PLAIN OBJECTS

by

Evelyn Ting

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Signature of Author: __________________________________________________________

Department of Architecture
January 15, 2015

Certified by: ________________________________________________________________

William O’Brien Jr.
Associate Professor of Architecture
Thesis Advisor

Accepted by: ________________________________________________________________

Terry Knight
Professor of Design and Computation
Chair of the Department Committee on Graduate Students
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Evelyn Ting

THEESIS COMMITTEE

Advisor

William O’Brien Jr.
Associate Professor of Architecture

Readers

Arindam Dutta
Associate Professor of the History of Architecture

Gediminas Urbonas
Associate Professor of Art, Culture and Technology
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ABSTRACT

Given the renewed status of the object in contemporary architectural discourse, this thesis explores the object's potential to participate in urban-scale field conditions despite its singularity and perceived autonomy from surrounding context. It proposes a strategy of object-making that privileges two faces as a means to highlight the parallel opposition that exists between the perimeter and core of a typical city block, and the binary conditions that occur as a result of this divide. The emphasis on two faces also creates the effect of flatness, challenging the three-dimensional quality of objects by defining them with two-dimensional figures.

The scenario of an expanding urban university campus, specifically the expansion of New York University in lower Manhattan, is used as the case study. The thesis accepts the theory that the knowledge economy has replaced industry in driving the socioeconomic and urban development of 21st-century cities, and that universities, a key player, must grow to stay competitive. The academic campus often functions like a city in microcosm, requiring its own services and infrastructure, and having to balance individual identity with a collective sense of place. At the same time, its growth inevitably conflicts with the communities that occupy the property in question. The two-faced formal device seeks to call out this simultaneous parallel and opposition, and argues for the object's potential to participate both in semiotics and abstract field conditions.

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ON TWO-FA CEDNESS

The object is making a comeback from being a kind of dirty word in architecture. The term is often used to describe architecture that disregards the urban and cultural context in which it is situated, reveling instead in its singularity and difference. However, non-contextual architecture does not necessarily equal anti-contextual architecture, a distinction Valerio Olgiati argues for in his theory on the significance of the architectural idea.\(^1\) Olgiati argues for the importance of architecture that derives from an abstract system of order, a design strategy inherently different from the approach that begins with the site in question.

Pier Vittorio Aureli argues more explicitly for the potential of architecture to be embedded with urban characteristics while at the same time embracing its autonomy from the city. He argues for the possibility of an architecture that is absolute, “resolutely itself after being ‘separated’ from its other [the city]” and yet deeply embedded with “the essence of the city.”\(^2\) This thesis uses this duality as its starting point, and introduces the concept of two-facedness as a formal device to produce autonomous architectural objects on the one hand, and a singular urban figure on the other.

Defining the architectural object with only two opposing faces creates an immediate distinction between the interior and the exterior facade. Like the typical city block, both participate in a type of public, one exposed to the overall city and the other shared amongst the specific occupants of the block. The two faces allow singular architectural objects to exist in the city that can also combine to produce urban scale effects. Thus, the response to context does not appear in isolated, idiosyncratic design moves at the object or building level, but instead are programmed as fundamental traits shared by a set of objects. The outside face of each object is defined as a rectangular plane, whereas the inside face is defined by the boolean of set primitive shapes: a square, triangle, and circle. Their simultaneous legibility and manipulation makes the resultant figures of the interior face at once familiar and strange.
To define an object with two faces also questions the three-dimensional quality with which it is commonly associated. The apparent flatness and solidity of the outer face hides the hustle and bustle of more private activities on the inside, displayed through an exuberant cast of figures.

The concept of two-facedness seeks to dramatize a set of binary conditions that are already inherent in the urban fabric in which they are inserted—blank vs. exuberant, mute plane vs. pure signage, stasis vs. variability—but in this case are heightened in the context of an added programmatic dichotomy, that between the expanding university campus and the city. One of the main challenges for urban universities is the need for growth within the existing flows of the city, as well as establishing an identity for its constituents. It is always a back and forth affair of compromise, to have a new building or set of buildings that reflects the university’s vision and identity as well as blends in with the existing city fabric. The two-faced object can simultaneously respond to both parties.


PLAIN OBJECTS
Blankness and Icons
BLANKNESS AND ICONS

The typical city block has two faces, an interior face and an exterior face. Usually, the exterior face, being exposed to a larger public, gets more adornment, while the interior face is more hidden, servicing only the specific occupants of the block. In this instance, the relationship is inverted, with the blank facade facing the outside and the exuberant facade facing the inside. The legibility of these inner facing figures as singular icons creates a cast of characters that constitute a cast of characters.

In his essay “From Object to Field: Field Conditions in Architecture and Urbanism,” Stan Allen argues for the importance for architecture to operate in terms of fields to better adapt and respond to the complexities of site. He highlights three characteristics that define the basic attributes of what he terms “field conditions”, borrowed from social theorist Robert Mangabeira Unger: blankness, vastness and pointing.

“The field is non-figural, hence ‘blank’ and resistant to semiotic interpretation; the field is necessarily vast, that is to say, it needs expanse and a sufficient number of repetitions to register as a field, and not a fragment. The third term, ‘pointing,’ is less obvious... it reaffirms the capacity of an abstract system to carry meaning, and trigger differences: a directed field.”

In the following set of images, snapshots of the exterior and interior elevation show how blankness, scalelessness and directionality are fundamental traits in these objects despite their highly determined geometry and form.

PLAIN OBJECTS
Blankness and Icons
DAY (EXT)

During the day, the outer perimeter of the campus is like a blank canvas. It does not project its identity as belonging to a private institution separate from the city, nor does it showcase the various activities it houses to the outside public. From afar, it seems as if part of the city has been whited out, an erasure juxtaposed against the common additive nature of city streets. The blankness and lack of resolution of the wall contributes to a sense of scalelessness that contrasts with the extreme reinforcement of scale in the fenestration of the tower behind. It becomes a backdrop for passersby, shifting the spotlight onto the happenings on the street, now like a stage. The faint texture of materiality is revealed only upon closer inspection, as are hints of occupation in the occasional vent and aperture.
PLAIN OBJECTS
Blankness and Icons
PLAIN OBJECTS
Blankness and Icons
PLAIN OBJECTS

Blankness and Icons
NIGHT (EXT)

At night, what was a solid white plane is now rendered near invisible. Without the typical array of windows seen in most city buildings, the outer wall of the campus seems to blend into the dark sky. In the day, the apertures come across as strange details that heightened the scalar play between the wall and the tower. In the night, however, the yellowish glow that emanates from certain apertures lends an air of familiarity against the grid of lights from the tower behind. The gaps between buildings that allow for pedestrian access in and out of the block is equally hidden at night, save for the faint glow from the translucent mesh that connects the interior and exterior face.
PLAIN OBJECTS

Blankness and Icons
CORNER (EXT)

The representation of the corner is flattened to further emphasize the wall as a continuous band. Although hidden from the exterior, the corner allows two adjacent objects to share a seam, and thus create a continuous interior while preserving the singular identity of each object. The larger interior space also means that the thickened, exterior wall can be occupied differently than in other segments. The increased porosity embeds more life into the wall, but still retains some mystery in the uneven distribution and varied sizes of the apertures.
PLAIN OBJECTS

Blankness and Icons
DAY (INT)

The interior facade—the new, inverted frontage of the institution—is comprised of fourteen unique figures, each programmed for an integral component to the campus: academic, residential, performance space, etc. Although each individual figure has its distinct outline, they are also resolutely from the same family, being all derived from three primitive shapes—rectangle, circle and triangle. Their relative simplicity and familiarity, as well as the way they are extruded away from the perimeter block gives them an iconic quality. In contrast to the blankness of the exterior facade, the interior figures and their one-to-one relationship with a specific campus program makes them more than just shapes, but signifiers open to semiotic interpretation.
PLAIN OBJECTS
Blankness and Icons
PLAIN OBJECTS
Blankness and Icons
NIGHT (INT)

As much as the exterior face is defined by its uniformity and continuity, so the interior face is defined by its variability in shape and size. Where the exterior face is solid, punctured by small apertures and other service and accessibility requirements, the interior face is transparent, a full display of the activities going on inside each object and framed by the outline of the figure. A translucent mesh connects between the two faces, allowing natural light to penetrate the interior interstitial spaces. At night, the opposite effect occurs, with the interior lighting illuminating the entire object and lessening the stark outline of the figure so prominent in the day. The mesh also has openings for circulation. Most importantly, the mesh allows both interior and exterior face a sense of wholeness and lack of compromise by incorporating all access and lighting requirements into its flexible surface.
PLAIN OBJECTS

Blankness and Icons
PLAIN OBJECTS

Blankness and Icons
CORNER (INT)

The interior corner condition shows how two separate figures are connected to create a continuous interior space without losing the resolution of the two figures as distinct entities. One of the key differences between the various figures with direct spatial repercussions is the way each figure meets the ground. Some meet flush with the ground, while others are elevated off the ground, carving out semi-exterior spaces and shaping the spatial sequence entering from outside the block.
PLAIN OBJECTS

Blankness and Icons
OBJECTS AND FIELDS

For Allen, “one of the potentials of the field is to redefine the relation between figure and ground.” He establishes a series of oppositions between object and field: shape vs. internal relationships of parts, formal vs. behavioral, relational vs. figural, serial aggregation vs. grids, axes, and symmetries. “Form matters, but not so much the forms of things as the forms between things.” In response, this thesis posits that the formal properties of objects does not rule out an attention to other forms and forces at play.

Although Allen argues for a complexity in the field that resists the simple dichotomy between the figurative and the abstract, one could apply the same argument to the dichotomy between object and field. The diagram on the left shows the parallel evolution of the single architectural object and the overall urban figure. Given the three residential towers already existing on the block, and the strong visual and spatial relationship established by their positioning, the most immediate urban strategy for the proposed intervention was to occupy the perimeter. The cube was chosen as the starting point, not least for its status as the quintessential “object.” Two faces are mapped out within this cubic bounding box and lofted together to produce the resultant set of objects. In response to existing site conditions, some of the interior faces are extended beyond the original bounding box, first orthogonally from the exterior plane, then gradually scaled and angled in relation to the existing towers. The gaps in between objects to allow access into the block are also mindful of existing pedestrian paths both in the carefully landscaped terrain inside and the Manhattan grid outside.

5. Ibid., 120.
PLAIN OBJECTS

Objects and Fields
The immediate site of intervention is located on the south block of two superblocks currently known as Washington Square Village. It houses two long residential housing blocks on the northern block, and three residential towers and NYU's athletic center on the southern block. Both plots are owned by NYU, and have been chosen for the university's expansion plan to strengthen their core identity around Washington Square Park.\(^6\)

The current distribution of NYU buildings around Washington Square Park shows visible formal similarities with the proposed intervention in terms of the square footprint of its building blocks. In both scale and form, they contrast to the surrounding city fabric, which is much denser and smaller in scale. The blocks also partially surround a large urban park; while the park has a strong sense of attachment to the university, it continues to be a public park and an amenity for the city at large. Part of NYU's motivation for expansion is the need for a stronger core presence, a challenge for institutions that are dispersed throughout the city and without a closed campus. At the same time, their integration with the city is part of their identity as a school. In response to the desire to strengthen institutional identity, this proposal considers the possibilities–or consequences–of a growing institution turning its back on the city, quite literally, by creating a new frontage that faces inward on a city block, giving the university a courtyard through the placement of objects rather than the drawing of a boundary.

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6. For more detailed information on NYU's existing expansion plan, see page 73.
The distinction between creating a courtyard with a collection of objects rather than a single continuous wall with various cuts and punctures is significant. Why is objecthood important to architecture, and cannot be discarded in the name of flows, systems, and fields? “It is as though objecthood alone can, in the present circumstances, secure something’s identity...”7 In the essay “Art and Objecthood,” Michael Fried argues that objecthood, as emphasized in works by artists such as Donald Judd and Robert Morris, is antithetical to art because it is “nothing other than a plea for a new genre of theater, and theater is now the negation of art.”8 The way in which art objects relate to the viewer is inherently theatrical because its shape and scale only produces meaning against a given situation and the viewer’s perception of the object.

Similarly, these two-faced objects seek to dramatize existing binary conditions that exist on the site, and engage the difference in scale and shape both against the city and the institution. The uniform, blank exterior face contrasts with the stepped profile and fenetration of the surrounding city blocks. The interior face establishes a new system of signage for the institution. Together, they create a new reference point with which to reexamine the city, as well as the possible relationships that can be forged between architecture and urbanism.

8. Ibid., 154.
Just as on the urban scale the objects are pinned onto the perimeter wall, so the same principle plays out at the building scale. Each building is comprised of a thickened service wall that faces the exterior of the block, packed with all the necessary services, vertical circulation requirements of the building, and a transparent wall. Extending from the wall are programs boxes to house more private, enclosed programs while the spaces between boxes serve more communal programs. The corner condition allows two objects to share interior space for larger programs, such as performance space and sport facilities while maintaining simultaneously the autonomy of the figure.
Above: The student center shows how various programs are distributed based on their need for enclosure. Meeting rooms, study spaces and an auditorium form program boxes while cafeteria and lounge seating occupy the interstitial spaces.
PLAIN OBJECTS

Objects and Fields
Above: Programs that require more floor area, such as the sports center, are housed in the corner objects for their connected interior space. Individual-use exercise equipment utilize the enclosed boxes while more public courts are exposed above.
Gallery/Exhibition; +4 ft

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Objects and Fields

Gallery/Exhibition; +30 ft
Dormitory; +4 ft
Dormitory; +30 ft
Student Center; +4 ft
Objects and Fields

Sports Center; +4 ft
Objects and Fields
Objects and Fields

Library; +4 ft
Performance; +30 ft
INSTITUTIONS AND THE CITY

“In a way, universities are the industries of today. They've replaced the manufacturing that has almost disappeared from U.S cities. A university imports raw material in the form of 18-year-old minds and bodies, processes that material, and four years later ejects a finished product that is ready for the market. Education is today's equivalent of the production line. It's an economic boon to any city.”

As the urban university campus today becomes more and more embedded with the city at an economic and infrastructural level, as evidenced by recent land grab struggles between universities and local neighborhoods, it can no longer afford to remain neutral on a spatial and programmatic level. The following is a summary of program and site research conducted in support of this thesis.

ORIGINS: THE FORMATION OF THE UNIVERSITY CAMPUS

The university campus today is much more complex than simply a site of learning. Its strategies of territorialization are not only physical, demarcating boundaries in the case of self-contained urban campuses or suburban campuses, but social, political and infrastructural. Education, and particularly the university campus, is the new frontier of urban development. The university now is the leading corporation. The university campus has historically grown and functioned as a city in microcosm, carving out its own territory and resources separate from the surrounding city. What is a potential future model of the university campus if the city within a city model no longer works?

9. Robert Campbell, “Universities are the New City Planners,” in The City as Campus, Urbanism and Higher Education in Chicago, by Sharon Haar (Minneapolis: University of Minnesota Press, 2011), 149.
Early universities took root in cities that allowed for relatively inexpensive living costs and was supported by rich agricultural regions. They did not have a dominating presence within the city, but instead its existing facilities. For example, lectures were commonly held in houses rented by professors, and examinations and assemblies in churches and convents. When scholarly privileges conflicted with local laws, schools were of a small enough scale that they could simply migrate elsewhere. This was a common phenomenon and often led to the formation of new institutions. Because of the increasing student population, however, moving locations became more difficult. The first act of the university binding itself to the city was designating a chapel exclusively for the use of university scholars.

Inherent in act of university campuses carving out their territory is the desire to create a sense of place that is separate from the surrounding context. In Jonathan Coulson’s book *University Planning and Architecture*, a campus plan is defined as a “comprehensive plan for physical growth, predicated upon a needs assessment responsive to the university’s vision, academic strategy, history and culture.”10 Again, one of the key functions of the campus plan is to create a sense of place. Specifically, he points out carefully bounded open spaces (University of Virginia’s Lawn) or significant buildings or constellation of buildings and their ability to symbolize the university.

The NYU administration argues that the modern day university is a key driver in the city’s urban development. The year 2031 marks NYU’s 200th anniversary. The plan outlines the university's projected growth and development, with the goal of strengthening its core campus at Washington Square as well as its global network of satellite campuses. NYU believes that the only way to compete with other universities is to increase its physical footprint— to build laboratories, classrooms and residences for the students and scholars that will contribute to it and the city. It has projected a maximum need for an additional six million sq. ft. by 2031 to be distributed across the city.\textsuperscript{11}

NYU is proposing to add 6 million square feet of new space across New York City in the next twenty years, with half the growth taking place in the historic blocks of the Village. The proposal is known as NYU 2031, which is a proposal for four new buildings, including a 38-story hotel for out-of-town faculty attending conferences, residential tower, and dorm building alongside the I.M. Pei towers.\textsuperscript{12} It will demolish the Coles Gymnasium and replace it with a 17-story mixed-use building with a dorm, academic space, supermarket and gym. It will need to rezone the area for commercial use. On the one side, the argument is that NYU needs space for research facilities if it is to compete for top faculty. On the other hand, local community is concerned that it will destroy the local neighborhood fabric.

In the span of 30 years, NYU has developed from a regional commuter school to a national university. 90\% of its student population is


\textsuperscript{12} New York University, A University as Great as its City, Ch.6, accessed July 10, 2014, http://www.nyu.edu/nyu2031/nyuinnc/pdfs/nyU2031Ch06TheCore.pdf.
international. It is the largest private university in the U.S., with a student population over 40,000. Mitchell Moss, professor of urban policy and planning at NYU, compares it to having year-round tourists. Universities create their own gravity that is separate from the city center, and NYU has been growing at a rate of 125,000 sq ft per year since its founding.

There are concerns that the Village will be overtaken with students and lose its local culture. It has a poor track record of development in the past. Despite plans to expand in other locations around the city, for example, moving the nursing school to East Manhattan or developing an entirely separate campus from scratch on Governor’s Island, the need for something centralized still persists. The school’s internal analysis shows they still need 3 million sq ft. in Greenwich Village.

The last decade has been a time where universities across Manhattan have been intent on expanding. There was Columbia University’s Manhattanville expansion, a 17-acre expansion into West Harlem first publicly approved in May 2009, and eminent domain clashes that ensued with local residents. Fordham University sought to add an additional 1.5 million sq ft. to their campus. In an effort to coordinate the various parties affected by the proposed NYU 2031, Scott Stringer, Manhattan borough president, sought to create a committee comprising NYU, Village Residents, and politicians to develop together.


Institutions and the City


New York University, A University as Great as its City, Ch.6, accessed July 10, 2014, http://www.nyu.edu/nyu2031/nyuinnyc/pdfs/NYU2031Ch06TheCore.pdf.


