

# The Third Facade

Haipeng Lin

Master of Architecture Thesis  
University of California, Berkeley  
2021-2022

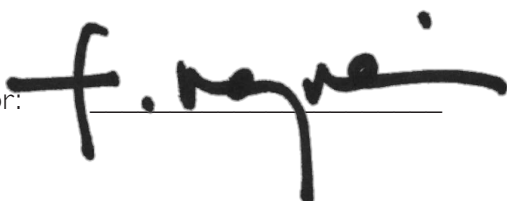
Advisor: Neyran Turan

This thesis book was produced in the context of Professor: Neyran Turan's seminar and studio *Another Practice* 2021-2022, in partial fulfillment of requirements for the **Master of Architecture** degree at the **University of California, Berkeley**.

Advisor: Neyran Turan

© 2022 Haipeng Lin.

The thesis of Haipeng Lin, titled *The Third Facade*, is approved:

Advisor: \_\_\_\_\_

Date: \_\_\_\_\_

05/19/2022

University of California, Berkeley  
Spring 2022

### Acknowledgements:

Thank you to my advisor, Neyran Turan, for your continuous and altruistic support and guidance throughout the year. I appreciate you always encouraging me to be myself and think independently. I could not have undertaken this journey without your ceaseless encouragement and advice.

I would like to extend my sincere thanks to all my friends and cohort. Thank you for always being there to support me. I have learned so much from all of you through all the extraordinary works you produced and the day and night conversations we've had.

Last but not least, thank you to my family for the unconditional love and support. Thank you all for always standing there by my side.



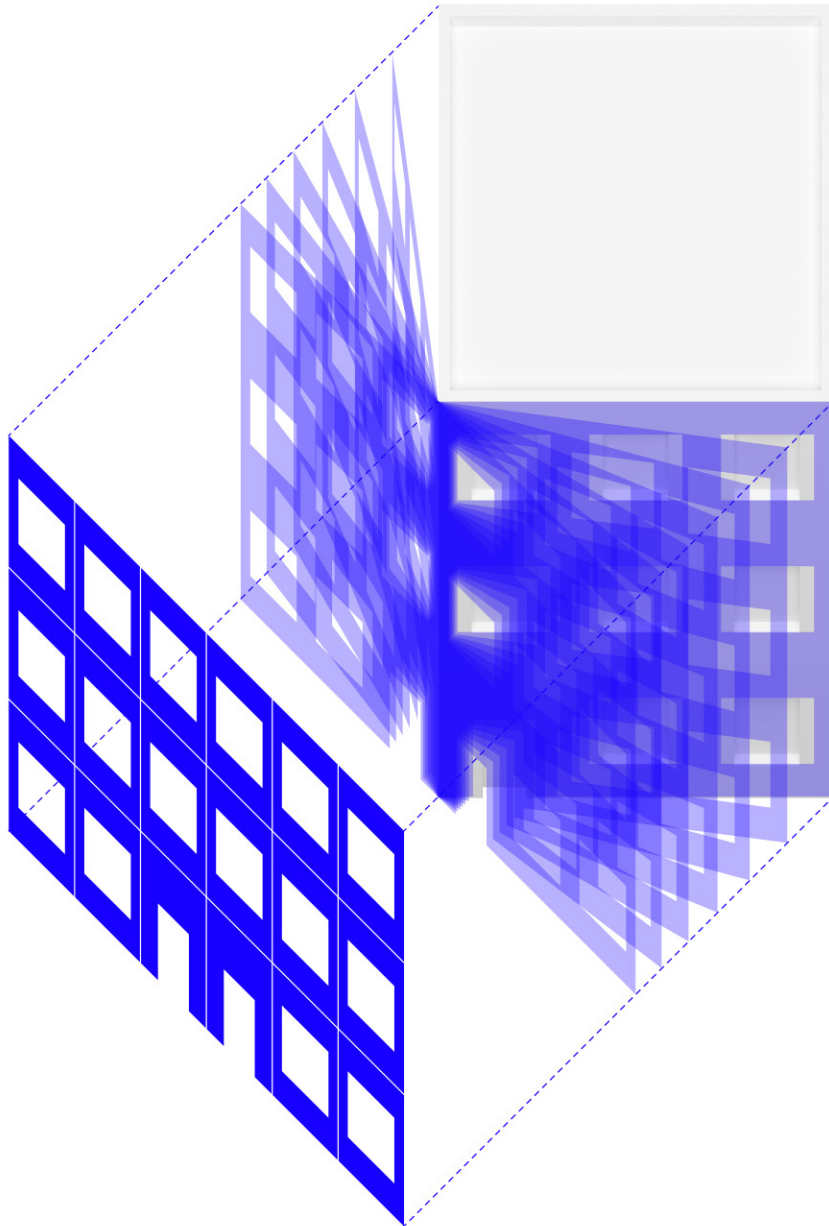
## Contents

5	<b>The Project</b>
7	The Third Facade
13	< 90
21	= 90
29	> 90
39	<b>The Research</b>
41	Legibility
45	Objectivity
49	Ambiguity
54	<b>Bibliography</b>

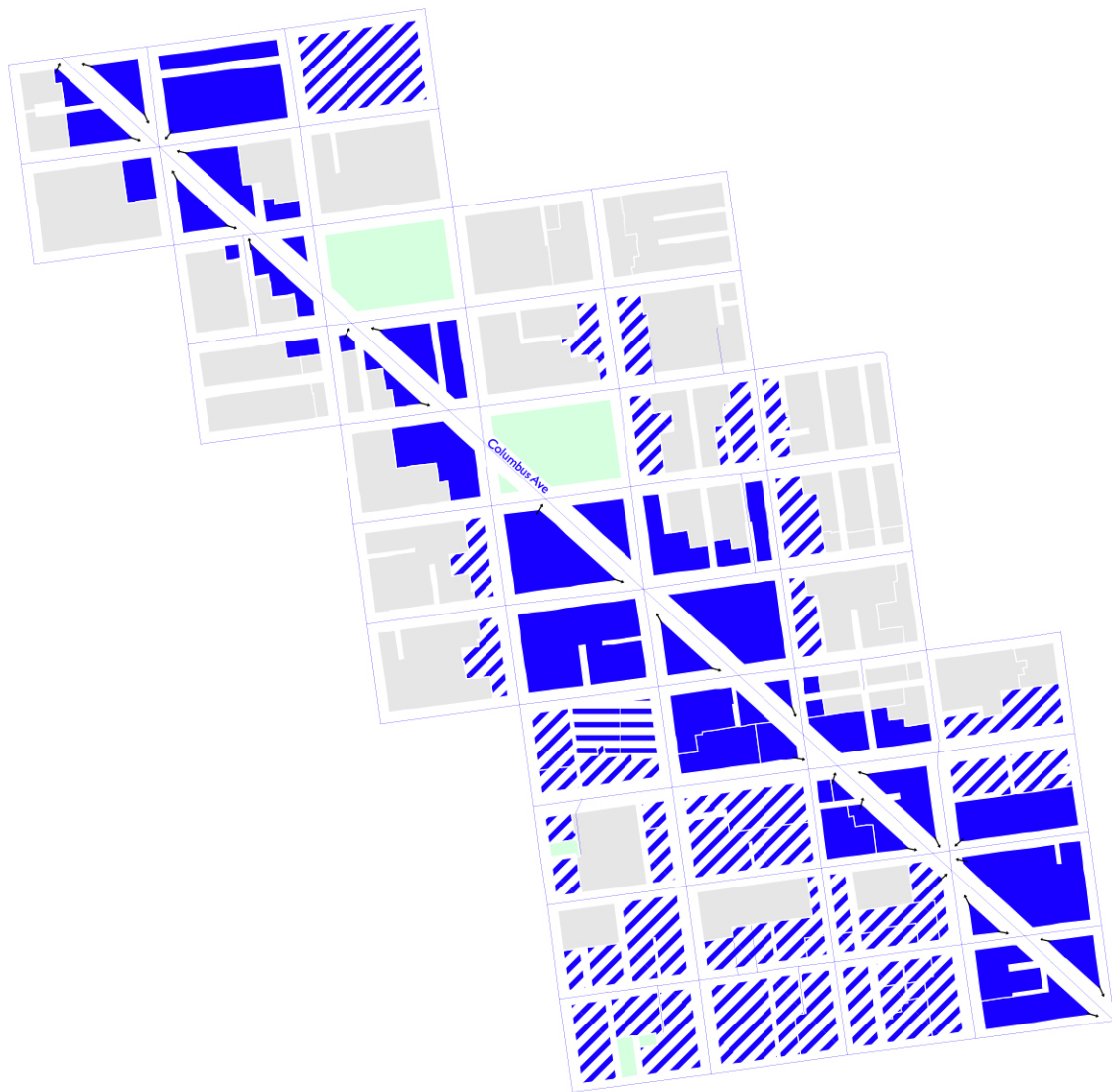
## The Project

## Thesis Statement

The frontality of the building is usually associated with the facade. However, it is common to see the building whose corner is chamfered at the ground level, implying the desire for the building's front to be read from the corner. It raises the discussion of the complex and contradictory relationship between front and facade. This thesis proposes the third facade as a new approach to the urban corner building by drawing the corner elevation as the primary elevation and using apertures as a way of defining the frontality. It aims to spark out potential typologies of the corner building, discussions on architecture's formal composition, and new readings of the urban contexts.



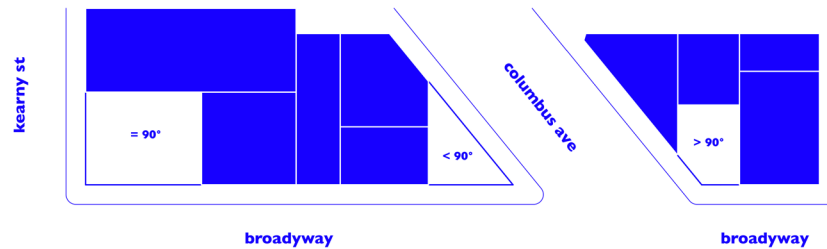
The frontality of the building does not necessarily equal to the facade. Most buildings in the city are contained within a boxy shape and have the facade composition in a very common grid. The strategy of the design is to apply this familiar grid composition at the corner, decoupling the orientation of the apertures from the facade which was parallel to the street. It tends to generate unfamiliar interpretations of the building from the most familiar design strategy.



- Moderate-Scale Mixed Use along the Columbus Ave
- Residential, Mixed (Houses & Apartments)
- ▨ Moderate-Scale Mixed Use
- Public

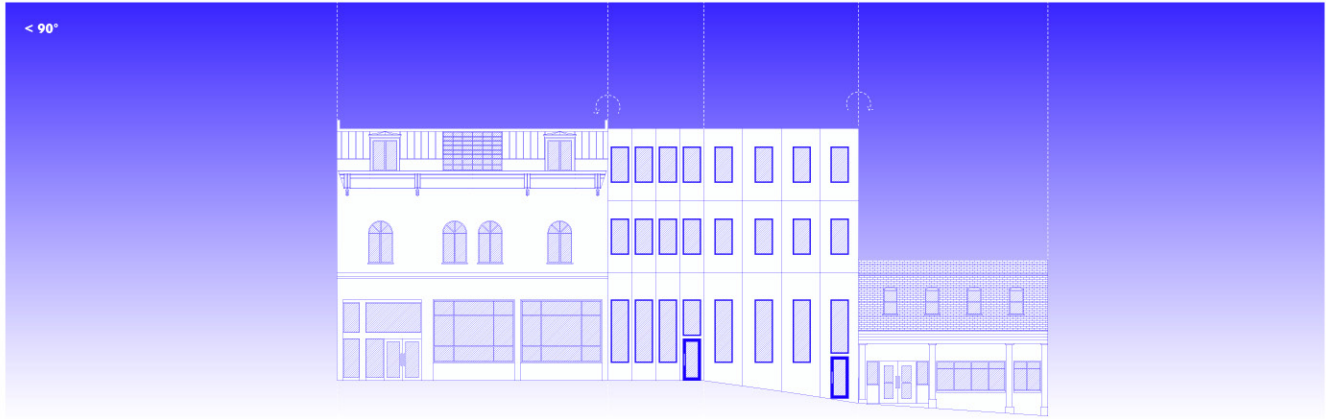
Block area along the Columbus Ave in San Francisco, California, indicating buildings with main entrance at a chamfered corner.





The selected sites are located along Columbus Avenue in San Francisco. Columbus Avenue is the street cut across the grid layout of the city, automatically resulting in many diverse corner conditions. This mapping is showing the buildings along Columbus Avenue with their entrance facing the corner, which demonstrates a large percentage of this condition.

The three selected sites vary in degrees that best represent the three possible corner conditions. This thesis focuses on the short mixed-use buildings in the city, having neighborhood commercial at the bottom and residential on top because they are the most common and vernacular building types within the city. In this case, the focus is even more narrow down to the corner of this type of building.



corner elevation

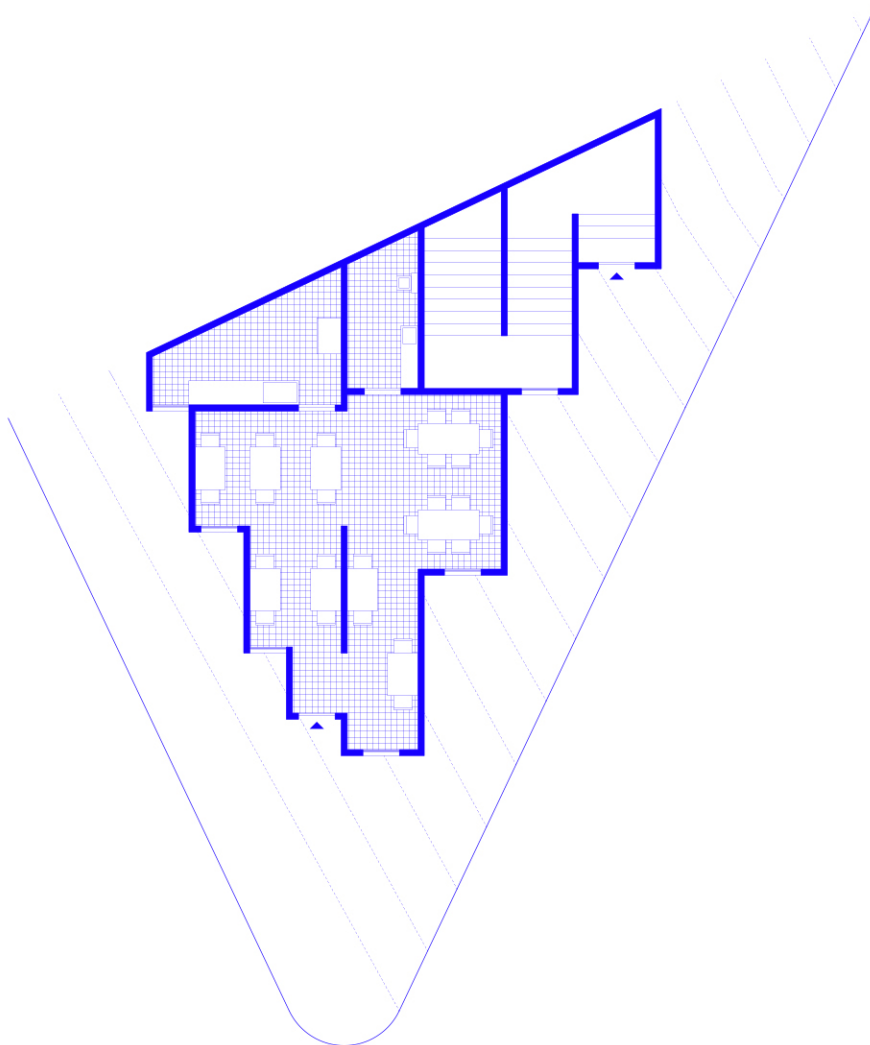
1 5 10 20 ft



This thesis proposes the third facade as a new approach to the urban corner building by drawing the corner elevation as the primary elevation and using apertures as a way of defining the frontality. The corner elevations are drawn based on a common grid composition of the facade while the neighboring building's elevations are folded here to have a better reference.

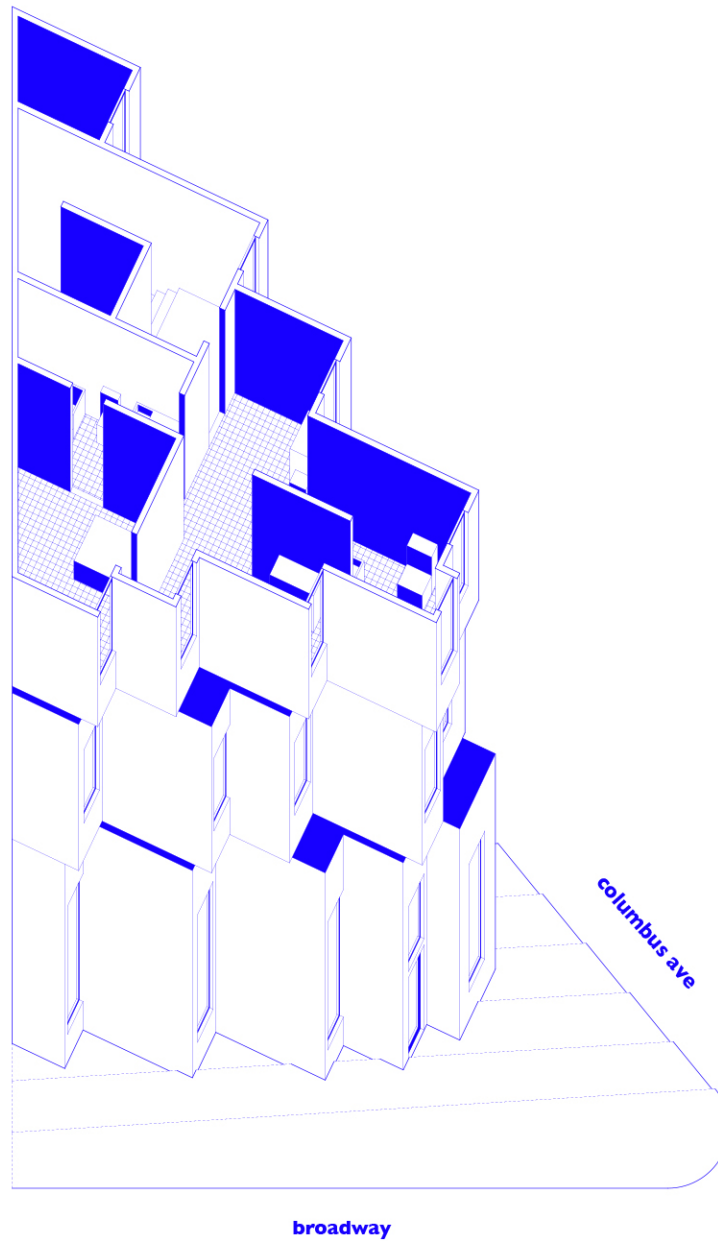
< 90

"< 90" is developed from the drawing of its corner elevation. The site is relatively narrow and tight due to the sharp angle. The strategy here is to set back the boundary and generate the zip zap form from the corner elevation and has all the apertures oriented toward the corner. The plan layout is reinforcing the reading of this formal gesture by following the grain of the orientation. The elevations on both streets show how the depth varies which creates this rich and interesting reading of the form.



< 90° ground floor plan



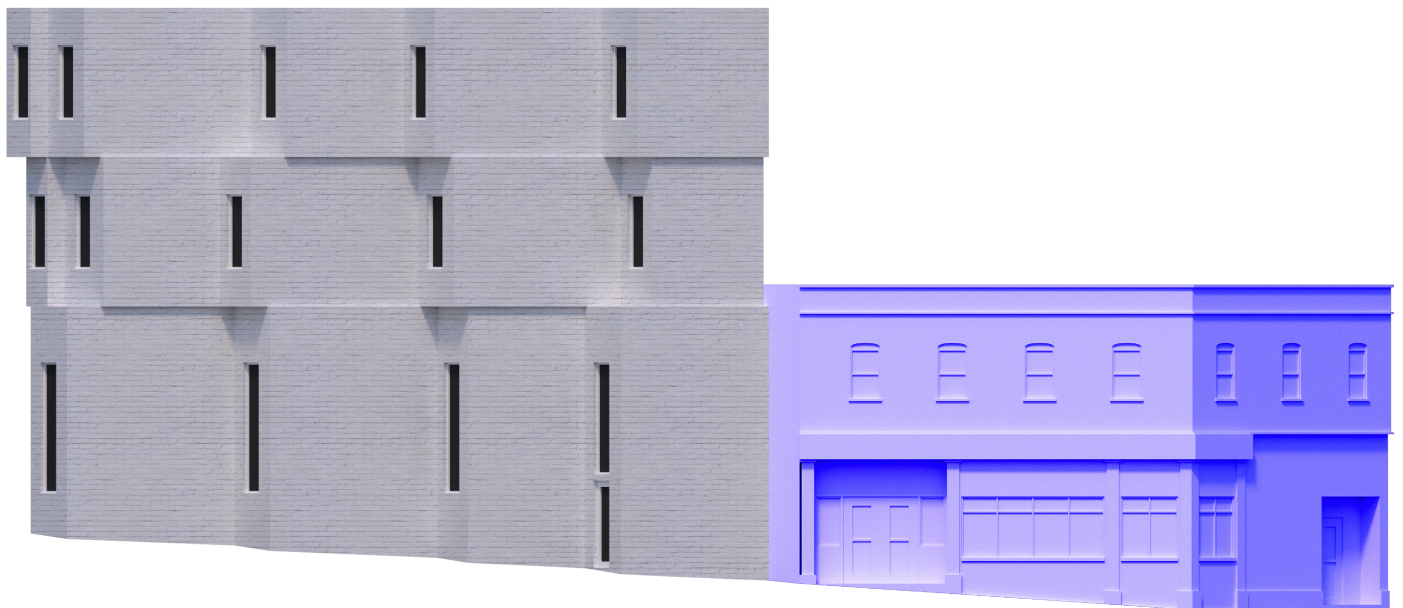


< 90°

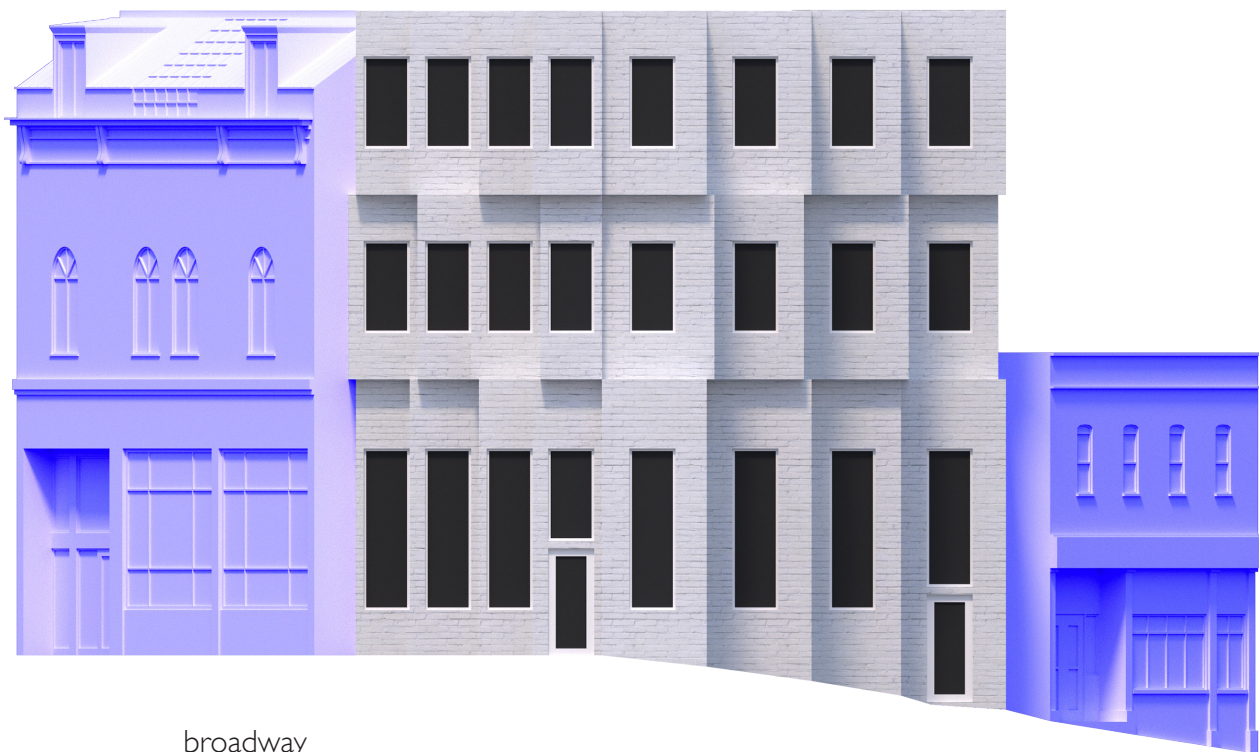
< 90



broadway



columbus ave



broadway

columbus ave

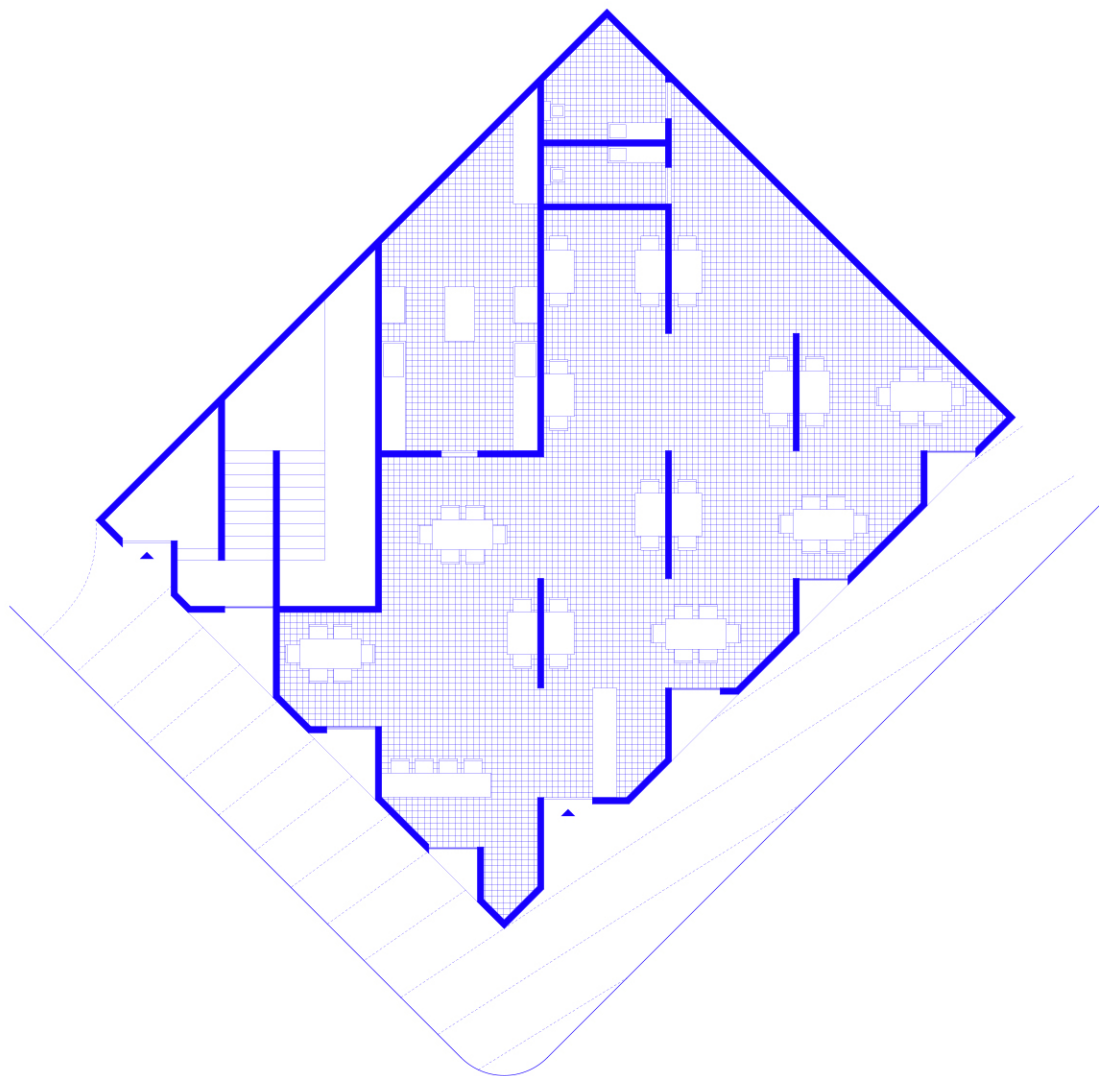




Model 1' = 3/8"

$$= 90$$

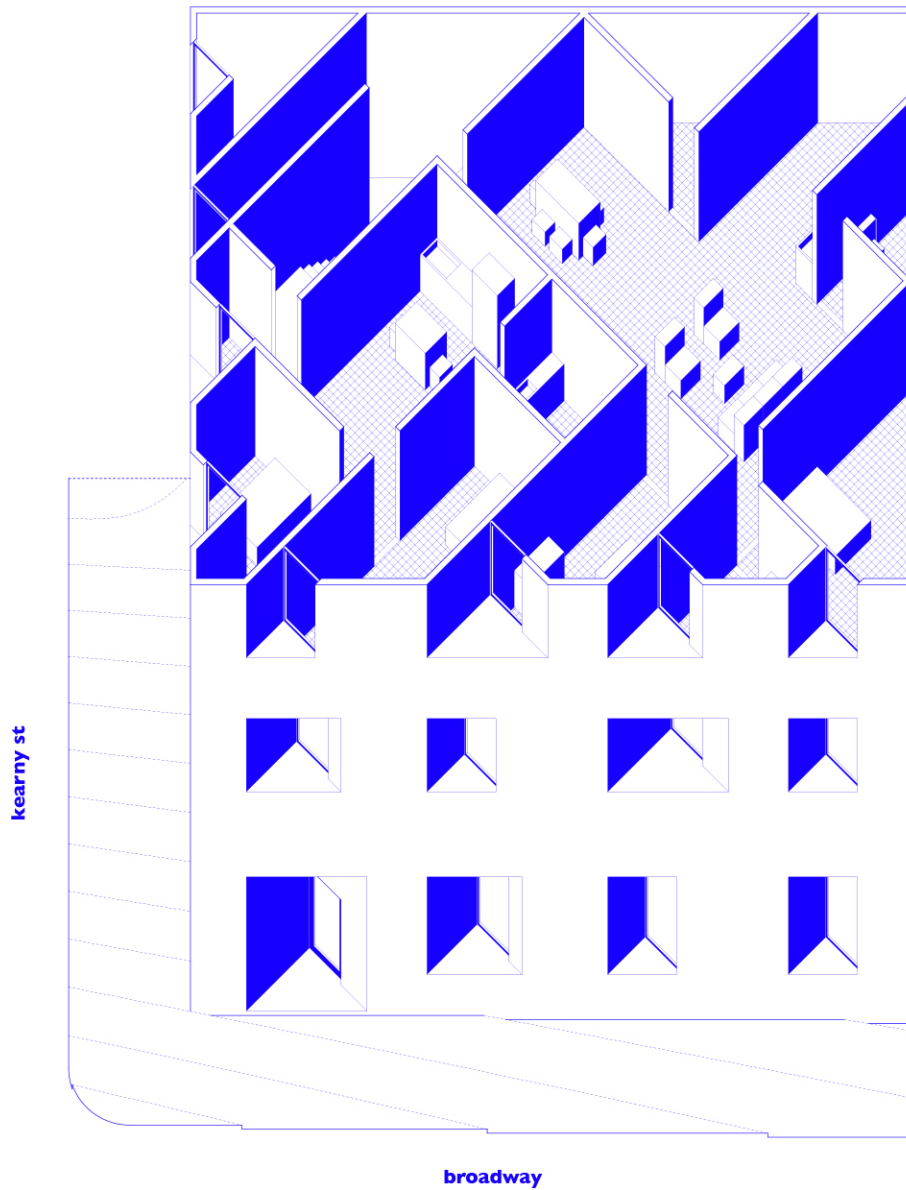
"= 90" is corresponding to the most common angle within the urban layout. The building itself maintains this boxy shape while the apertures have different depths creating these negative bay windows. It has a great impact on the reading of the interior space and reconstructs a new relationship between the facade and the inside.



= 90° ground floor plan

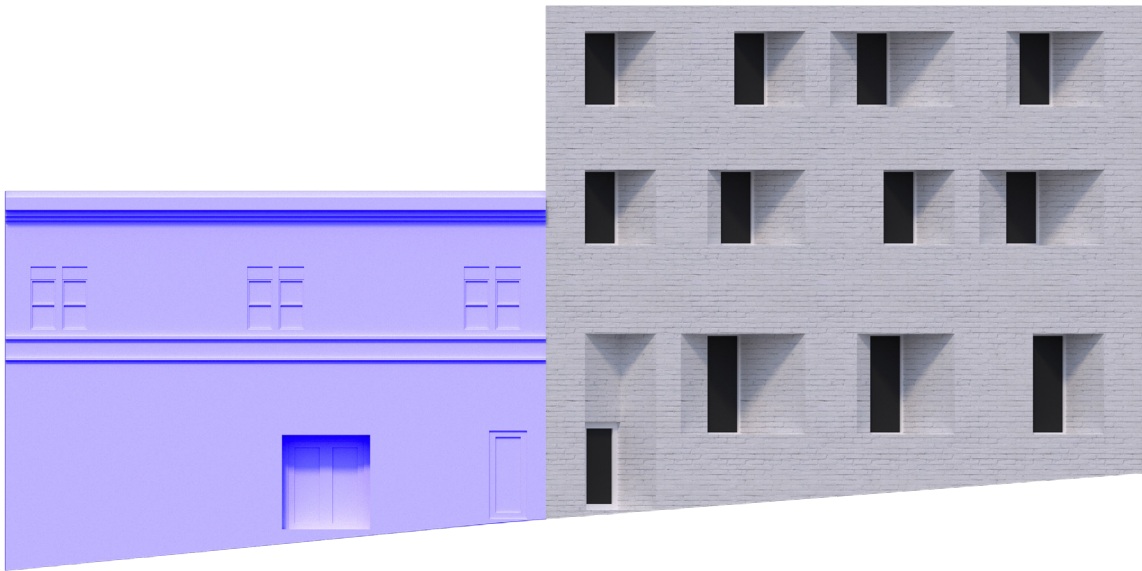


= 90

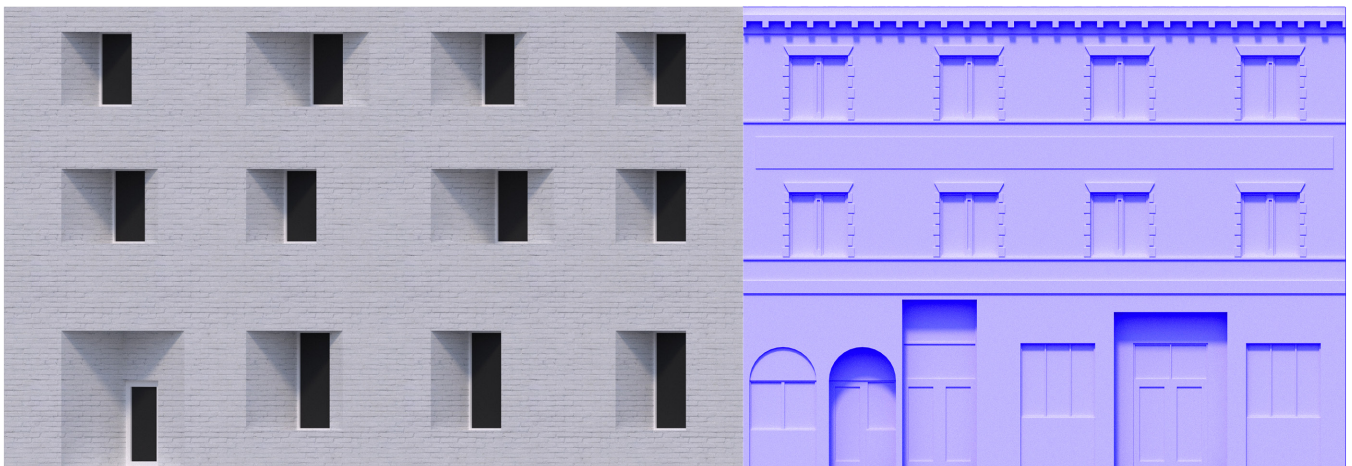


= 90°

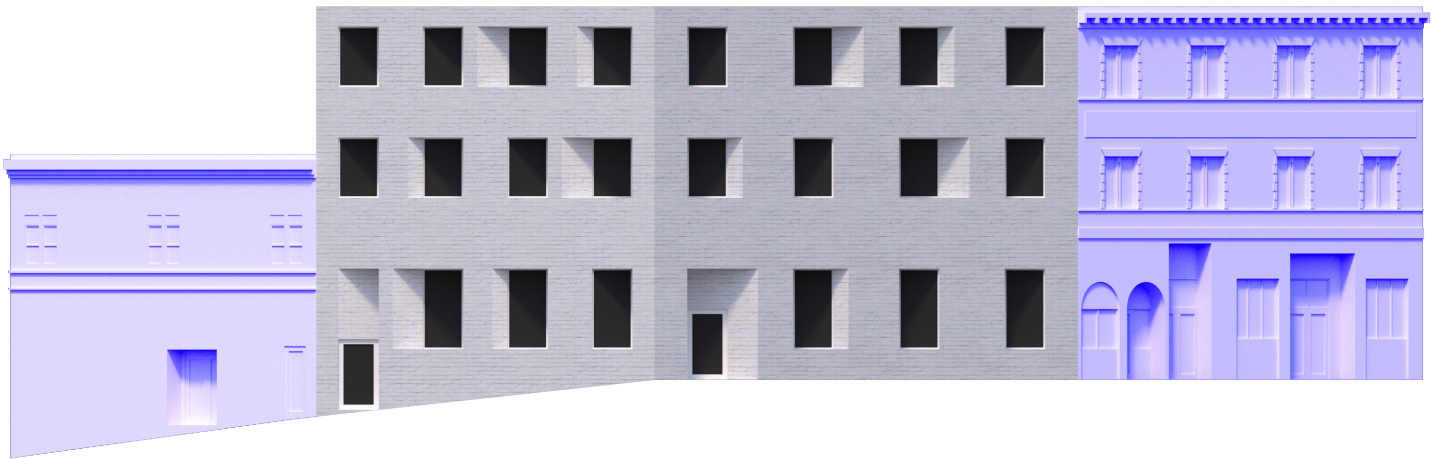
= 90



kearny st



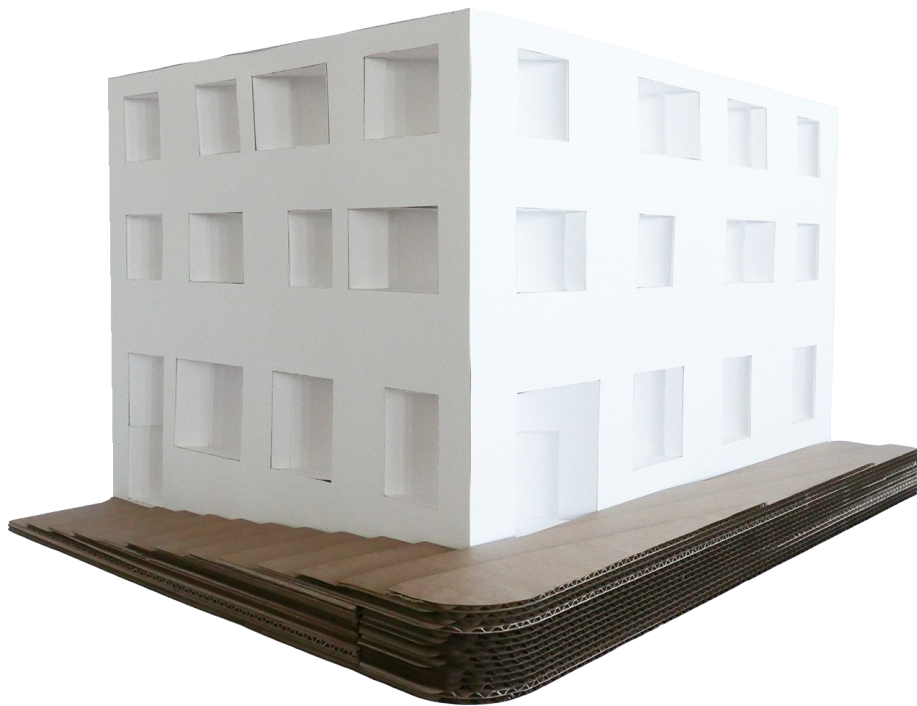
broadway



kearny st

broadway

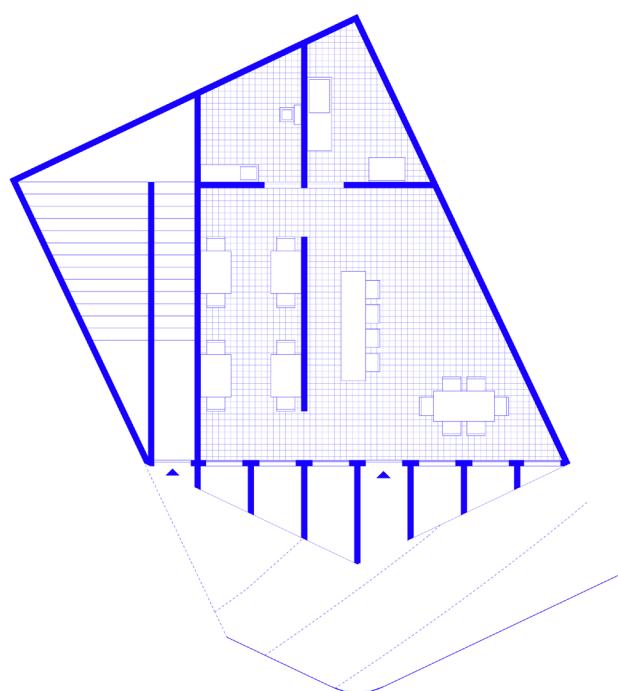




Model 1' = 3/8"

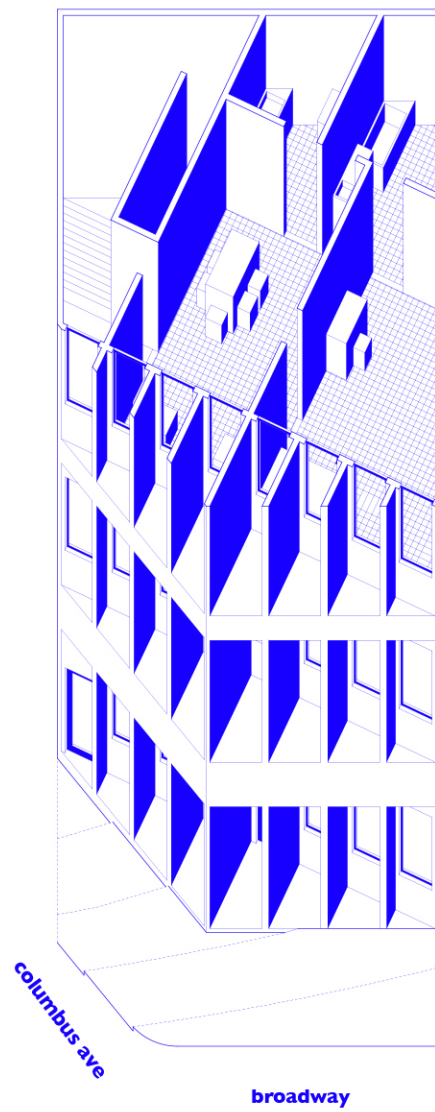
> 90

">90" also refers to an unusual angle of the city corners. The apertures are all aligned together sort of to create a new facade cutting through the corner. It exists within the building and challenges people's reading of the front even more since the cut surface is visible and continuous at the corner.



> 90° ground floor plan

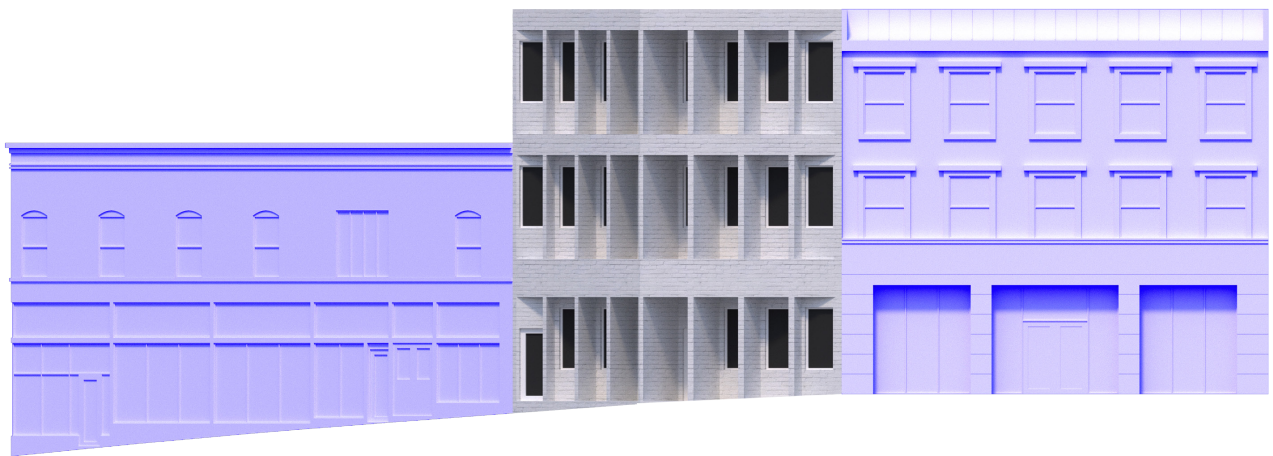




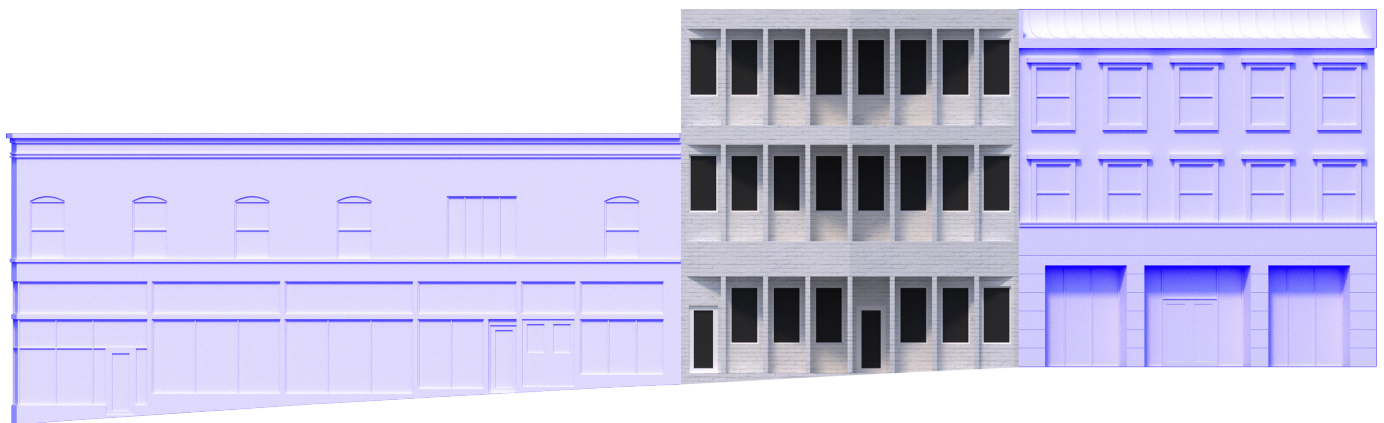
> 90°



columbus ave



broadway



columbus ave

broadway





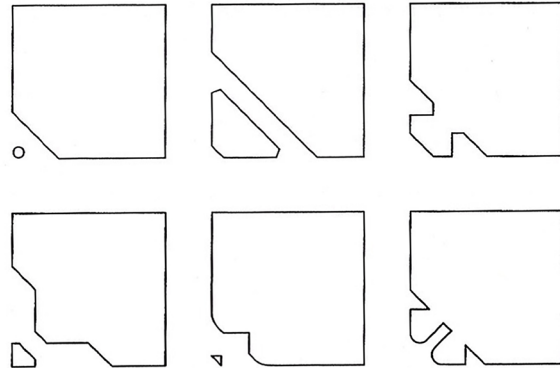
Model 1' = 3/8"



The third facade is not only a design strategy for the short mixed-use buildings. Drawing from the investigation of these banal buildings, it looks forward to projecting and radiating out to the broader architecture question between the front and the facade. It aims to spark out potential typologies of the corner building, discussions on architecture's formal composition, and new readings of the urban contexts.

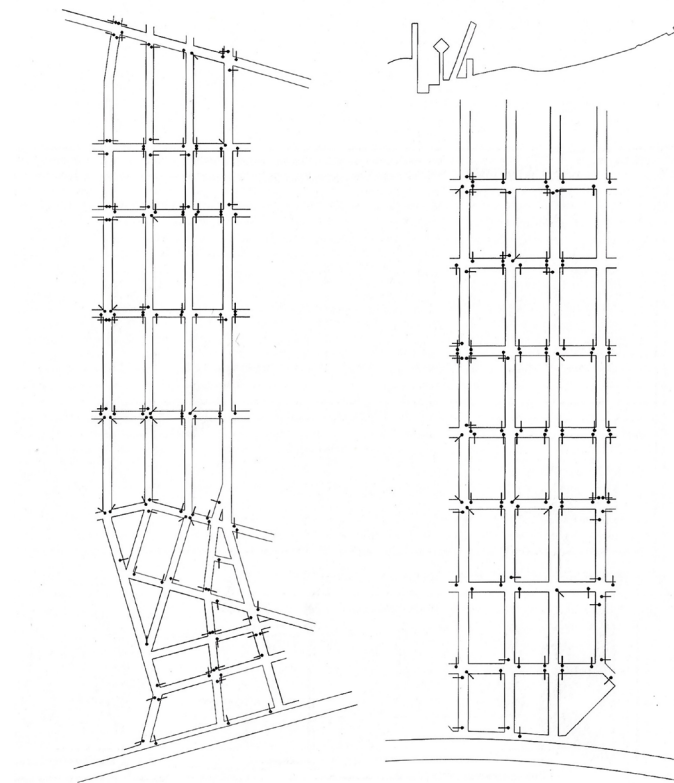
## The Research





Plan diagrams in *Unresolved Legibility in Residential Types*  
by Clark Thenhaus (2019)

Plan diagrams of variations on the chamfered corner (top).

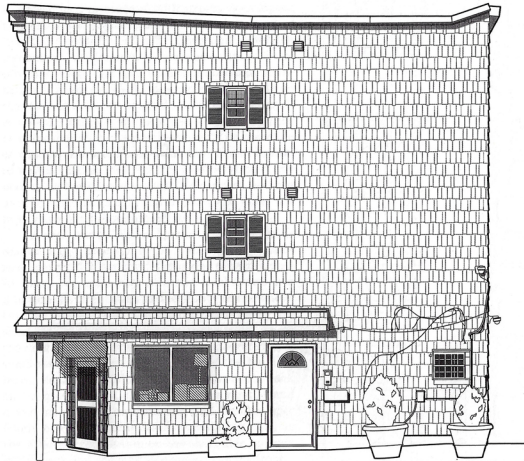


Diagrams in *Unresolved Legibility in Residential Types*  
by Clark Thenhaus (2019)

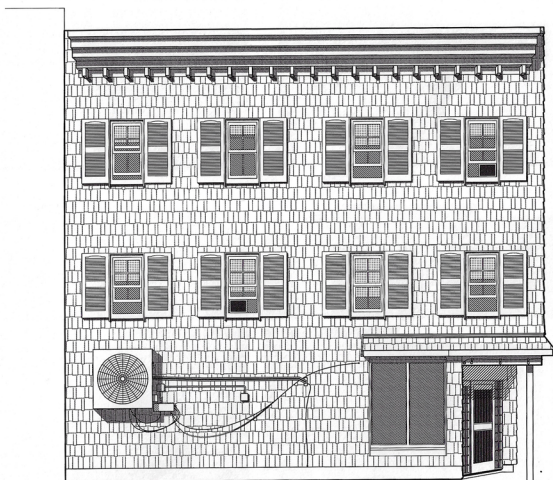
Nine-by-three block area between Manhattan Avenue, McGuinness Boulevard, the Brooklyn Queens Expressway, and Greenpoint Avenue in Brooklyn, New York, indicating buildings with a chamfered corner (left).

Nine-by-three block area bounded by the Brooklyn Queens Expressway, the East River, 6th Street, and 9th Street in Brooklyn, New York, indicating buildings with a chamfered corner (right).

As Built Drawings in *Unresolved Legibility in Residential Types*  
by Clark Thenhaus (2019)



AS BUILT\_A wine bar at Wythe Avenue and 7th Street in Brooklyn, New York, viewed from Wythe Avenue appears as the front at the ground floor, but as the side on the upper two floors.

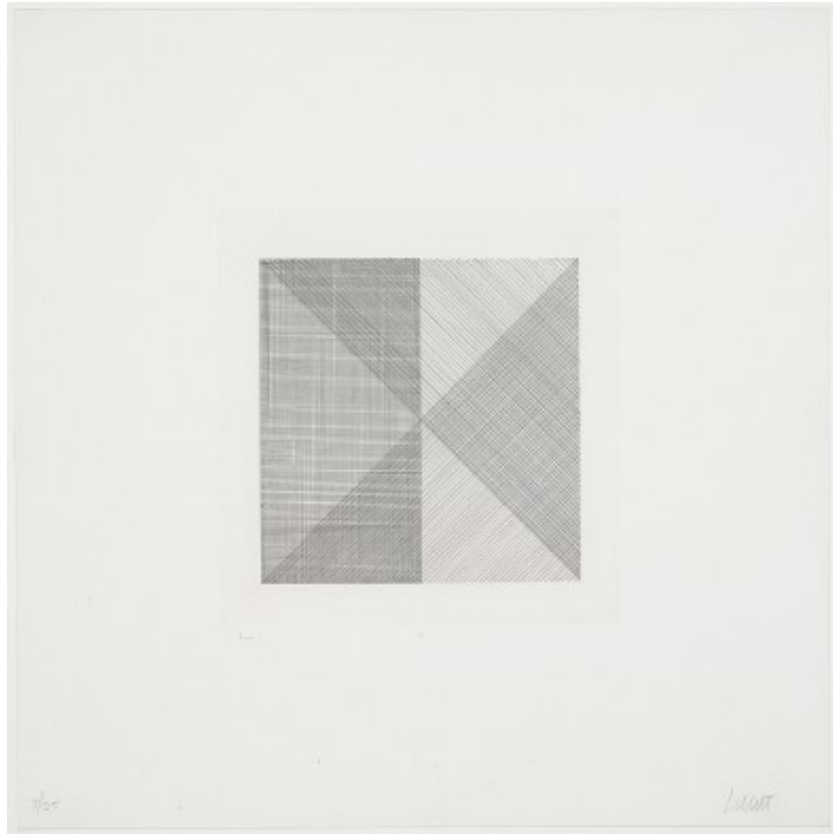


AS BUILT\_The same wine bar at Wythe Avenue and 7th Street in Brooklyn, New York, viewed from 7th Street appears as the front on the upper two floors, but as the side on the ground floor.

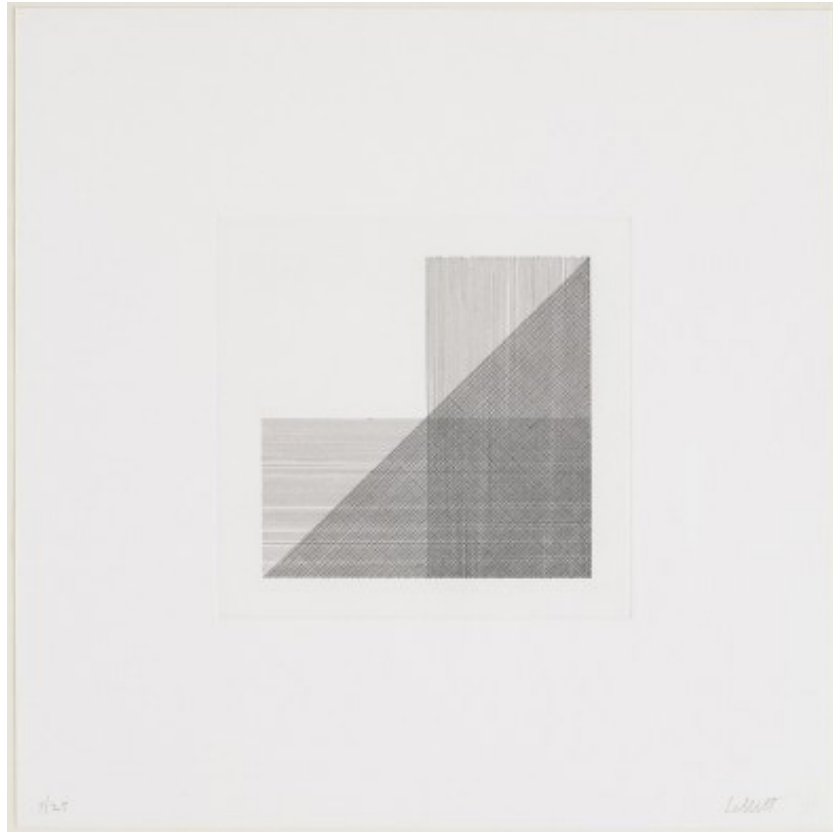


### **Legibility:**

In Thenhaus' book, the chapter "Mixed-Up Stacks & Cut Corners in Mixed-Use" raises an architectural question about the unresolved legibility of buildings. It happens all around us but is not often noticed and valued. The cut corners of the corner buildings in the city call into question whether the front of the building is equal to the facade. In the cases given by Thenhaus, the front of the building is defined by the entrance located at the chamfered corner, while the other apertures on the regular facade are constantly fighting against it as if competing for who is the real front. This contradiction triggers the discussion of this thesis on this pure architecture question and also pushes the formation of an idea to design corner buildings like corner buildings.



*Squares with a Different Line Direction in Each Half Square*  
by Sol LeWitt (1971)



*Squares with a Different Line Direction in Each Half Square*  
by Sol LeWitt (1971)



*Water Towers*  
by Bernd & Hilla Becher (1970-2010)



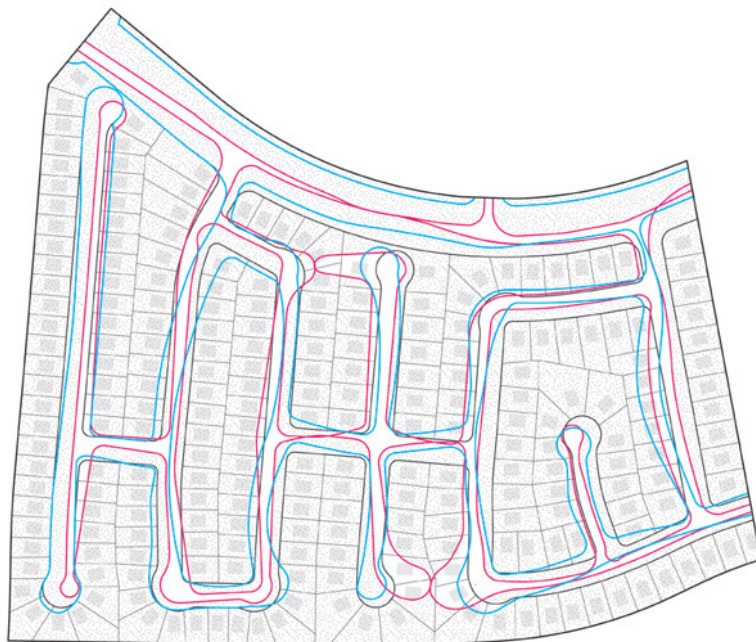
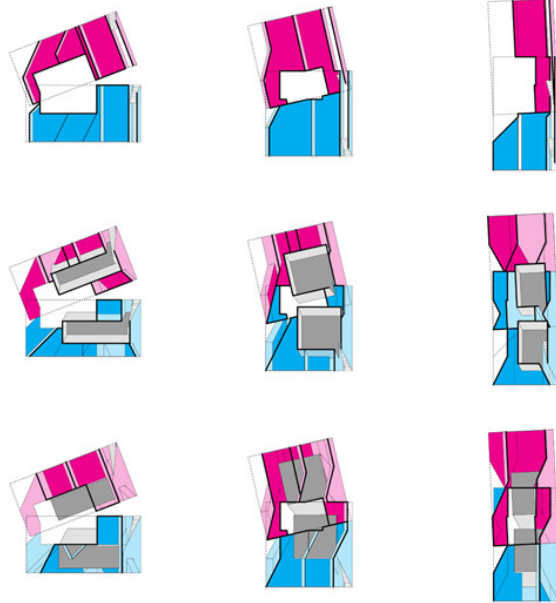
*Grain Elevators*  
by Bernd & Hilla Becher (1965-1992)

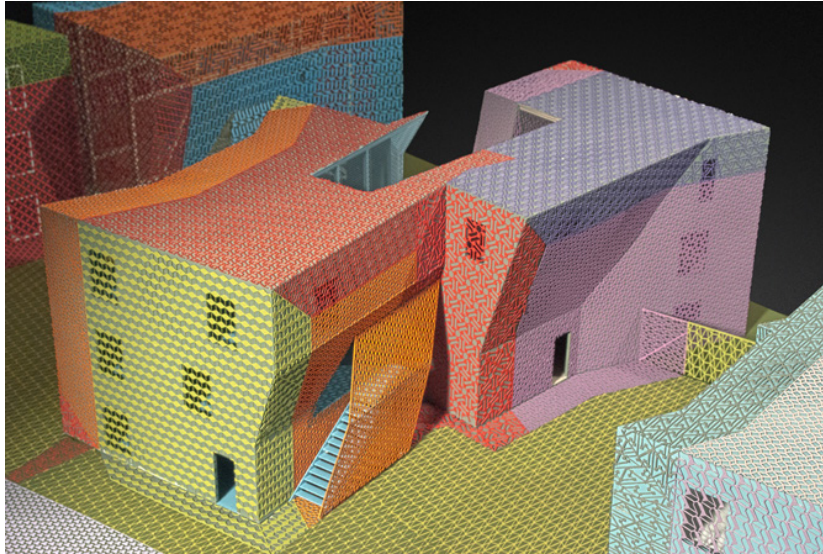
## Objectivity:

In June 1967, LeWitt published "Paragraphs on Conceptual Art" in the pages of *Artforum*. In this piece, he argues "The idea becomes a machine that makes the art....To work with a plan that is preset is one way of avoiding subjectivity....This eliminates the arbitrary, the capricious, and the subjective as much as possible." In his work *Squares with Different Line Direction in Each Half Square*, LeWitt's instructions are both prescriptive and open-ended so that the resulting work of art varies according to the interpretation made by the drafts-person producing the work of art.

In the images by Bernd & Hilla Becher, "the industrial structures are always photographed frontally, from an elevated standpoint, and feature a perfectly overcast sky and even light. This technique allows the presence of the horizon to recede to the point of being barely noticeable, putting forward a representation of the objects reminiscent of an architectural elevation. They believed that the precision of their photography enabled the viewer to gain access to the logic the industrial structures, to read in their capricious forms their function and the different processes that took place within them."

Their artistic strategy of redefining objectivity is also well absorbed into this thesis. First of all, elevations are the most objective representation of a building within architectural drawings. It is flat and conveys direct and correct architectural information. In the drawing of the corner elevations, the aim is to provide constraints to the architectural form through an objectively formulated instruction. Playing with simple and objective strategies can lead to complex and interesting results.





*Property with Properties*  
by Andrew Zago (2011)





*Wrong Chairs*  
by Norman Kelley (2012-2014)

Ambiguity



### **Ambiguity:**

In Andrew Zago's project, *Property with Properties*, the misregistered property lines between the building and the sidewalk creates the awkwardness that doesn't align with normative manners. The pattern of the facade is unexpectedly projected to the ground, where building and sidewalk start to overlap and the new possibilities of spatiality are introduced.

Norman Kelley's *Wrong Chairs* manifest the architect's conceptual imperatives regarding materiality, joinery, and engagement. Unfamiliar or purposefully incorrect details entice cognitive engagement and invite the user to consider the aesthetic characteristics of the object, rather than functional qualities. These considerations ultimately transcend the scale of the objects themselves.

Both Zago and Kelley's designs fully demonstrate that the intentional ambiguity of the form can stimulate more possibilities. In this thesis, the forms of the corner buildings at different angles are still completing the prescriptive boundary without destroying the reading of this corner. The building's ambiguity is obtained through the process of decoupling the front and the facade. This ambiguity redefines the legibility of the building's front, the reconstruction of the façade, and the innovation of the interior space.

## Bibliography

Bair, Kelly, Kristy Balliet, Adam Fure, and Kyle Miller. Possible Mediums. Edited by Kelly Bair and Adam Fure. New York ;: Actar Publishers, 2018.

Vassallo, Jesús. Epics in the Everyday : Photography, Architecture, and the Problem of Realism. Zurich, Switzerland: Park Books, 2019.

Venturi, Robert. Complexity and Contradiction in Architecture. New York: The Museum of Modern Art, 2019.

Young, Michael. Reality Modeled After Images: Architecture and Aesthetics after the Digital Image. Milton: Taylor and Francis, 2021.

Young, Michael. "The Art of the Plausible and the Aesthetics of Doubt." *Log* (New York, N.Y. 2003), no. 41 (2017): 37–44.

Thenhaus, Clark. Unresolved Legibility In Residential Types. *Applied Research and Design*, 2019.

Zago, Andrew. "AWKWARD POSITION!" *Perspecta* 42 (2010): 205–218.

Haipeng Lin | The Third Facade