

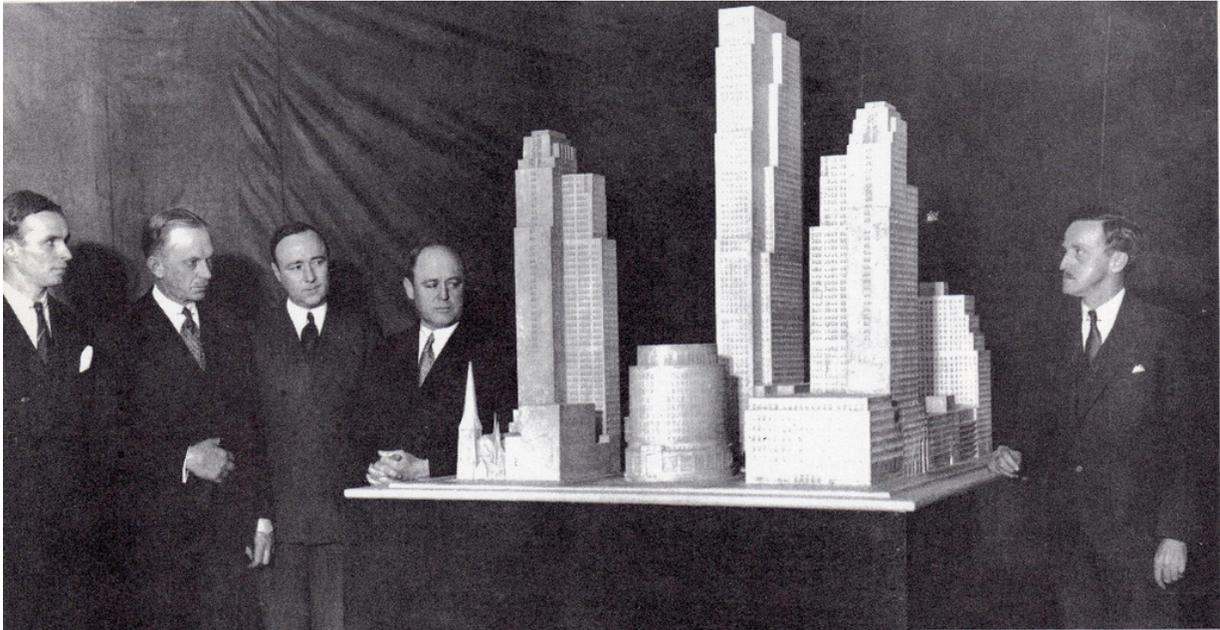
**Columbia University**  
**GSAPP**  
**AAD Summer 2015**

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## **Megablock Urbanism**

### **Rockefeller Center Reconsidered**

New York, NY USA



Rockefeller Center - Original Design in 1931  
Image: wirednewyork.com

### **Intro:**

The world continues to urbanize, in many regions at an astonishing pace, and we as architects must find ways to intervene in its physical metamorphosis. We are for the first time in history more urban than rural. Existing cities are expanding and new ones are being formed without historic precedent. How we continue to urbanize is of huge consequence. And, how we understand this phenomenon is critical to our ability to participate in the future urbanization of the world. This means we must invent new ways of thinking about cities and be agile enough to continuously modify and/or discard even the most recently developed theories and strategies. What possible socially and ecologically sustainable solutions can be invented for accommodating future urban growth? What role does architecture play in these newly formed megacities?

## Superblock / Megablock:

For many cities around the world, large-scale superblock development provides the default solution for accommodating urban growth. Superblocks, in their contemporary form, are byproducts of modernism – from Le Corbusier; to Soviet *microrayons*; to Lúcio Costa and Oscar Niemeyer's Brasilia; to Mao's *danwei* (factory units); to Steven Holl's Linked Hybrid in Beijing. Varying in size from 8 hectares to over 50 hectares, with populations from 1,000's to over 100,000, superblocks are spatial instruments with social, cultural, environmental, and economic implications, operating between the scales of architecture and the city.

Over the past 7 years, Asia Megacities Lab has been focusing much of its research on the 'Megablock.' What we hope to accomplish with our research is to redefine these superblocks--or 'Megablocks'—as laboratories for the consequences, opportunities, and potential global proliferation of large-scale urban models. We hope to discover through our research unique and emerging urbanisms that can be deployed in a multiplicity of urban contexts. The studio provides the 'speculative' and 'projective' component to the research - the design of the 'Megablock' becomes the experiment. How can the 'Megablock' become a socially and ecologically sustainable prototype for future urbanization?

## Megablock Urbanism – Manhattan

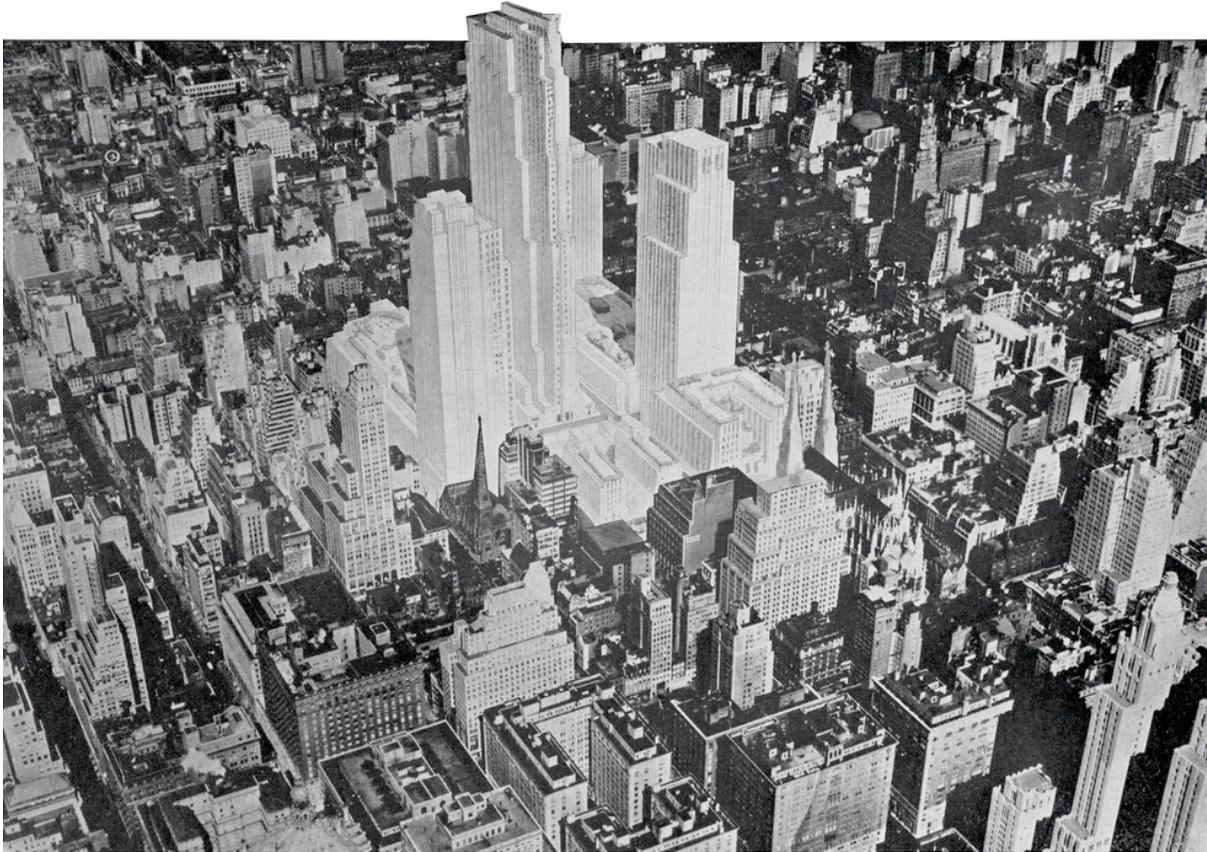


Rockefeller Center  
Image: wirednewyork.com



Lincoln Center  
Image: Keithyorkcity.com

The studio will focus on a Manhattan superblock. The ubiquitous Manhattan grid was established in 1811. The grid created oblong-shaped blocks, varying slightly in size (approx. 200' x 1,000'), comprised of a repetition of parcels organized linearly and back-to-back (approx. 25' x 100'). With the advance of technology and the ability to build bigger, the single parcel proved too constraining to accommodate the more ambitious projects. With the introduction of mega-projects in the 20<sup>th</sup> century, even whole blocks proved inadequate. As a result, multiple blocks were combined to accommodate a new 'mega' scale. Is the superblock still a relevant model for urban development?



Rockefeller Center – Bird’s Eye Rendering  
Image: wirednewyork.com

**Project:**  
**Rockefeller Center Reconsidered**  
**Birth of the Mega**

The challenge of the studio is to re-conceptualize Rockefeller Center in New York City.

The studio will be divided into two main phases.

**Phase I: Urban**

The first phase will focus on the urban scale and massing. Collectively, or in 2 or 3 groups, the studio will re-plan Rockefeller Center at the urban scale. As a starting point, the project will return to the site configuration that existed at the conception of the original project planning. The new master plan(s) and massing studies will provide the urban context for architectural proposals.

**Phase II: Architecture**

The second phase will focus on the architectural scale. Each student, or small team, will design in more detail the architecture of the urban scale plans. This exercise will fulfill the urban ambitions through architecture.

## Rockefeller Center

In the late 1920's, the ambitions of two entities aligned in Midtown Manhattan. Columbia University, a major landowner of properties throughout Manhattan, was planning a new campus in Morningside Heights. It was looking for revenue opportunities to help fund the project. At the same time, John D. Rockefeller was looking for an available site he could develop and provide a new space for the Metropolitan Opera. Thus, Rockefeller Center was born.

Rockefeller initiated the development project in part to provide a new space for the Metropolitan Opera. However, with the stock market crash of 1929, the Metropolitan Opera could not commit to a lease, and Rockefeller decided to move forward with the project despite their absence. The project was the largest private building project of modern times.<sup>1</sup> The Midtown site, bounded by Fifth and Sixth avenues, and from 48th Street to 51st Street, equaled 22 acres (89,000 m<sup>2</sup>). The total proposed building area was 8,000,000 square feet (743,000 m<sup>2</sup>) and comprised of multiple building, uses and functions. Rockefeller Center marked the birth of the 'mega' scale.

## Associated Architects



Associated Architects  
Image: supercrits.com

Numerous design schemes on a variety of possible sites were devised during the initial planning of the project. All of the early schemes assumed the opera house would be the centerpiece of the development. Some of the schemes were quite radical and inventive. However, once Rockefeller was committed to the development, and the Metropolitan Opera was detached from it, a new design team was formed - less to produce an innovative scheme than one to exploit the real estate value of the site. In 1929, the firm Todd, Robertson & Todd were hired to lead the project with architects Reinhard & Hofmeister and Benjamin Morris, Harvey Wiley Corbett (with a young Wallace Harrison) and Raymond Hood as consultants, from then on known as the Associated Architects.

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<sup>1</sup> Roussel, Christine (May 17, 2006). *The Art of Rockefeller Center*. New York: W.W. Norton & Company. ISBN

## Form follows Finance

With the loss of the Metropolitan Opera as the centerpiece of the project, the Rockefeller team scrambled to find a substantial tenant that would prove to be, as Todd described, “an important concern of national and international standing.”<sup>2</sup> To lure possible tenants, a design proposal was devised that could offer a substantial office building to a major company. Radio Company of America (RCA) was offered a fifty-story building at the center of the project, which shaped the final design of the entire development. (The tower was later heightened to seventy stories.) The initial sketch for the proposal was generated by Todd’s request by his architects Reinhard & Hofmeister.<sup>3</sup> It became the pragmatic blueprint for the development.

Clearly, the priority of the planning shifted entirely to maximizing leasable real estate. The midtown area of Manhattan was quickly transforming into a vibrant commercial center. Being replaced were residential brownstones and privately owned mansions of the wealthy. The once residential streets were being conceived as continuous walls of shops and commercial functions. The now famous promenade and sunken plaza were less conceived as public civic spaces than opportunities to funnel more customers into the development, whether from Fifth Avenue to the east or the subway trains below. For many involved, the loss of the Metropolitan Opera was far from unfortunate. In fact, it was seen as a great opportunity to fully exploit the site’s real value.

From the beginning of the planning process, even with the Metropolitan Opera, the project was conceived as a speculative development. The project was only feasible if it could generate significant income. Producing income for a project of this scale required the ability to accommodate and attract a multitude of functions. Already the largest private development project of its time, its mixed-use programming was also one of its most diverse and ambitious. Planning for a variety of specific architectural needs and requirements was paramount. As Rem Koolhaas stated in his book, *Delirious New York*, “Rockefeller Center is the most mature demonstration of Manhattanism’s unspoken theory of the simultaneous existence of different programs on a single site, connected only by the common data of elevators, service cores, columns and external envelope.”<sup>4</sup>

Even though the Metropolitan Opera was no longer included in the planning, entertainment was still considered a critical component to the development. Four theaters were planned together to create Radio City. A wide variety of popular entertainment could be shown in Radio City, including multiple forms of performance, cinema and theater. In addition to the theaters, the program mix for Rockefeller Center included prime retail spaces throughout the street level and lower levels that connected to the subway. Two hundred thousand square feet of new office spaces – equivalent to the Empire State and the Bank of

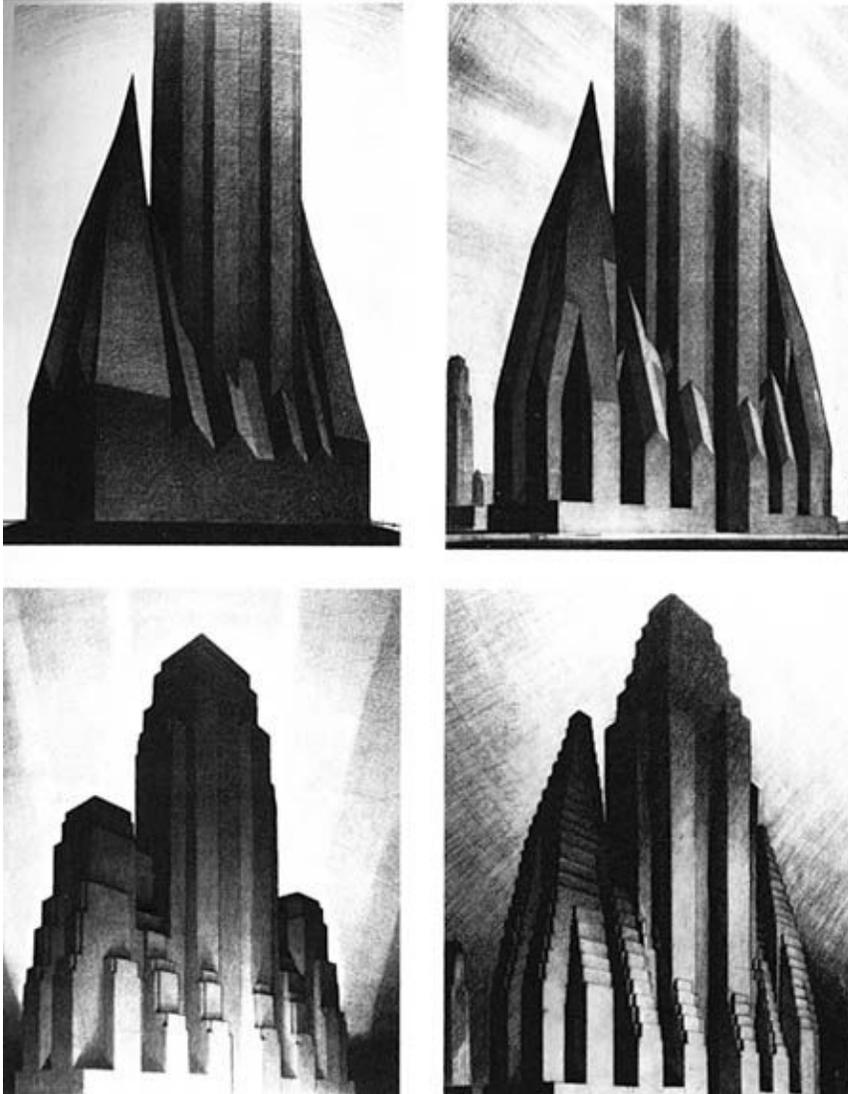
<sup>2</sup> Stern, Robert A.M., Gregory Gilmartin and Thomas Mellins. *New York 1930: Architecture and Urbanism Between the Two World Wars* (New York: Rizzoli, 2009.), P. 638.

<sup>3</sup> Koolhaas, Rem. *Delirious New York: A Retroactive Manifesto for Manhattan* (The Monacelli Press, December 1, 1997.) p.182.

<sup>4</sup> Koolhaas. p.197.

Manhattan Buildings combined - were accommodated in the now seventy-story tower and surrounding buildings. Production studios for broadcasting for included. Restaurants were planned to meet the lunchtime demands of thousands of new office workers and for those in the evening who wanted to participate in a more glamorous cosmopolitan lifestyle. Rockefeller Center exemplified the ambitions of the modern metropolis in the 1920's and 1930's.

### Urban Form



Hugh Ferris' NYC Zoning Setbacks Illustrations  
Image: pininterst.com

Although multiple planning strategies were studied, including schemes that occupied the multiple blocks with a raised podium, it was decided to, for the most part, maintain the through-streets to organize the development and to define the public spaces. The interior streets were pedestrianized with the perimeter streets remaining as vehicular. A main formal pedestrian axis was created from Fifth Avenue drawing the public into the block and to emphasize the grandness of the central tower. Deploying this strategy meant that the programs

and functions were dispersed into multiple buildings, creating an ensemble of parts that created a whole.

By dedicating a majority of the available FAR of the combined blocks into the fifty-story (later enlarged to seventy) tower in the center, the surrounding perimeter buildings were smaller and shorter, which created an overall cascading effect when perceived as a whole. The design of the overall massing and form of the project was lead by Raymond Hood, who had up until that time proposed a number of radical urban projects for New York. The project in its mountain-like form, not only complied with the setback regulations for the Manhattan zoning regulations devised in 1916 (dramatically rendered by Hugh Ferriss) but also with some of Hood's earlier architectural experiments. A manifestation of artistic expression combined with pure logic and pragmatics.

### **Hanging Gardens**

Sold as a means to raise the rent of offices overlooking the rooftops of the lower buildings, gardens were conceived suspended in the air, removed from the ground by layers of slabs and mass. The rooftop gardens were to be connected by a series of bridges creating a continuous park in the sky. As Koolhaas noted, it also provided an artificial landscaped ground floor for the towers.<sup>5</sup> Paradoxically, it detached landscape from the ground leaving it almost entirely without vegetation, while injecting the rooftops with a lush and pastoral artificial landscape.

### **Rethinking the Mega**

What is 'mega' scale today? Is this scale appropriate to urban development? We see large-scale development being constructed in cities throughout the world. Can this be a sustainable development model? What defines the 'mega' scale in Manhattan? Does it still align with the ambitions of the city? Is it only a device for real estate development? As the studio rethinks Rockefeller Center, what can be learned from its past – both planned and spontaneous – that can be applied to a contemporary condition? How can it contribute to urban and civic life in New York City? How might it today offer a promise of the future metropolis as it did in its initial planning?

### **Project Program Requirements:**

As a starting point to the project, the program requirements will match what exists currently. During the urban Scale phase, the studio can challenge those programs and offer an alternative proposal. The overall area of the project cannot shrink.

Rockefeller Center is comprised of multiple buildings and with multiple stakeholders. The studio will concentrate on the original 14 office buildings from the 1930s. The landmark buildings comprise over 8,000,000 square feet

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<sup>5</sup> Koolhaas. P.204.

(743,000 m<sup>2</sup>) on 22 acres (89,000 m<sup>2</sup>) in Midtown, The "superblock" is bounded by Fifth and Sixth avenues, and from 48th Street to 51st Street.

The studio will inventory and analyze (graphically) the existing buildings/functions and programs to determine the minimum requirements. The list below includes the major buildings/functions.

- One Rockefeller Plaza 608,000 sq ft (56,500 m<sup>2</sup>) — Originally the Time-Life Building; an original tenant was General Dynamics, for whom the building was briefly named.
- 10 Rockefeller Plaza 288,000 sq ft (26,800 m<sup>2</sup>) — Originally the Holland House, then the Eastern Air Lines Building. Currently home of Today Show studios.[16] and the Nintendo World Store.
- 30 Rockefeller Plaza (30 Rock): GE Building 2,900,000 sq ft (270,000 m<sup>2</sup>) — Formerly the GE & RCA Buildings. Headquarters of NBC.
- 30 Rockefeller Plaza (30 Rock) Global Headquarters and National Headquarters of Deloitte & Touche LLP
- 1240 Avenue of the Americas: One of the original buildings on the site not demolished; It has been adapted as an annex building to 30 Rock.
- 50 Rockefeller Plaza: Bank of America Building 481,000 sq ft (44,700 m<sup>2</sup>) – Formerly the Associated Press Building and home to many news agencies. Isamu Noguchi's large, nine-ton stainless steel panel, News, holds the place of honor above the building's entrance. Noguchi's design depicts the various forms of communications used by journalists in the 1930s. The only building in the Center built to the outer limits of its lot line, 50 Rock took its shape from the main tenant's need for a single, undivided, loft-like newsroom as large as the lot could accommodate. At one point, four million feet of transmission wire were embedded in conduits on the building's fourth floor.
- 1230 Avenue of the Americas: Simon & Schuster Building 706,000 sq ft (65,600 m<sup>2</sup>)[17] – Formerly U.S. Rubber/Uniroyal Building and site of the Center Theatre prior to 1954.
- 1250 Avenue of the Americas: GE Building — Originally RCA Building West, officially known as 30 Rockefeller Plaza.
- 1260 Avenue of the Americas: Radio City Music Hall
- 1270 Avenue of the Americas 528,000 sq ft (49,100 m<sup>2</sup>) – Originally the RKO Building, later the American Metal Climax (AMAX) Building
- 600 Fifth Avenue 409,000 sq ft (38,000 m<sup>2</sup>) — Formerly the Sinclair Oil Building
- 610 Fifth Avenue: La Maison Francaise 130,000 sq ft (12,000 m<sup>2</sup>)
- 620 Fifth Avenue: British Empire Building 130,600 sq ft (12,130 m<sup>2</sup>)
- 626 Fifth Avenue: Palazzo d'Italia 120,000 sq ft (11,000 m<sup>2</sup>)
- 630 Fifth Avenue: International Building 1.2×10<sup>6</sup> sq ft (110,000 m<sup>2</sup>)
- 636 Fifth Avenue: International Building North 120,000 sq ft (11,000 m<sup>2</sup>)

Other additions to the program are encouraged and at the discretion of the designer/team.

## Research

The studio will undertake research on the following topics at the beginning of the semester. Research will be conducted in teams. Each team will be assigned one or two topics to research and present to the studio during week two (see schedule).

- NYC: Site + Context + grid (Master Plan of 1811)
- Rockefeller Center: History; programs; etc
- Local zoning laws
- Superblock/Megablock / Megastructure precedents
- Mixed-use precedents

## Deliverables

Urban:

- Program: Requirements + Analysis
- Concept Drawings and Renderings
- Master Plan: Scale TBD
- Site Sections: Scale TBD
- Site Model: Scale TBD
- Site Analysis

Architecture:

- Building Floor Plans: Scale TBD
- Building Sections: Scale TBD
- Building Site Plan: Scale TBD
- Renderings: Interior and Exterior
- Massing Model (physical): Scale TBD – to fit on studio master plan site model
- Building Model (physical): 1/16" = 1'-0"

## Schedule:

June 5 (Fri)	First Class – Studio Introduction
June 12 (Fri)	Pin-up 1: Research Presentation + Urban Scale
June 19 (Mon)	Pin-up 2: Urban Scale Master Plan Presentation
July 1 (Wed)	Pin-up 3: Architecture: Building Concepts
July 8 (Wed)	Mid-Review: Master Plan + Building Concepts
July 24 (Fri)	¾ Review
Aug 3-7	Final Review

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### Urbanism:

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