

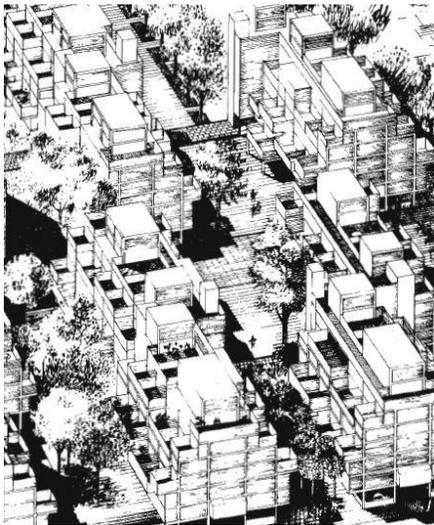
Columbia University
Graduate School of Architecture, Planning and Preservation
A4003: Core Studio 3, Fall 2015
States of Housing

M / Th 1:30-6:30 Studio Faculty: Charles Eldred, Eric Bunge, Mario Gooden, Robert Marino, Ada Tolla, Giuseppe Lignano, Jinhee Park, Hilary Sample, Galia Solomonoff

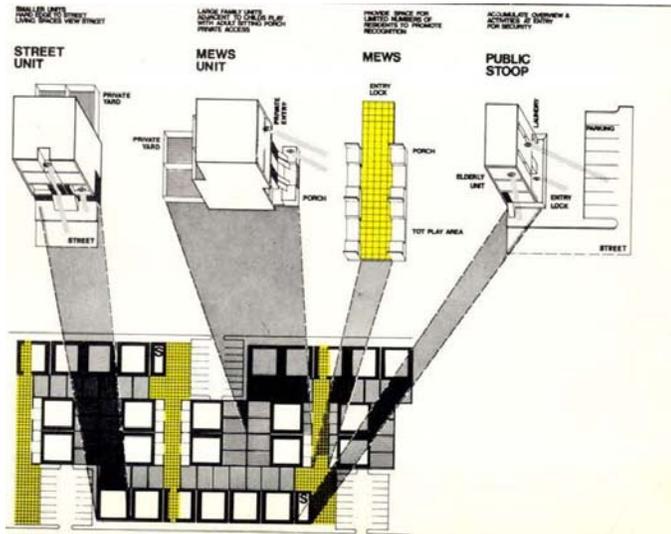
W 2:00-4:00 History of Visual Representation: Reinhold Martin, in Avery 114

Hilary Sample, Coordinator Housing Studio; hms2155@columbia.edu
Teaching Assistant: Lindsey Wikstrom; lmw2167@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 within the required core studio sequence. The studio is structured through 3 assignments beginning with an urban and typological analysis set in New York City followed by examining a housing project located in one of the following cities: Rio de Janeiro, Mumbai, or Berlin, which includes traveling to these sites, and concludes in an 8 week design project problem. 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 and analysis, and an architectural proposal. It operates as a laboratory in which to explore new possibilities for urban living in New York City and specifically within a site located in the South Bronx. Throughout the term, each student will examine the significance of public or social housing—both past and present—as exists in New York City and abroad, with a new emphasis on the history of visualization in parallel with a history of housing and representation that will be embedded within the studio, and finally through team projects that will speculate on the rich potential for contemporary urban housing types.

The first part of the studio is structured around developing a body of research and an understanding of housing in New York City as well as examining housing in global cities, introducing students to housing typologies through two specific assignments. The first assignment will focus on site, infrastructures, and typology using a cross section of the City, from Manhattan to the Bronx; and the second assignment will examine the architecture of housing units, environment, building programs and systems through a select building in Rio de Janeiro, Mumbai, or Berlin. Students will travel to those locations as part of this assignment in order to gain knowledge about the specific building and its history, its context, and the city where it is found. 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, gradually zooming into the scale of the unit, and finally integrating systems into a design project. Students will examine distinct typologies of housing both public and

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private at a variety of scales. In addition, students will design units, aggregate them, and explore the subjects of health, live/work, and the arts in relation to housing. Though the brief puts forth the perimeter block housing type for the given site, no type of housing is off-limits for exploration.

The studio aims to establish the space for a discussion about typology through housing to occur throughout the term. Housing by its very nature is a generic building type. Some may argue that working within a particular typology produces boring buildings. However, it is precisely through understanding of a type, and its multiple typologies that allows one to understand what has motivated the peculiarities of a particular building. 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... Students will be exposed to a variety of housing types, and 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 from density, socio-economic structures, climate, materiality, development models, cultural relationships, single to family dwellings, relationship between informal to luxury. In general, the housing studio will use their precedents and site visits as a means to gain knowledge about what constitutes contemporary housing.

In 1958, Lina bo Bardi questions the very definition of housing and what constitutes housing and what is included within housing by her definition this includes shops, school and public services, those things that are distinct from intellectual luxuries such as museums or libraries.¹ Rio de Janeiro has a broad range of architectural history that revolves around social class, where wealth and poverty are neighbors. The precedents are Pedregulho by Affonso Reidy, Co-op Ativa by Demetre Anastassakis, and Sergio Bernardes em Botafogo. Students will study the impact of the climate on living in the city and how traditional and novel forms have addressed the issue of comfort through density, topography, and materials. Over the last three decades, favelas, often referred to as □ informal □ settlements, are constructed in order to provide the necessary economy of live-work housing in the city, and are increasingly becoming stable places and are now called communities. Students will visit Rio das Pedras and should reconsider the favelas in the context of Utilitarianism and fairness while also considering housing typologies and the urban grid. Infrastructural projects are also important to understand the relationship of the new city of Rio das Pedras to Rio de Janeiro, specifically the consideration of being □ on the grid □ and □ off the grid □. Berlin has a turbulent history that provided a foundation for new types of architecture and housing. The precedents are Block 1 by OM Ungers, Potsdamer Platz by Renzo Piano, and Unite d □ Habitation by Le Corbusier. We will visit additional projects that vary in scale from low rise multi-family housing, multi-block mixed-use developments, and live-work projects. In Berlin, students will study the impact of the northern European climate on living in the city, and how housing projects have addressed the issue of comfort. Each type adjusts itself differently to the grid and to its environment, addressing family types, age, playgrounds, heat gain, waste management, or water reclamation. Mumbai will also offer students a range of housing types across different socio-economic and environmental conditions. The precedents are Kanchenjunga Apartments by Charles Correa and the Residential Chawl Typology. Students will study the impact of the climate on living in the city and how traditional and novel forms have addressed the issues of comfort, shared living space, air flow, sanitation, and maintenance. The low-rise high-density and tower housing precedents will be valuable research opportunities to use to re-approach housing in New York City. Students will travel to those locations in part to learn from the differing contexts surrounding housing typologies in the city, but also to bring new ideas about scale and environment transported back to the South Bronx.

¹ BoBardi, Lina. "Houses or Museums (1958)." *Stones Against Diamonds*. Architectural Association. London, 2012.

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In Aldo Rossi's *The Architecture of the City*, he describes American architecture as above all 'the architecture of the city': primary elements, monuments, parts. Specifically, New York is a city of monuments such as I did not believe could exist.² If there are monuments, they too fit within types. How then does a type differ from a monument? Does urban context make the difference between a type and a monument? We will examine the distinction between pure expressions of type, and cases in which a type is altered by the city to produce architecture. How is the problem of repetition represented? Specifically, it is understood that the repeated number of units can become monumental as an overall form for housing, or through the series or seriality of housing towers in the park that appear monumental and in particular ways become monuments of specific socio-economic groups. How does the city intervene in the design of a building? What constraints or alterations are reflected in the design of a project, and in its ultimate form?

The studio emphasizes understanding the history of New York City's multiple housing types, and how they continue to develop across the city, but primarily how is type in turn impacted by a multiplicity of forces, from the literal gravity, to the more social and overall by the city? Through research and drawings, the studio will investigate Greater Harlem and the South Bronx, two neighborhoods that have innovative and rich architectural that developed in the face of complex social and cultural histories, over the past fifty years. For instance, Harlem's Main Street along 125th Street, reflects a changing landscape of ownership, occupation, public, and private space.³ We can look to the lack of development of the East Harlem Triangle as an urban failure by the City despite a local community's effort to reshape it. There are many lessons to be learned by studying these neighborhoods especially in the context of the current housing crisis that the city is confronting. Similarly, the Bronx's Grand Concourse as an urban connector raises new possibilities for development and types of housing. But are these changes and developments productive? Do they produce the kind 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 four years, the studio has examined sites in East Harlem and the Bronx. Past studios focused on the prominence of the East Harlem, its proximity to Harlem's Main Street, urban infrastructure, and the Greenway park system and 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 the zoning code. Prior studio sites included City-owned property and sites designated for development under Mayor 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 partner of the studio.⁴ In May 2015, Mayor de Blasio announced his plan for affordable housing in New York City, which builds 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. DeBlasio is also in the process of changing 421a, the low income tax subsidy typically known for its 80-20 model, to a 65-35 model, with the intention of virtually cutting in half the rate of producing affordable units.

2 Aldo Rossi, *The Architecture of the City* (MIT Press, 1982), pg. 15.

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

4 <http://www.nyc.gov/html/hpd/html/about/message.shtml>

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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 as 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 is leading the United States with its policies and programs for housing and health, making instrumental and visible changes to the city's social and built form through interventions such as bike lanes and new parks. And yet, the urban population continues to struggle with chronic health problems, from an obesity epidemic in the Bronx to childhood asthma in East Harlem. The studio will study local and national policies, including New York City's Active Design Guidelines, PlaNYC, and the Affordable Health Care Act, in order to understand how shifting policies relate to urbanism.⁵ 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 that is up for study within in this studio, is one that can take on multiple meanings, the first being literally physical health, but this term health can have value and be attributed to other conditions like economics, policy, ideas of sustainability, to the social in relation to housing. This year's studio builds upon and expands previous research by shifting the site across the Harlem River. The relationship between the previous years' Harlem River sites and this year's will test new architectural and urban conditions through visual and physical in searching for new types of housing. This studio will challenge each student to think about the aspect of urban public health within all assignments but primarily be a theme of the final housing project.

Over the course of the term, the studio will examine a site in the South Bronx. The site is made of three block ends and is bound on all sides by the Grand Concourse, a playground, the Metro North tracks, and Hostos Community College and Center for the Arts. Nearby infrastructural thoroughways include the Madison Avenue Bridge to the north; the Major Deegan Expressway and Harlem River to the west. These boundaries create physical edges, but also confront the site with their variety of scales. Each team will be challenged to design a housing proposal that takes a position with respect to the street, the infrastructure, the specific architectural typologies at play, and the shape and elevation of the site. Among the greatest challenges for this specific site is the location of the 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 the context? Inherently, the three ends suggest a perimeter block model for the purpose of gaining and maximum light and air, which offers a maximum health and comfort, and expansive window wall and envelope design opportunities.

The studio will encourage public and professional discourse surrounding affordable housing and architecture today.

⁵ Policies developed in NYC are proving to be groundbreaking and have been adopted by other cities around the country.
<http://mayorschallenge.bloomberg.org/>

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Assignment #1

Typology Versus the City

Due: September 21, 2015 at 1:30pm in Avery114



Damian Ortega, Cosmic Thing, 2002.

To begin the term, we will walk from Columbia University, through Harlem to East Harlem passing Strivers Row, Astor Row, Sugar Hill Apartments, Dunbar Apartments, across the Harlem River, and up the Grand Concourse to the site. Each studio will undertake an analytical investigation of the urban, typology, through issues associated with urban morphology, and infrastructural development. The studio will focus on the neighborhoods of East Harlem and the South Bronx, which include Marcus Garvey Park, the 125th \square Main Street \square , Park Avenue and the elevated Metro-North Rail line, Harlem River Drive and Greenway, to the multiple bridges, Port Morris, Randall \square s Island, and the Grand Concourse. From this exercise, each student will have the opportunity to reverse the working methodology to the studio looking at

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housing from the outside in. It is expected that each student will learn new lessons and have new insight into the larger area of the housing site. Health, as a subject, is one that can take on multiple meanings, the first being literally physical health, but this term health can have value and be attributed to other conditions like economics, policy, and the social in relation to housing. This studio will challenge each student to think about the aspect of urban health within their housing project.

In addition to the subject of health, the studio encourages each student to think about the intersection between architecture and urbanism, particularly subjects of economics, structure, materials, etc. as well as formal and spatial questions. How does culture play into housing? Has the city done enough to integrate the Bronx's significant cultural heritage into its South Bronx Initiative Plan? How has the Bronx changed in response? Larger questions for the studio to consider are the issues of homeownership, what is public, and what makes a community? Entering into what seems to be a second recession in the United States, and following a downturn in the economy from 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? Today, the Bronx's close proximity to midtown Manhattan, and its ease of access to public transit (it is only 15 mins by express train to Penn Station), is undergoing gentrification and at the same time new developments of 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 for each studio to understand the broader physical and historical context of the South Bronx, and 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 be it transit and/or accessibility.

In the way that Damian Ortega deconstructs the popular VW bug, each student team is to examine and represent their ideas and research about the site through a conceptual taking apart of the city. Students are to examine first the South Bronx and then begin to understand the given site. It is intended that the focus of the Urban site study is the larger urban context of the South Bronx. Students will continue to work site issues throughout the remaining term, and should ask questions about the site in a methodological manner that serves to influence their designs as well as create an architecture that is much about buildings as it is about urbanism and infrastructures.

Edge City⁶

Constructed between 1832 and 1835, the New York and Harlem Railroad running along Park Avenue from City Hall to the Harlem River was in many ways the early modernization of Upper Manhattan. In 1873, the Village of Harlem was annexed to the City of New York. It was considered at the time to be one of the most fashionable residential areas in which to live.⁷ Similarly, the Bronx's history includes the Grand Concourse, designed by Louis Risse, who intended for the street to become the Bronx's version of the Champs Elysees. In 1909, the Concourse was extended south to 138th St., stretching it to five miles, and at parts, 180 ft. wide. In the early 20th C., considered to be the "Park Avenue of the Middle Class", bringing a centralized main street connection through the entirety of the Bronx.⁸ The condition of the edge of the city and in this case the edge of the Manhattan Grid offers up a place to both 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. The edge of the city here is bounded and contained by large scale urban infrastructure from the Harlem River Drive, train tracks, but also sites in proximity to the Harlem River,

⁶ PAMPHLET ARCHITECTURE 13: EDGE OF A CITY, Steven Holl, 1991, Princeton Architectural Press; <http://www.stevenholl.com/books-detail.php?id=41>

⁷ <http://mmpcia.org/site/historic-district/>

⁸ Rosenblum, Constance. *Boulevard of Dreams: Heady Times, Heartbreak, and Hope Along the Grand Concourse*. Ebook. NYU Press. 2009.

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and to a series of parks that line the edge of the city on both sides of the river. Geography and topography are two elements that should be explored.

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NYC Housing Projects

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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
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

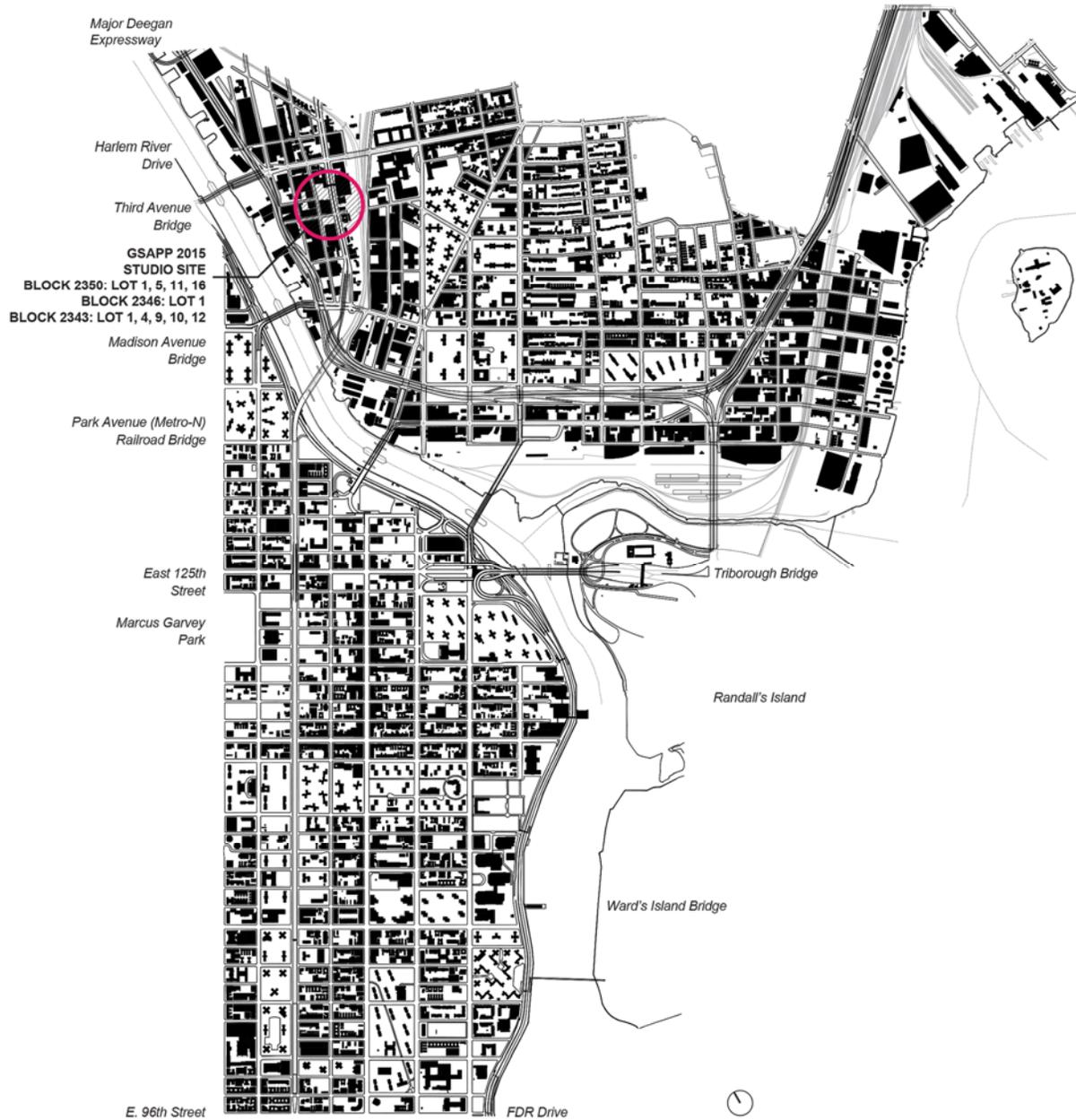
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SITE SOUTH BRONX



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SITE 425 GRAND CONCOURSE

For the purpose of the studio, we will work with a site that is both real and imaginary. The studio site includes a block originally slated for adaptive reuse bundled with two adjacent blocks.



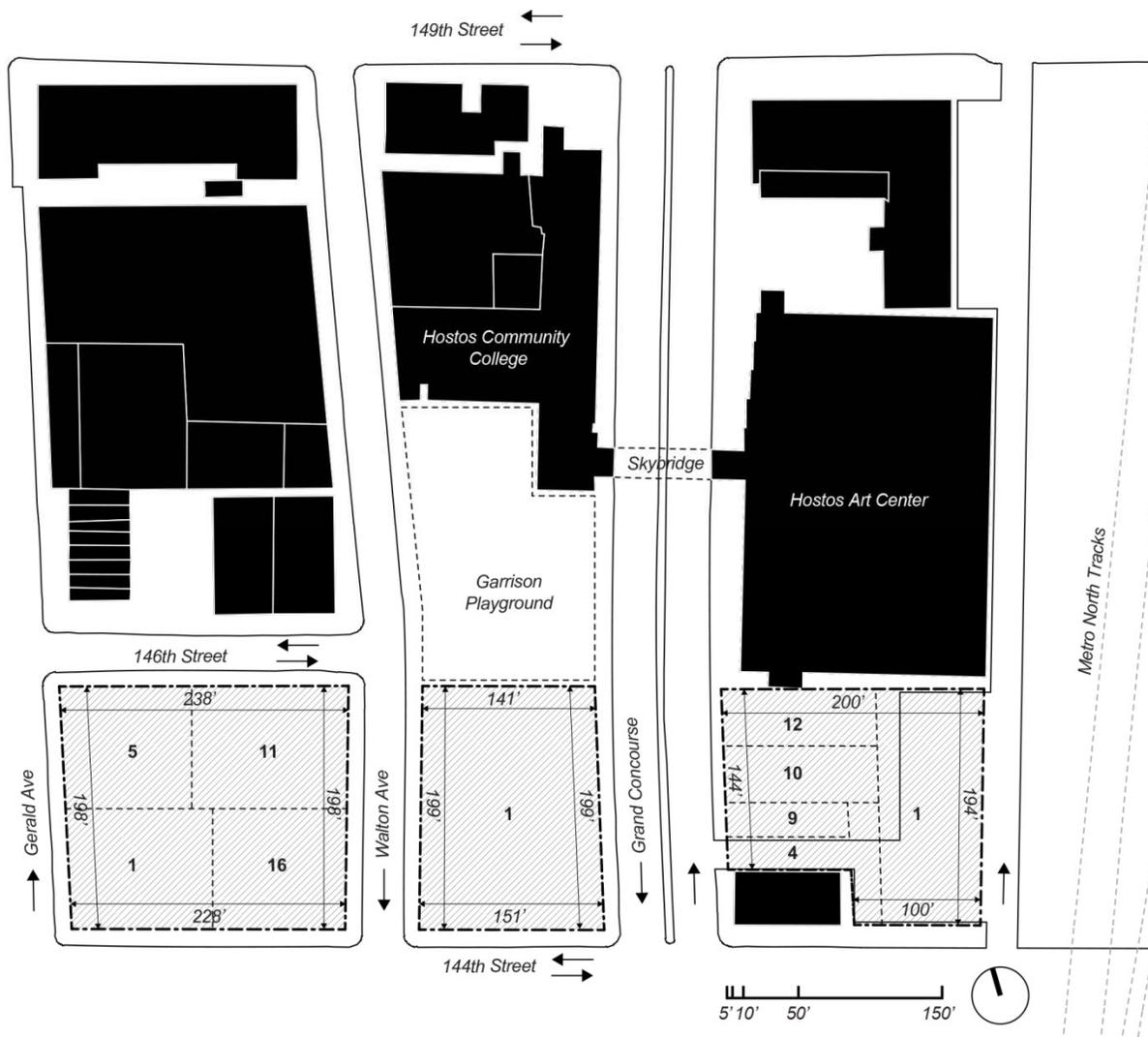
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SITE ZONING



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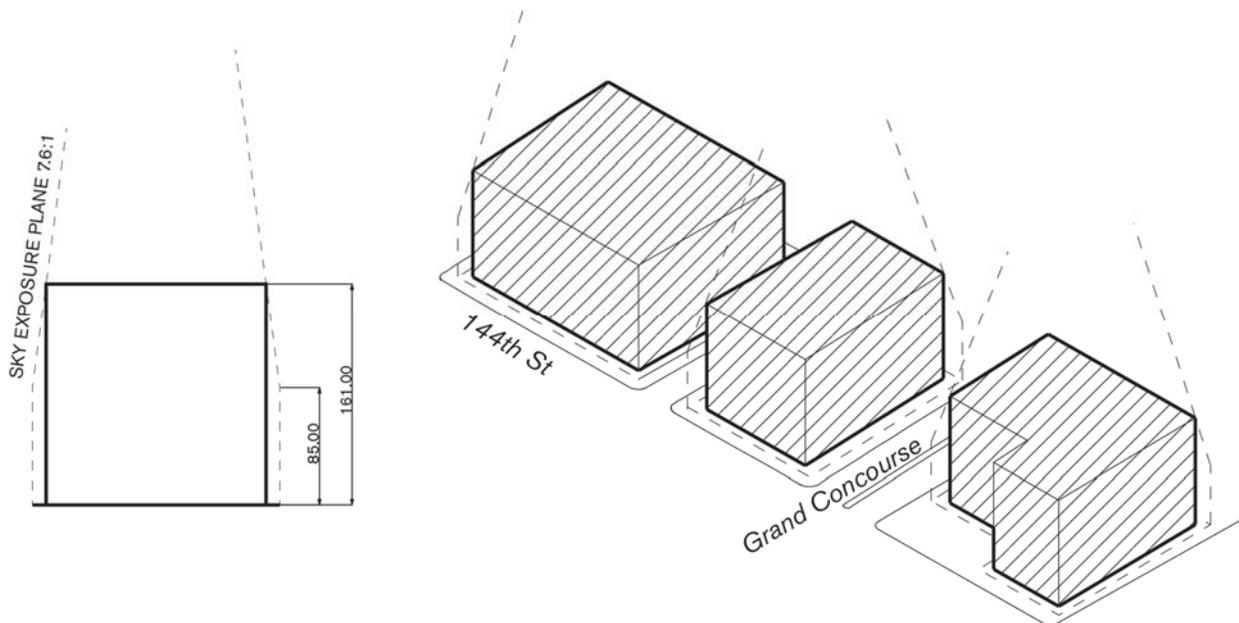
SITE ZONING DEFINITIONS

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, such as Washington Heights. New buildings in R8 districts may be developed under either height factor regulations or the optional Quality Housing regulations that often reflect the 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 ($6.02 \text{ FAR} \times 10.7 \text{ OSR}$). 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 ($>75'$) and 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 since these districts are easily accessed by mass transit. It can be waived if 15 or fewer parking spaces are required or if the zoning lot is 10,000 square feet or less.



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SITE ZONING DEFINITIONS

Special Purpose District MX-13⁹

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 and 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 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, for example), 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

C6 districts permit a wide range of high-bulk commercial uses requiring a central location. It is a commercial district that is typically mapped in areas outside central business cores that has a commercial FAR of 6.0 and a residential FAR of 0.99-7.525.¹⁰

Public Housing

1974, Section 8 Housing, encouraged private development of affordable homes

1992, HOPE VI, funds to demolish poor-quality public housing projects and replace with mixed-income lower-density housing

The Bronx has 100 NYCHA developments with 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 medium 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% Bronx, 43% Brooklyn, 45% Manhattan, 42% Queens

Market Rate Housing

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

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

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

⁹ <http://www.nyc.gov/html/dcp/pdf/zone/map6a.pdf>

¹⁰ http://www.nyc.gov/html/dcp/pdf/zone/zoning_handbook/c6.pdf

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SITE PHOTOS



Grand Concourse from 149th St. Neg. A-148
April 30, 1941

Grand Concourse from 149th St.
June 2014, Google Earth

Grand Concourse from 144th St.
June 2015



Railroad from 144th St. Google Earth April 2009



Columbia University
Graduate School of Architecture, Planning and Preservation
A4003: Core Studio 3, Fall 2015
States of Housing

M / Th 1:30-6:30 Studio Faculty: Charles Eldred, Eric Bunge, Mario Gooden, Robert Marino, Ada Tolla, Giuseppe Lignano, Jinhee Park, Hilary Sample, Galia Solomonoff

W 2:00-4:00 History of Visual Representation: Reinhold Martin, in Avery 114

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Teaching Assistant: Lindsey Wikstrom; lmw2167@columbia.edu

Walton Ave from 144th St. July 12, 2015

Requirements and Representation

Each studio shall work towards a comprehensive understanding of their precedent and document these findings through a range of scales and material output. While this research will serve as a basis to themes that will be explored throughout the rest of the term, the documentation and presentation should be treated as its own autonomous design exercise. 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 system of an urban infrastructure at a scale to be determined in consultation with your critic
2. One model and one drawing of a significant detail of the site (either a unique component or a segment of a performative system) that you consider essential to the understanding of the city (at a minimum scale of 1" = 100').
3. All drawings shall be presented on sheets that are 11" x 17" and no more than 4 sheets per team as a small booklet.
4. Identify what type of housing project you are working with, and write one paragraph about the South Bronx that both summarizes and conceptualizes the system.
5. Photograph models.
6. Present work as a pdf to be projected.
7. All work is to be submitted on a labeled CD to Lindsey Wikstrom by September 22nd. Photos of models are to be submitted as 300 dpi jpgs, and all drawings are to be submitted as .eps files.
8. One overall site model and site section to be determined in consultation with your critic. To be completed as a studio. Due October 19th

Review

Assignment is introduced on September 11th and all work will be presented as part of a joint studio with the entire Housing studio and faculty on September 21st starting at 1:30pm in Avery 114. The review will start promptly at 1:30pm. 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 5:30pm.

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 Landmarks Conservancy; August, 1997.

Mark Jarzombek, "Corridor Spaces," *Critical Theory*, vol. 36, no. 4, (Summer 2010), Chicago: University of Chicago Press, pp. 728-770.

Mark Wigley, "Network Fever," *Grey Room*, *New media, old media: a history and theory reader*. New York: Routledge, 2006

Alison and Peter Smithson, *Urban Structuring: studies of Alison & Peter Smithson*. (New York: 1967).

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

Robert A.M. Stern. "Harlem and Upper Manhattan," *New York 2000: Architecture and Urbanism Between the Bicentennial and the Millennium*. (New York: The Monacelli Press, 2006).

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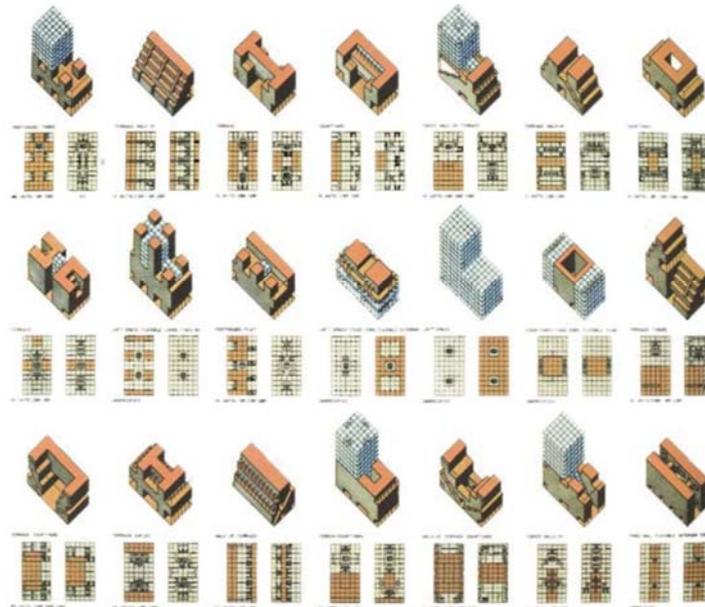
W 2:00-4:00 History of Visual Representation: Reinhold Martin, in Avery 114

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Assignment #2

Local Versus Global Typology

Due: October 1, 2015 at 1:30pm in Avery114



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

In the second assignment, each studio will undertake an analytical investigation of one housing project. The pedagogical goal of this work is to investigate relationships between specific housing types, fixed building systems, variable programs, and the multiple forms that are 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, single room occupancy. With the knowledge you've learned in the first assignment about NYC housing types and their urban setting, now investigate how this relates to the many other types of housing that exist in Rio, Mumbai, and Berlin. As a way to further understand the significance of housing, this part of the studio will include travel to Rio, Mumbai, and Berlin. For the purpose of the studio, and the short time frame for this assignment each critic has pre-selected a precedent that their studio is to examine that relates to the studio trip. The precedents range in type and in location. While the studio is based in the Bronx each student should undertake the problem of housing with a broad view.

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Each type of housing has a very specific ideology about the relationship between collective and domestic living, as well as 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 its largely repetitive program that consists of units, corridors, parking, laundromats, lobbies, elevators, stairwells, and other building systems. The precedent assignment is meant to introduce not only many types of forms but also organizations, and issues critical to housing and architecture such as materials, environmental, economics, value, and social and cultural influences, and to comprehend the simultaneous systems that have to inhabit a relatively small space of a dwelling, from circulation, to plumbing, to structure, to electrical. This precedent analysis is critical to conceptualizing work that shall be 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 public policy and governance that structures the intent for 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 (please see list below) for its form and performance/systems. Begin by gathering all relevant information such as plans, sections, and images. From this information each team shall assess the information and begin to record through the acts of making and drawing to produce an analytical study of each precedent. This evaluation should be approached from two scales from the unit to the overall form and urban context. For the purpose of this studio the unit is as equally important as the project's overall form. When examining the project, analyze the models for the subjects of health and wellbeing through related systems. Additional components and systems to investigate include: urban infrastructure, urban morphology, post-occupancy, materials, structure, life safety, accessibility, zoning, policy, etc.

Pedagogically, the precedent analysis is a twofold exercise. It is first and foremost 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. Secondly, 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 the structural diagram and its material assemblage, or the relationship to its site, and 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 have one fully presented as a comprehensive overview of their housing precedent. 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 as a collective studio assignment.

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Requirements and Representation

Each team shall work towards a comprehensive understanding of their precedent and document these findings through a range of scales and material output. While this research will serve as a basis to themes that will be explored throughout the rest of the term, the documentation and presentation should be treated as its own autonomous design exercise. 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 a scale to be determined in consultation with your critic
2. One model and 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 your building (at a minimum scale of 1" = 1'-0").
3. Analytical drawings of the units.
4. All drawings shall be presented on sheets that are 11" x 17" and no more than 4 sheets per team as a small booklet.
5. Identify what type of housing project you are working with, and write one paragraph about the project that both summarizes and conceptualizes the typology.
6. Photograph models.
7. Present work as a pdf to be projected.
8. All work is to be submitted on a labeled CD to Lindsey Wikstrom by October 2. Photos of models are to be submitted as 300 dpi jpgs, and all drawings are to be submitted as .eps files.

Review

Assignment is introduced on Sept. 21st and all work will be presented as part of a joint studio with the entire Housing studio and faculty on October 1st starting at 1:30pm in Avery 114. The review will start promptly at 1:30pm. 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 response concise and should primarily speak through the documents produced for the review. The third assignment shall be presented at 5:30pm.

Readings

Richard Plunz, *A History of Housing in New York City*. New York: Columbia University Press, 1990.
Alan Colquhoun, Typology and Design Method, *Perspecta*, Vol. 12, (1969), New Haven: Yale University Press, pp. 71-74.
Rafael Moneo, On Typology, in *Oppositions*, n.13, 1978, Institute for Architecture and Urban Studies.
Mar Jarzombek, Corridor Spaces, *Critical Theory*, vol. 36, no. 4, (Summer 2010), Chicago: University of Chicago Press, pp.728-770.

Additional Readings

Reyner Banham...The Architecture of the Well Tempered Environment
Reyner Banham, A House is Not a Home, *Architectural Design* (January 1969): 45.
Laurent Stalder, translated by Jill Denton, Air, Light, and Air-Conditioning, Grey Room Summer 2010, No. 40: 84-99.
William W. Braham, Household conditioning (if you are cold, put a sweater on). *Building Systems, Design, Technology, and Society*, Eds. Kiel Moe and Ryan E. Smith, Routledge, 2012, p.185-192.

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Global Housing Typologies

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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)
6. Saishunkan Seiyaku Womens' Dormitory, Kazuyo Sejima (Kumamoto, Japan)
7. Kanchanjunga, Charles Correa (Bombay, India)
8. Kasbah, Piet Blom (Hengelo, NL)
9. Madrid Social Housing, Morphosis (Madrid, Spain)
10. Habitat '67, Moshe Safdie (Montreal, 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. Hansaviertel Tower, Van den Broek en Bakema (Berlin, DE)
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
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
33. Quinta da Malagueira Housing, Alvaro Siza
34. Housing on Lutzowplatz, O.M. Ungers
35. Crawford Manor, Paul Rudolph (New Haven, CT)

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Individual Studio Assignment*

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

Bunge Studio:	Berlin: BARarchitekten, Spreefeld, Kopenicker Strasse 49, Berlin-Kreuzberg, Germany, 2012
Eldred Studio:	Berlin: Frei Otto's Eco-Houses, Rauchstrasse 21, IBA, Berlin, Germany, 1984-87
Sample Studio:	Berlin: O.M. Ungers, Block 1 Köthener Strasse, IBA, Berlin, Germany, 1981-87
Gooden Studio:	Mumbai: Charles Correa, Kanchanjunga Apartments, Cumballa Hill, Mumbai, 1970-1983
LOT-EK Studio:	Mumbai: Chawl Type
Marino Studio:	Rio: Housing by Irmãos Roberto in Botafogo
Park Studio:	Rio: Demetre Anastassakis, Co-Opera Ativa, Cidade de Deus, Rio de Janeiro, 1995
Solomonoff Studio:	Rio: Affonso Reidy, Pedregulho Housing Complex, 1947-1955

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Precedents

The precedents range in type and location. Each studio will examine one precedent. Students are required to find the resources, i.e. plans, sections, images, will be gathered and presented prior to traveling to the precedent site, please see schedule for review date. The benefit of this is twofold. Traveling will be focused on understanding the urban form and the density within the city. Students will also give their presentations on the precedent building during the trip. Each precedent has been chosen because of how they respond to the climate they were built in, the environment they create for living, levels of density within the building and context, and unit aggregation.

Rio de Janeiro



Co-Opera Ativa, Demetre Anastassakis
1995



Candida Pareto, Sergio Bernardes
1978



Pedregulho, Affonso Reidy
1947-1955

Berlin



Unite, Le Corbusier
1959



Spreefeld, BARarchitekten
2012



Block 1, IBA, O.M. Ungers
1987

Mumbai



Kanchanjunga Apartments, Charles Correa
1970-1983



Chawl Typology

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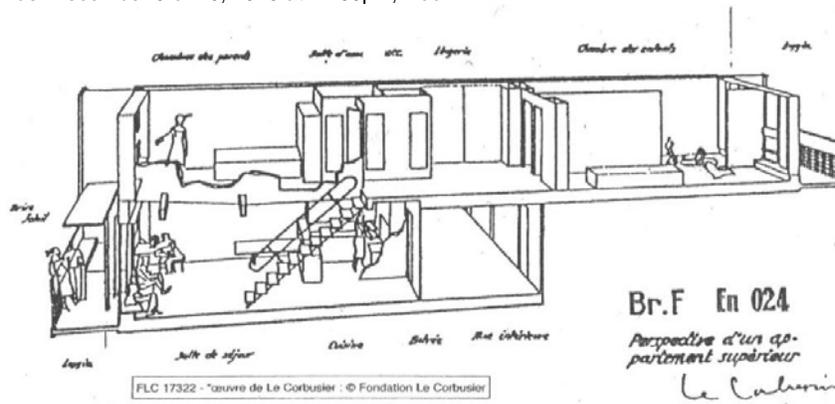
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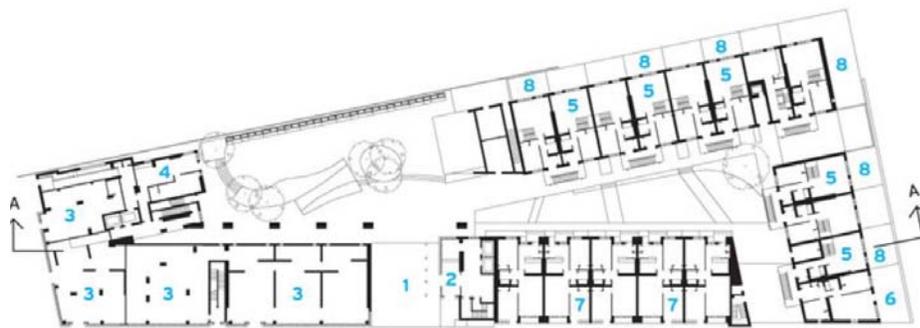
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Assignment #3 Housing & Community: Units, Structures, and Environments

Due: December 9 or 10, 2015 at 12:00pm, Room TBA



Le Corbusier, Unite



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

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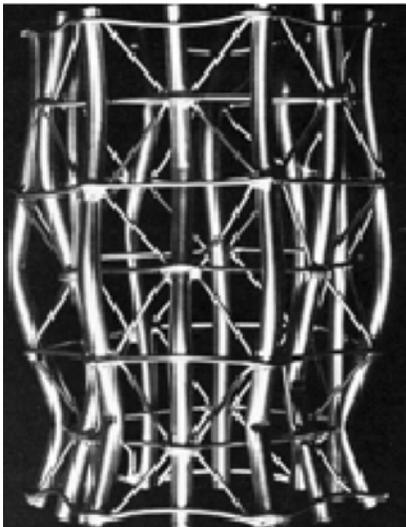
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Units

Having already been introduced to lessons from the site study and precedent, students will be introduced to the problem of designing housing by creating units and the problem of aggregation but not as an autonomous practice, rather understanding systems of structures, program, accessibility, and environments. Modern architects approached housing as a purely functional problem often working from the inside out. An example of this can be seen in Karel Teige's research in the 1932 book *The Minimal Dwelling*. The housing question for Teige was essentially one of a problem of statistics and technology leading to the point that housing ultimately comes down to a question of the general plan. While these ideas were formulated in the aftermath of World War I's housing crisis, 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 that is already frequently at the minimum in terms of conditions like area, light, budgets, amenities, and 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 the prototype. Similarly, the inclusion of the model of the Lemoine House by OMA introduces subjects of structures, physics, and accessibility as a means to both understand and produce the design of house and its basic forms. These same criteria are essential to urban public housing, and should begin with the design of the unit.

From Structures to Environments



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



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

The formal exercises of unit repetition will begin the next series of studies of structures and aggregation. Here students are to propose complex structures of repeated units, learning lessons related to scale, structure, and systems, and engage in the dialectic between form and function. Today, aggregation is understood through different processes of production than previously practiced, think Moshie Safdie's *Habitat* (1967) in Montreal to Steven Holl's *Linked Hybrid Housing* (2009) in Beijing. For the purposes of this studio, the focus is on high density as the model to begin with. Returning, perhaps nostalgically, to the beginning of the Columbia Housing Studio when it emerged in reaction to the 1960s urban renewal projects, and in context to the Museum of Modern Art's exhibition *New City: Architecture and Urban Renewal* in 1967 followed up by *Another Chance for Housing: Low-Rise Alternatives* in 1973 hold valuable historical lens for reading the city

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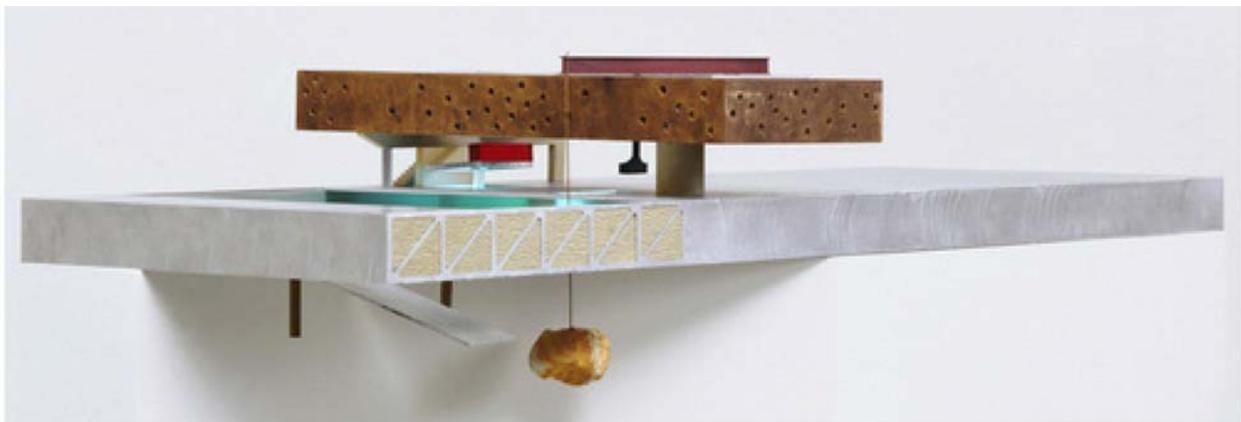
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and should be referenced in the studio. Both exhibitions presented housing projects for East Harlem. This interest in high-density alternatives should form the grounding of each aggregation study but should be rethought for the contemporary conditions of the city.

The studio will examine high density housing that serves specific audience, aging populations or artists with special regard for human comfort. Students will design a series of climate effects and comfort zones within their projects. Similarly, to testing and modeling climatic envelopes, structural studies should be completed in the form of digital stress tests. The School's Roving Engineer program that has accompanied the studio previously is being reorganized this year. A new program of an initial Presentation and Round Table Discussion will be held in the beginning of the term. The purpose of the program is to provide students with access to structural engineering principles and concepts sooner and at the beginning of the design process. A round table 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 LeRicolais (1894-1977) examined the beauty of failures. The stress of the elements upon a built form include gravity, physics, wind loads, shear, lateral forces, and the strain 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 is it from the outside in? Structural concepts shall 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, 1954

The program given as part of the housing project is to be analyzed before beginning design work through a series of modeling studies in consultation with your critic. The primary program for this studio is housing, community center for the aging, and commercial space with public space. This city-owned property is to be developed under the Department of Housing Preservation and Development (HPD)'s 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

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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.□

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

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

New York development tends to follow artists, currently considered 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. This has now 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, which can directly relate to the street life. Neighborhoods in Rio, for example, Rio das Pedras, are constructed entirely by mixing living and working space where proximity to the street increases its 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 site□ s immediate context of the Arts Center and schools, the housing project should consider as part of its program, new models for working. There is a growing community in this neighborhood and within the Bronx through projects like the Silvercup Studios that open up opportunities for Live/Work unit types and affordable or below market rate housing for artists. Consider other projects like Ozenfant Studio by Le Corbusier and the Schindler House shared by Richard Neutra and Rudolf Schindler for living and working.

In addition, 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,□¹¹ says Dean Linda Fried from the Mailman School of Public Health in her book *Unafraid of Aging*.

There is evidence that for some populations around the world by the year 2030 there will be more elderly than children. What it means to grow old in society in America today holds different meaning than in previous times. Aging or retiring were understood to take place at a particularly age, 65. What does this mean for society and particularly for housing, and urban housing? Statistics show that East Harlem□ s aging population is growing. Part of this studio is to design and develop a community center for the aging as part of the program.

¹¹ <http://www.wsj.com/articles/linda-fried-on-the-future-of-retirement-1404762925>

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 A4003: Core Studio 3, Fall 2015
 States of Housing

M / Th 1:30-6:30 Studio Faculty: Charles Eldred, Eric Bunge, Mario Gooden, Robert Marino, Ada Tolla, Giuseppe Lignano, Jinhee Park, Hilary Sample, Galia Solomonoff

W 2:00-4:00 History of Visual Representation: Reinhold Martin, in Avery 114

Hilary Sample, Coordinator Housing Studio; hms2155@columbia.edu
 Teaching Assistant: Lindsey Wikstrom; lmw2167@columbia.edu

PROGRAM*

ROOM	SQUARE FOOTAGE	NOTES
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.	
SUBTOTAL	5,000 SF	
RESIDENT SHARED AMENITIES		
Storage		15 SF per unit
Laundry		
Dryers		1 dryer per 40 units
Washers		10 washers
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
SUBTOTAL	48,250 SF	

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ROOM	SQUARE FOOTAGE	NOTES
COMMERCIAL		
Retail (Cafe, Market)	500 SF	
Class A Office space	2,000 SF	
SUBTOTAL	2,500 SF	
COMMUNITY PROGRAMS		
Public Pool	10,000 SF	
Community Garden / Terrace Equipment Storage	10,000 SF	
Community Center for the Aging Exercise Room Lecture Hall / Auditorium Country Kitchen Manager's Office Storage Accessible Restrooms Dining Room Arts and Crafts Beauty Salon	10,000 SF	Stackable seating, piano
Business Center Desk	1,000 SF	Two computer stations, fax machine
SUBTOTAL	29,000 SF	

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ROOM	SQUARE FOOTAGE	NOTES
<hr/>		
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
SUBTOTAL	173,750 SF	
<hr/>		
TOTAL NET	258,500 SF+	

Net Service areas include common spaces and mechanical @ 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.

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www.qis.columbia.edu

HARLEM HISTORY

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*Gilbert Osofsky. "Harlem Tragedy: An Emerging Slum," *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," *New York 2000: Architecture and Urbanism Between the Bicentennial and the Millennium*. (New York: The Monacelli Press, 2006).

BRONX HISTORY

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Rosenblum, Constance. *Boulevard of Dreams: Heady Times, Heartbreak, and Hope Along the Grand Concourse*. Ebook. NYU Press. 2009.
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PRECEDENTS

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*Michael Henry Adams. "The Row House in Harlem," *Harlem Lost and Found: An Architectural and Social History*. (New York: The Monacelli Press, 2001)
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Colin Rowe □ Conditions of Modernity, □

*James Stirling □ Apartments, NY: Investigation of an Urban Type □

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," *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).

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UNIT AND AGGREGATION

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Alvaro Siza. □ Living a House. □ *Alvaro Siza: Private Houses: 1954-2004*. (Skira editore: 2004).

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

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

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* Henri Lefebvre. "Social Space," *The Production of Space* (Oxford, UK; Cambridge, MA: Blackwell, 1991).

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

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

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

"What is Affordable Housing?" *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>

AGING

Volume # 27: On Aging (New York: Columbia University GSAPP / Archis, 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*. no. 15 (Cambridge: The MIT Press, 2004.), 28-59.

Alison Smithson "Byelaws for Mental Health," *Architectural Design* no 9 1960, 356-357.

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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," *Sense of the City: An Alternate Approach to Urbanism*. (Montreal: Canadian Centre for Architecture and Lars Muller Publishers, 2005)

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-biq-new-york-debut/>
<http://www.archdaily.com/34302/linked-hybrid-steven-holl-architects/>
<http://www.archdaily.com/6268/56-leonard-street-new-york-herzog-de-meuron/>
<http://urbanomnibus.net/2011/03/from-the-archives-harlems-ps90/>
<http://www.archdaily.com/614478/first-look-inside-biq-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=xqUsEVwXchQ>

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](#)

EXHIBITS

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Current

A Long-Awaited Tribute: Frank Lloyd Wright's Usonian House and Pavilion, Guggenheim, 2012.07.27 - Ongoing

This Is for Everyone: Design Experiments for the Common Good, MOMA. 2015.02.14 - 2016.01.16

From Watersheds to Faucets: The Marvel of New York City's Water Supply System, Queens Museum.

Saving Place. Museum of the City of New York. 2015.04.21 - 2016.01.03

Designing Affordability: Quicker, Smarter, More Efficient Housing Now. AIA Center for Architecture. 2015.10.01 - 2016.01.16

Past

Sites of Reason: A Selection of Recent Acquisitions, MOMA
<https://www.moma.org/visit/calendar/exhibitions/1480>

Sylvan Cemetery: Architecture, Art & Landscape at Woodlawn, Wallach Art Gallery, Columbia University
<http://www.columbia.edu/cu/wallach/exhibitions/Sylvan-Cemetery.html>

Conceptions of Space: Recent Acquisitions in Contemporary Architecture, MOMA
<https://www.moma.org/visit/calendar/exhibitions/1485>

Uneven Growth: Tactical Urbanisms for Expanding Megacities.
<http://uneven-growth.moma.org/>

Assembled Realities: Jeff Chien-Hsing Liao's New York, Museum of the City of New York
<http://www.mcny.org/exhibition/assembled-realities>

Reimagining the Waterfront: Manhattan's East River Esplanade, Museum of the City of New York
<http://www.mcny.org/exhibitions/current/reimagining-the-waterfront.html>

The Harlem Edge: Cultivating Connections, AIA Center for Architecture:
<http://cfa.aiany.org/index.php?section=exhibitions&expid=227>

Illuminations: Expanding the Walls 2012, The Studio Museum in Harlem:
<http://www.studiomuseum.org/exhibition/illuminations-expanding-the-walls-2012>

Harlem Walking Tours: In Their Footsteps, The Studio Museum in Harlem:
<http://www.studiomuseum.org/event-calendar/event/harlem-walking-tours-2012-09-29>

Ghosts in the Machine, The New Museum:
<http://www.newmuseum.org/exhibitions/view/ghosts-in-the-machine>

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Foreclosed: Rehousing the American Dream, MoMA:
<http://www.moma.org/visit/calendar/exhibitions/1230>

The Greatest Grid, The Museum of the City of New York:
<http://www.mcny.org/exhibitions/past/The-Greatest-Grid.html>

The Unfinished Grid: Design Speculations for Manhattan, The Architectural League of NY:
<http://archleague.org/2011/11/the-unfinished-grid-design-speculations-for-manhattan/>

Do Ho Suh, Lehmann Maupin Gallery:
<http://www.lehmannmaupin.com/#/artists/do-ho-suh/>

Natalie Jeremijenko, Environmental Health Clinic:
<http://www.environmentalhealthclinic.net/>

Creative Time:
<http://www.creativetime.org/mission>

Making Room, Citizens Housing and Planning Council:
<http://makingroomnyc.com/>
<http://urbanomnibus.net/2011/10/making-room/>

MAKING ROOM is an initiative of [Citizens Housing & Planning Council](#) (CHPC) that brings together: cutting-edge housing research; new design proposals; and pragmatic policy recommendations to advocate for New York City to allow the development of some brand new, legal and safe housing options.

The Vienna Model: Housing for the 21st Century City, Austrian Cultural Forum
<http://www.acfny.org/event/the-vienna-model/>

HISTORY OF HOUSING AT GSAPP

Joan Ockman. *Architecture School: Three Centuries of Educating Architects in North America*.(Cambridge: The MIT Press, 2012).

James Tice. "Theme and Variation: A Typological Approach to Housing Design, Teaching and Research," *Journal of Architectural Education*, Vol. 46, No. 3 (Feb., 1993), pp. 162-175.

PUBLIC HOUSING

<http://www.nydailynews.com/new-york/picture-nycha-tenants-cameras-article-1.1128800>

MIXED FINANCE PROGRAM: http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/hope6/mfph

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MID-REVIEW REQUIREMENTS

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 $1/4" = 1" - 0"$: Detail Model of your selection

Perspectives

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

Conceptual Structural Diagrams

Produce one 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 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 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 it should further elaborate on your design concept. Where possible do not repeat information. Please discuss with your individual critic.

Presentation and Time

Part of Studio culture includes balancing your work of the studio 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 and your own. In addition reviews are meant to be productive, useful, and also critical of your work providing insight and helping you move your project forward. Reviews are limited in time and therefore requires 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 should also be 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 11pm. 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, and also the introduction presentation.

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FINAL REVIEW REQUIREMENTS

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 1/4" = 1' - 0": Detail Model of your selection

Perspectives

Minimum of 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 experiential different qualities in public vs. private space, shared vs. communal, 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 drawing, model or 1 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 it should further elaborate on your design concept. Where possible do not repeat information. Please discuss with your individual critic.

Presentation and Time

Part of Studio culture includes balancing your work of the studio 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 and your own. In addition reviews are meant to be productive, useful, and also critical of your work providing insight and 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 should also be 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 7 at 1:30pm. Each team is to submit their work to their critic for review. Model making is acceptable until the December 8 at 11pm. These are recommended deadlines for the purpose of ensuring that students can be present on review days.

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Final Documentation

All models, drawings, and other materials must be documents and collected for the School's archive and 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. The 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 shall shift scales and examine the site in 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 shall 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 round table 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, don't 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 medical or otherwise urgent). It's more important that students are present for one another's presentations than gluing last minute additions to models. Round table 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.

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.

End of year show

In preparation for the End of Year Show in May, all students must submit three high resolution images of their projects. Additionally, please remember to save your models to be included in the show.

Columbia University
Graduate School of Architecture, Planning and Preservation
A4003: Core Studio 3, Fall 2015
States of Housing

M / Th 1:30-6:30 Studio Faculty: Charles Eldred, Eric Bunge, Mario Gooden, Robert Marino, Ada Tolla, Giuseppe Lignano, Jinhee Park, Hilary Sample, Galia Solomonoff

W 2:00-4:00 History of Visual Representation: Reinhold Martin, in Avery 114

Hilary Sample, Coordinator Housing Studio; hms2155@columbia.edu
Teaching Assistant: Lindsey Wikstrom; lmw2167@columbia.edu

SCHEDULE

The studio will be held on Mondays and Thursday with a two hour lecture and discussion on Wednesdays.

The beginning of the term shall focus on multiple introductions. Codes, rules, and constraints will be the themes explored through organized talks by architects, health experts, engineers, and city officials. The site study and precedent assignments will run in parallel and serve to provoke early thinking and questions about housing in New York City. After the mid-term, there will be swift and intense focus on design, systems, energy, and novel housing models with invited speakers presenting their work in a conversation setting. All talks are to be held in 114 Avery. These talks and guests have been invited especially for the housing studio.

Week 1

September 9, Wednesday: 2:00 PM All school orientation with Dean, 113 Avery
3:00 PM Studio Presentations and Lottery, 114 Avery

September 10, Thursday: 5:00 PM Lottery results posted

September 11, Friday: 2:00 PM Studio Introduction, Avery 114
3:00 PM Introduction to First Assignment: Site Study In the studio
4:00-6:00 PM Walking Tour of Site

Week 2

September 14, Monday: 1:30-6:30 PM Studio Meeting / Desk Crits
6:30 PM Lecture: Kersten Geers & David Van Severen

September 16, Wednesday: 2:00-5:00 PM Arch Visualization with Reinhold Martin

September 17, Thursday: 1:30-6:30 PM Studio Meeting / Desk Crits

Week 3

September 21, Monday: 1:30-6:30 PM Pin Up Assignment 1 Review in Avery 114
5:30 PM Introduction to Second Assignment: Precedent Study
6:30 PM Lecture: Kate Orff

September 23, Wednesday: 2:00-4:00 PM Arch Visualization

September 24, Thursday: 1:30-3:30 PM Guest Lecture: Alfreda Radzicki and Michael Gelfand
3:30-6:30 PM Studio Meeting / Desk Crits

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W 2:00-4:00 History of Visual Representation: Reinhold Martin, in Avery 114

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Week 4

September 28, Monday:	1:30-6:30 PM 6:30 PM	Studio Meeting / Desk Crits Lecture: Vo Trong Nghia
September 30, Wednesday:	2:00-4:00 PM	Arch Visualization
October 1, Thursday:	1:30-6:30 PM 5:30 PM	Pin Up Assignment 2 Review in Avery 114 Introduction to Third Assignment

Week 5

October 5, Monday:	Travel Week
October 7, Wednesday:	Travel Week
October 8, Thursday:	Travel Week

Week 6

October 12, Monday:	1:30-6:30 PM 6:30 PM	Studio Meeting / Desk Crits / Introduce Assignment 3 Lecture: Jeanne Gang
October 14, Wednesday:	2:00-4:00 PM	Arch Visualization
October 15, Thursday:	1:30-6:30 PM 4:30-6:00 PM	Studio Meeting / Desk Crits Student to Student Studio Trip Presentation

Week 7

October 19, Monday:	1:30-6:30 PM 6:30 PM	Studio Meeting / Desk Crits Roving Engineers (TBD) Lecture: Eric Howler & Meejin Yoon
October 21, Wednesday:	2:00-4:00 PM 4:00-6:00 PM	Arch Visualization Guest Lecture: Alan Suna from Silvercup Studios
October 22, Thursday	1:30-6:30 PM	Studio Meeting / Desk Crits Roving Engineers (TBD)
October 25, Sunday	11:00 PM	Pencils Down-all drawings printed and pdfs completed Only model making permitted after this time

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W 2:00-4:00 History of Visual Representation: Reinhold Martin, in Avery 114

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Week 8: Mid-Review Week

October 26, Monday	1:00 PM 1:30-6:30 PM 6:30 PM	Studio Introduction by Hilary Sample Mid-Review Open House Lecture: Stefano Boeri
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October 28, Wednesday:	No Class,	Double Session the following week
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October 29, Thursday:	1:00 PM 1:30-6:30 PM	Studio Introduction by Hilary Sample Mid-Review
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Week 9

November 2, Monday:	No Studio-Election Holiday	
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November 4, Wednesday:	2:00-5:00 PM	Arch Visualization
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November 5, Thursday:	1:30-6:30 PM 4:30-6:00 PM	Studio Meeting / Desk Crits Student to Student Studio Presentation
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Week 10

November 9, Monday:	1:30-6:30 PM 6:30 PM	Studio Meeting / Desk Crits Roving Engineers (TBD) Lecture: Bijoy Jain
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November 11, Wednesday:	2:00-4:00 PM	Arch Visualization
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November 12, Thursday:	1:30-6:30 PM	Studio Meeting / Desk Crits Roving Engineers (TBD)
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Week 11

November 16, Monday:	1:30-6:30 PM 6:30 PM	Studio Meeting / Desk Crits Roving Engineers (TBD) Lecture: Farshid Moussavi
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November 18, Wednesday:	2:00-4:00 PM	Arch Visualization
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W 2:00-4:00 History of Visual Representation: Reinhold Martin, in Avery 114

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November 19, Thursday: 1:30-6:30 PM Studio Meeting / Desk Crits

Week 12

November 23, Monday: 1:30-6:30 PM 3/4 Reviews
6:30 PM Lecture: Neil Brenner

November 25, Wednesday: 2:00-4:00 PM Arch Visualization

November 26, Thursday: Thanksgiving Holiday / No Studio

Week 13

November 30, Monday: 1:30-6:30 PM Studio Meeting / Desk Crits
4:30-6:00 PM Student to Student Project Presentations

December 2, Wednesday: 2:00-4:00 PM Arch Visualization

December 3, Thursday: 1:30-6:30 PM Studio Meeting / Desk Crits

December 4, Friday GSAPP Last Full Day of Classes
9:00 AM Symposium: Climate Change and Scales of Environment

Week 14: Final Review Week

December 7, Monday: 6:00 PM Pencils Down-all drawings printed and pdfs completed
Only model making permitted after this time.

December 9, Wednesday: 12:00 PM Students to Pin Up / Set Up
1:00 PM Final Reviews

December 10, Thursday: 12:00 PM Students to Pin Up / Set Up
1:00 PM Final Reviews

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Hilary Sample, Galia Solomonoff

W 2:00-4:00 History of Visual Representation: Reinhold Martin, in Avery 114

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Week 15: Exam and Paper Week

December 18, Friday

6:00PM

Housing Wrap Up Review and Party Wood Auditorium

Week 16: Grades Due

December 21, Monday:

5:00PM ALL STUDENT WORK COLLECTED FOR EYOS

TWO COPIES OF ALL DIGITAL WORK ON CD GIVEN TO Lindsey Wikstrom

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[Break out of reviews: Proposed schedule subject to changes](#)

[Monday, October 26th](#) [1pm Hilary Sample Introduction](#)

Mid Reviews	Critic	Room
	Solomonoff (Bunge)	412
	Eldred (Park)	505
	Marino (Tolla + Lignano)	B300S
	Gooden (Bunge)	600

[Thursday, October 29th](#) [1pm Hilary Sample Introduction](#)

Mid Reviews	Critic	Room
	Sample (Eldred)	412
	Park (Solomonoff)	505
	Bunge (Marino)	B300S
	Tolla + Lignano (Gooden)	600

[Thursday, November 19th](#)

Three Quarter Review (all on the same day) I can have mine in the studio...
 Up to each critic to decide how to do this. Can pair or not.

	Sample & Bunge	412
	Park & Tolla + Lignano	505
	Solomonoff & Marino	B300S
	Gooden & Eldred	600

[Wednesday, December 9th](#) [1pm Hilary Sample Introduction](#)

Final Reviews	Critic	Room
	Sample (Solomonoff)	412
	Park (Marino)	505
	Bunge (Gooden)	B300S
	Tolla + Lignano (Eldred)	600

[Thursday, December 10th](#) [1pm Hilary Sample Introduction](#)

Final Reviews	Critic	Room
	Solomonoff (Tolla + Lignano)	412
	Eldred (Bunge)	505
	Marino (Sample)	B300S
	Gooden (Park)	600