

**Architecture
Thesis**

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**Post-
Standardization**



**Architecture
Thesis**

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**Post-
Standardization**



Special Thanks to

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Abstract

The epistemological ground for Post-Standardization is the pursuit of a humanitarian and egalitarian Utopia.

Marx notoriously argues that the economic Base determines the Superstructure. Objecting to Marx's deterministic categorization, Post-Standardization brings together the Base and the Superstructure, where social housing and cultural institutions (e.g., museums and libraries) amalgamate. In the context of this thesis, "social housing" is the Base, denoting a specific typology of this architectural category: social housing projects utilizing Standardized Prefabricated Architecture (abbreviated as SPA in the following); "cultural institutions" are the Superstructure, denoting such institutions that require little sunlight and produce little noise (termed as Dim-Quiet Programs or DQP).

Reflecting on architectural history, SPA provided the perfect solution to the post-WWII explosion of the population globally. While it is a magic wand for policymakers to solve the housing crisis, its standardization has caused social, cultural, and political problems in cities for the monotonous visual effects it generates – in most cases, such monotonousness equals a taken-for-granted form of minimalism, which in turn shows the project's ignorance of the culture and history of the site. And in the course of urban development, the mono-functionality (i.e., with its one and only function being the residency) of these housing projects has gradually led to their inability to meet the diverse needs of their residents, resulting in such projects' short lifespans and desperate needs for renovation.

Echoing the Chinese government's 2020 policy to build more social housing, alleviate the housing crisis, and promote SPA technology in residential projects there, this thesis, Post-Standardization, is a critique of the existing typology of SPA in social housing projects. While contemporary architects often incorporate commercials and other public programs on the lower floors of residential buildings, there still are many architectural opportunities in the spaces in between these standardized residential units for them to explore. Such spaces create the potential for DQP to fit in. Instead of directly decorating the SPA units with cultural motifs, incorporating DQPs that suit the lifestyle and cultural background of the site deepens the humanitarian consideration of the project. This incorporation creates a symbiosis between the Base and the Superstructure, the social housing, and the DQPs in between. These two typologies not only share the budget but also compensate for their different functional and structural requirements – the residential section receives enough sunlight and the intersection of the two economizes on the expense of building façades. One way of understanding this symbiosis could be that the façade of the cultural architecture, which usually costs a lot for the exhibitionistic and monumental nature of such architecture, is substituted by social housing units, which in turn make the cultural architecture more iconic in a humanitarian sense, fulfilling its need for exhibitionism.

On the one hand, social housing units make the DQPs more accessible and egalitarian than cultural architecture projects with huge budgets. On the other hand, DQPs give the social housing an identity that is deeply related to the culture and historical background of the site. By challenging the existing social housing typology where

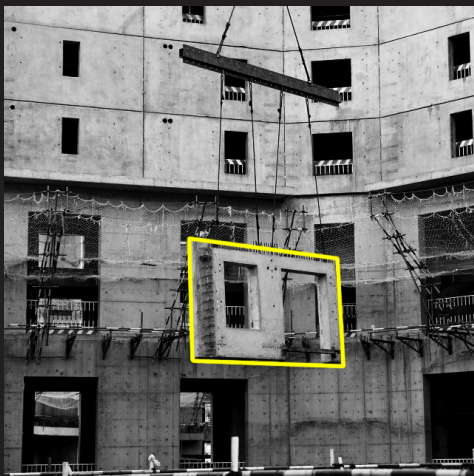


residential units and other programs are separated, this thesis attempts to amalgamate the two, advocating a synthesis that is more economic, functional, and humanitarian.



Top: Sune Sundahl Installation of large concrete panels in residential buildings, 1967–1968 ArkDes photo collection

Bottom: Prefabricated modules on site, Baiziwan Social Housing, Beijing, 2019, MAD Architects



Glossary

Aesthetic

1. Something that is bona fide political and ideological beneath the facade (/scaffold) of apoliticality and unideologicality.¹

“All ideologies are equal, equally ridiculous, they are useful only to provide the spice of aesthetic excitement, so the more problematic they are, the more excitement they generate.”²

2. A combination of things that are pleasing to look at (based on the culture, history, and lifestyle of its locality). Rarely a concern in contemporary minimalist-oriented architectural design (especially when it comes to the architect-client relationship), but commonly discussed in interior design to make the designer-client relationship easier.³

“I like the aesthetic of Bauhaus.”

“You mean the blandness of cubes and cement?”

Synonym: Style, Taste

3. A strand of philosophy revolving around art and beauty so that it becomes popular among modern dilettantes, danties, and philistines of art.

1 With reference to the philosophy of Žižek and Rancière.

2 Žižek. “*Architectural Parallax Spandrels and Other Phenomena of Class Struggle*”. http://www.art3idea.psu.edu/notes/zizek_architecture.pdf.

3 With reference to Urban Dictionary. “*Aesthetic*”. <https://www.urbandictionary.com/define.php?term=aesthetic>.

“He is using that aesthetic pickup line at the pub again.”
“Yeah, I bet he can attract some pseudo-sapiosexual.”

Synonym: Pretentiousness, Pseudo-intellectualism

4. A weapon to attack the hostile ideology as “inhumane”, or to attack a designer as “immoral”.

“There are too many unnecessary ornaments (See Ornament) in your design, you are committing a crime!”
“Your design is so inhumane, just look at its minimalistic aesthetics.”

Architect

1. Those who tell you how to live your life because they have a better taste (See Taste).

“Put all your clothes in the closet. Don’t just put them on the bed.”

“Mom, you’re such an architect.”

2. Those who are good at making compromises. 5 bathrooms serving one bedroom? You got it. A 65-foot-high living room? No problem. But as soon as you put a pair of unicorn slippers on the entrance floor, they’ll accuse you of insulting their design.

Synonym: Designer.

3. The architect (*Strix Architectus*) is the most stubborn living owl species and a member of the genus *Strix*, the same genus with the artist (*Strix Artifex*), the philosopher

(*Strix Philosophus*), and the designer (*Strix Excogitaroris*). It is most recognizable for its obsession with mental masturbation and intruding on the human environment.

Architecture

1. The result of the aforementioned (See *Architect* 3) intruding.
2. Clothing. Representation. For example, landmarks, usually cultural architecture or skyscrapers, are the representation of the city. Residential buildings are the clothes of its dwellers, whose quality (used to be represented by the ornaments on them) demonstrates their social hierarchies.
3. Something that probably *is not* art but also *is* at the same time.

“Hold on, is architecture also art?”

“Of course not, it’s autism. Box-drawing. Masturbation with a ruler or a sextant or whatever they use. You should demean and criticize the genteel institution of architecture. While extolling the virtues of ‘pure’ arts.”⁴

Culture

1. A white colonizer’s fetish. It has now become the

source for the architects (See *Architect 2*) to extract elements from to justify their designs.

2. The lifestyle that implies something about oneself.

“Why don’t you wash the pan after cooking?”

“That’s the secret to omelettes,” he explains. “We never clean. We ... season. It’s French culture.”⁵

3. When somebody does something embarrassing, burps after eating, for example, culture is how you react to it in a polite way. To be very vulgar, all seduction rituals are the cultured way of dealing with the fact that people would like to copulate with each other.⁶

Detail

1. Something very small, but makes the work really great or really bad.⁷ It used to be the synonym of Ornament (See *Ornament*), and now it usually refers to construction details.

2. An international professional journal devoted to construction and building details.

DETAIL in a bilingual (German-English) edition with an on-line translation supplement in French and Italian; 10 issues a year (2008)

DETAIL in English (the entire journal translated into En-

5 With reference to Netflix TV Series, *Emily in Paris*.

6 Slavoj Žižek, “On Culture and Other Crimes: An Interview with Slavoj Žižek”, University of Chicago

7 With reference to Urban Dictionary. “Details”. <https://www.urbandictionary.com/define.php?term=details>



glish; 6 issues a year)

DETAIL in Chinese (6 issues a year)⁸

“I don’t know why the professor asked us to deliver detail drawings, since all we are doing this semester is conceptual design.”

“Just go to the library (See *Library*) and copy something from the DETAIL.”

Dim-Quiet Program

The nerd who never goes to a party. Perhaps they prefers to stay quietly in a dark corner, reading books with a warm small lamp.

Some of them love books, called Library (See *Library*);
Some of them enjoy warm water, called Bathing House;
Some of them are addicted to data, called Data Center;
Some of them never drink alcohol, called Cafe or Tea House...

They are usually public cultural architecture (See *Architecture 2*), granted with huge budgets to create a fancy image of the city. As Žižek pointed out, “they created a multifunctional egalitarian open space, but the very access to this space is invisibly filtered and privately controlled.”⁹ (See Catalog *Slavoj Žižek - Living in the End Times*)

Housing

8 With reference to Wikipedia. “*DETAIL (professional journal)*”. [https://en.wikipedia.org/wiki/DETAIL_\(professional_journal\)#History](https://en.wikipedia.org/wiki/DETAIL_(professional_journal)#History)

9 Žizek, Slavoj, and Slavoj Žižek. *Living in the End Times*. Verso, 2011. p271



1. The architecture (See *Architecture 2*) where people dwell. A place that is part of the society but also temporarily separates you from the society. You can do whatever you want as long as you don't get your neighbors annoyed or suspicious.
2. The *Base*, or the *Substructure*.¹⁰ In many real-time strategy games like Warcraft III, building more housing can increase the population, which leads to further development.
3. Desperate for sunlight, sensitive to noise – compared to Dim-Quiet Program (See *Dim-Quiet Program*).

Synonym: Residential

Library

A collection of books. An architecture typology (See *Typology*) that requires little sunlight, because both reading and the collection should avoid direct sunlight. Also, a place where being quiet is a virtue. (See *Dim-Quiet Program*).

“In any case, a library containing all possible books, arranged at random, might as well be a library containing zero books, as any true information would be buried in, and rendered indistinguishable from, all possible forms of false information; the experience of opening to any page

of any of the library's books has been simulated by web-sites which create screenfuls of random letters.”¹¹

Ornament

1. An aristocratic lady much loved by people since ancient times. When the father of the architect profession—Alberti—wrote about the legend of her family, Architecture (See *Architecture* 3), he devoted four of his ten books to her. However, her extravagant lifestyle has caused discontent, many regarded her as a “sin” during the modern movement, accusing her of being a mechanism for capital to produce and sell more useless crap to the masses.

“The evolution of culture is synonymous with the removal of ornament from utilitarian objects.”¹²

2. The love for architecture. The empathy towards the load bearing members.¹³ The ornaments are love letters that craftsmen write to the architecture they build.

Synonym: Decoration

3. The expensive materials and construction techniques are new ornaments. That's how rich people differentiate their mansions from ordinary homes after mass production made ornaments cheap.

11 With reference to Wikipedia: *The Library of Babel*. https://en.wikipedia.org/wiki/The_Library_of_Babel

12 Loos, Adolf. *Ornament and Crime*. Penguin UK, 2019.

13 With reference to Morgan Starkey's thesis, *Mixed Metaphors*. <https://mixed-metaphors.cargo.site/ABSTRACT>

Synonym: Materiality

Post-Standardization

1. iPhone cases. The urinal signed by Duchamp. The Aura (See Catalog *Walter Benjamin - The Work of Art in the Age of Mechanical Reproduction*).¹⁴ It refers to the effort to achieve individuality in the context of mass production. Like the invention of iPhone cases isn't necessarily a rebel against the mass production of iPhone, Post-Standardization aims to provide an alternative in the design of Prefabricated Architecture (See *Prefabricated Architecture*).

2. The name of a thesis, this thesis.

Prefabricated Architecture

1. A technology developed after WWII to solve the housing crisis. (See Catalog *ArkDes - Flying Panels: How Concrete Panels Changed the World*). The design method is usually horizontally and vertically stacking the standardized units.

2. An ideological weapon to criticize an ideology as inhumane. (See *Aesthetic 2*)

Shenzhen

¹⁴ With reference to Walter Benjamin's 1936 essay, *The Work of Art in the Age of Mechanical Reproduction*.

1. Has a fetish for books. There are more than 1000 libraries (See *Library*) in Shenzhen, the biggest of which is located next to the Shenzhen Civil Center in Futian District.
2. Famous for its extremely high housing prices. The average housing price is about 70,000 yuan per square meter, while the median wage is 5,200 yuan per month. Therefore, Shenzhen government has started a campaign since 2010 of building social housing (See *Social Housing*)
3. Ever since the pandemic of 2020, most Chinese airports suspended flights to other countries, so taking a ferry to Hong Kong Airport from Shekou Dock in Shenzhen has become one of the main methods for students to fly abroad.

Social Housing

1. Usually it's a solution to a crisis, rather than something contributing to the city's image. Therefore, compared with other government-funded projects like cultural architecture, social housing has very limited budgets. In many developed countries, SPA is the default choice for social housing projects.
2. In China, social housing almost means a lack of design: gigantic, dense, and monotonous. Since the budgets are low, the copy-and-paste design approach is the norm, and very few famous architects would like to participate in such projects. (See Catalog *MAD Architects - Baiziwan Social Housing*)

Synonym: Public Housing

Social Housing Baby: Child conceived in order for the mother to (a) gain access to subsidized housing; (b) state benefits; and (c) avoid work for life.¹⁵

Taste

To patronize the faculty of taste is to patronize oneself.¹⁶

Typology

The act of categorizing, thinking in groups.¹⁷ As Halford John Mackinder famously pointed out, “Knowledge is one. Its division into subjects is a concession to human weakness.”

Theme Park

The superfluous interpretation of a culture, a site, or a circumstance, but appears to be well-made. Usually made by someone who is not local: an international starchitect, a foreign singer, or a colonizer.

“I don’t see them,” revealed Scorsese. “I tried, you know?”

15 With reference to Urban Dictionary. “*Social Housing Baby*”. <https://www.urbandictionary.com/define.php?term=Social+Housing+Baby>

16 Sontag, Susan. *Notes on “Camp”*. Picador, 2019.

17 Moneo, Rafael. *On Typology*. Oppositions.1978. p23

But that's not cinema. Honestly, the closest I can think of them, as well made as they are, with actors doing the best they can under the circumstances, is Theme Parks. It isn't the cinema of human beings trying to convey emotional, psychological experiences to another human being."¹⁸

18 From Scorsese's view on Marvel movies.

Bibliography

MAD Architects - Baiziwan Social Housing

Known as the most beautiful social housing in China, Baiziwan Social Housing was completed in 2019. MAD Architects, the architecture firm that designed it, released a manifesto “New Housing” after the co, setting new standards for prefabricated social housing in China and calling for participation of well-known architecture firms in the social housing campaign started by the Chinese government to solve the increasing housing crisis in major Chinese cities.

By creatively adapting a Y shape plan for each residential tower and the setback design to form a mountain shape, this project not only satisfied the sunlight requirement for each living unit, but also created a three-dimensional landscape, achieving 47% Greenery Rate. Convenient stores, cafes, books stores etc. are placed on the ground floor to create an open neighborhood, while programs like gym, cultural center, and running lanes are on the second floor for residents’ use only.

However, the residential towers are still relatively homogeneous, stacking the same prefabricated units horizontally and vertically. The aesthetic of simplicity that the manifesto advocated is more of a compromise for the budget than a conscious design intention, since MAD Architects is well known for its preference for parametric designs.



新住宅

MAD 建筑事务所

LE RESIDENTIEL RÉINVENTÉ



- 一 与自然相伴
- 二 开放社区融于城市
- 三 丰富的空间，宜人的尺度
- 四 阳光权
- 五 预留弹性发展空间
- 六 以个性理解社会性
- 七 空间绿化率
- 八 朴素美学

社 會 住 宅
北 京 第 一 號

ArkDes - Flying Panels: How Concrete Panels Changed the World

Standardization, a building system based on prefabricated concrete panels, was regarded as a major advance in building technology that can provide the mass with a decent place to dwell. The panels were in the movies, in the novels, in artworks. But now standardized prefabricated building is usually the synonym of “designless”. This book thoroughly examines the history, technological developments, and artworks associated with standardized prefabricated buildings. Of course, this technology helped many people to have housing during the post WWII era, which is a great achievement. It is still the default choice, or best solution to solve the housing crisis anywhere. In the meantime, this book also examined many architects’ and artists’ effort to improve this technology by adding more artistic values. Indeed, it’s hard to realize creative ideas when the resources and budget are very limited. Many contemporary architects avoid using standardized prefabricated components in their projects because they usually create monotonous looks. This thesis is a continuation of this book, where more design thoughts are added to the standardization.



FLYING PANELS

FLYING PANELS
How Concrete Panels
Changed the World



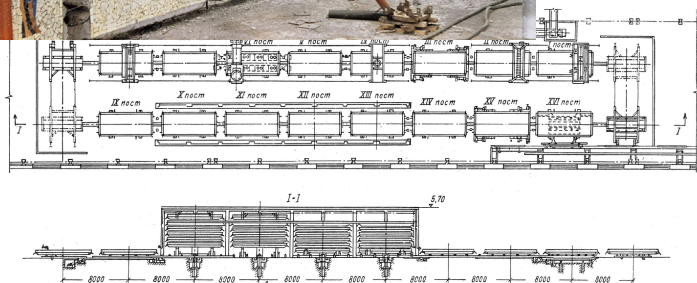
Edited by
PEDRO IGNACIO ALONSO
and HUGO PALMAROLA

Jarsky Brothers - Mosaic Facade in Soviet Tashkent

How much is identity worth to a building? The answer is 5% in Soviet Tashkent.

In each housing project in Soviet Tashkent, 5% of the budget was spent on the facade artwork to give identities to standardized prefabricated panel housings. The brothers Petr Jarsky (1929-1993), Nikolay Jarsky (1931-2014), and Alexander Jarsky (1936-2015) were famous for their mosaic artworks in Tashkent. Although the technique wasn't very advanced and the artwork was 2D, the mosaic works gave identities to the a-historical and a-cultural prefabricated buildings. As a comparison, when the Swedish government attempted to get rid of the homogeneity in Sweden's Million Programme, they simply painted the facade with different colors.

However, due to the lack of maintenance and mono-functionality, the prefabricated social housing eventually deteriorated.



Cao Fei - Who's Utopia

Shot in a light bulb factory in Guangzhou, Who's Utopia includes scenes of workers dressed as the characters who they wish to be, dancing, playing guitar, and doing Taichi in the factory among other workers in uniforms. The movie posed a question in the mass production industrial era, searching for the possibility of showcasing individuality in the "inhuman" working environment. What's really inhuman is regarding people in uniforms or living in monotonous prefabricated buildings as mere numbers, ignoring their desire for individuality.

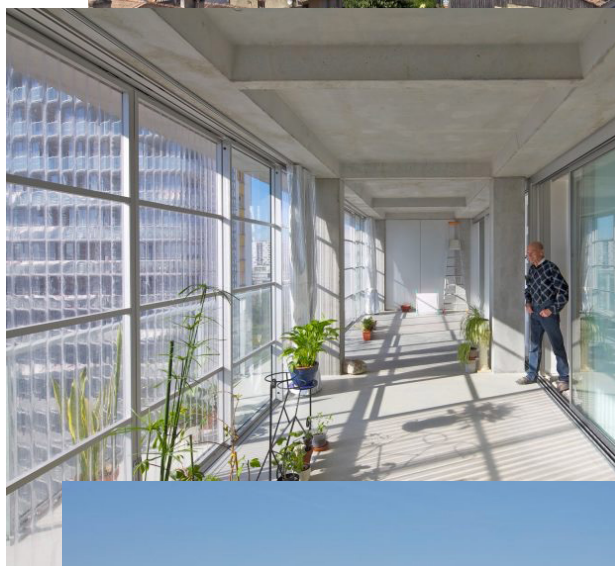
Therefore, this thesis explores the idea where standardized prefabricated buildings can become platforms to showcase individuality, instead of uniforms that act as machines for living.

This thesis is aimed to explore the question: does mass production inevitably result in the loss of individuality? How can design react to mass production of prefabricated housing?



Anne Lacaton & Jean-Philippe Vassal - Social Housing in Grand Parc Bordeaux

The 2021 Pritzker Prize was awarded to a studio known for refurbishments. This marks an important shift in the values of architectural culture, that the obsession with novel designs of new buildings might need to be examined. The values should not be limited to the design itself, but also about for whom it's designed, why it's designed. Besides the reduction of carbon emission to refurbish old buildings, this project demonstrates how design can benefit the wider public. Not only is the look of the social housing changed, but also each family has a larger space to dwell in. In some sense, it's another version of Alejandro Aravena's Half Houses. It showcases a humanitarian concern for people living in social housing. The standards of decent dwelling are changing, but those who live in old social housing are left behind.

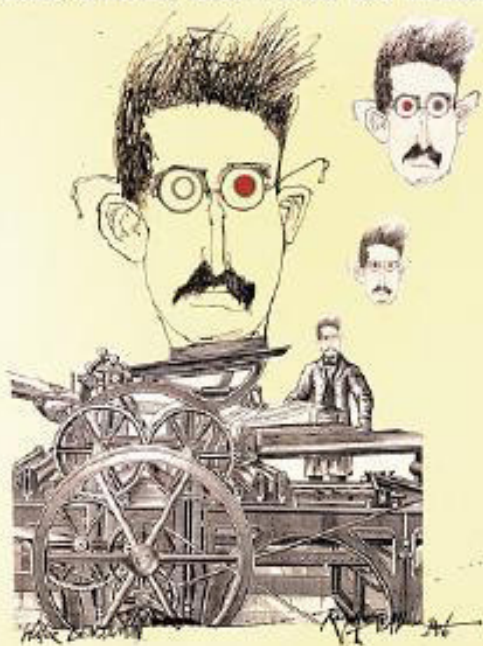


Walter Benjamin - The Work of Art in the Age of Mechanical Reproduction

If we view architecture as a form of art (which, according to the Glossary: Architecture 3, is controversial), then the mechanical reproduction Benjamin was referring to in his essay is standardized prefabricated architecture. Benjamin argues that the aura of a work of art derives from authenticity (uniqueness) and locale (physical and cultural). Similarly, we can refer to the Jarsky Brothers' work in Soviet Tashkent (See Jarsky Brothers - Mosaic Facade in Soviet Tashkent), whose culturally based mosaic works gave uniqueness to each prefabricated building. This thesis aims to explore the same idea in contemporary context. Besides 2D drawings like mosaic works or colored patterns, how can the combination with other programs provide standardized prefabricated buildings with unique spatial characteristics? How can the cultural background further influence the design of standardized prefabricated architecture?



THE WORK OF ART IN THE AGE OF ITS
TECHNOLOGICAL REPRODUCIBILITY
AND OTHER WRITINGS ON MEDIA



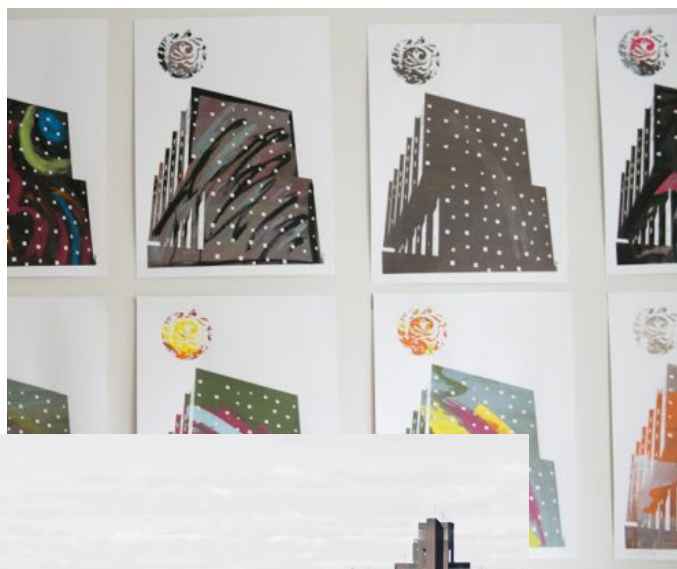
walter benjamin

David Adjaye - Sugar Hill Housing Complex

David Adjaye, a knighted British architect, claimed that, “It is a cliché that poor housing has to be ‘pretty,’” and asked, “Why is it that this is ‘cool’ for rich people but ‘tough’ for poor people?” In 2014, David Adjaye’s housing project in Sugar Hill, New York sparked controversy with its iconic form and abstract rose patterns on the cladding. The 13-story, 124- apartment affordable housing complex has cladding achieved with rose embossed graphite tinted pre-cast panels, and its staggered façade referenced the row houses in the surrounding neighborhood. Just like how Bofill believes people in social housing deserve Neoclassical ornaments as much as those who live in luxurious Haussmannian housing in Paris, Adjaye thinks this neighborhood deserves a cool design as much as his wealthier clients in London and UAE.

Adjaye’s effort wasn’t widely appreciated in the neighborhood. According to a report on interviews with local residents, it “looks like a prison” and “It’s an affront to the historical fabric of the neighborhood”.

However, the building is much loved by the neighborhood because of the children’s museum within it. This case pointed out how important it is to insert different programs into social housing to enliven the neighborhood.



Ricardo Bofill - les espaces d'abraxas

What makes this project unique is that it's a social housing project. Ricardo Bofill played with the local cultural elements, like the Haussmannian columns and decorations, the arcs, and the buttress, to design for the poor people. Usually, when we see a project like this, it's a luxurious apartment or a fancy shopping mall. And that's exactly what I want to demonstrate in my thesis, that aesthetics should be available for everyone, instead of being exclusive to certain social hierarchies.

The article also talks about how the system of heavy pre-casting makes it possible to fabricate extensive and complex architectural language, which is an example of how technology enables architects to realize more complex designs. Although the project isn't very successful, due to the lack of the other functions, its location, and policies, and so on, we can learn a lot from Bofill's analysis of the local cultural elements and how he played with them in his design.



Slavoj Žižek - Living in the End Times

Žižek's article, *Architectural Parallax Spandrels and Other Phenomena of Class Struggle*, provided several insights for this thesis.

First, it reveals how ideology functions through architecture. Žižek compared the theories of Loos with Venturi. He claimed that ideology is at work especially in the apparently innocent reference to pure utility. It's exactly the message of excessive and non-functional ornaments that makes the building functional, which is livable. Žižek further took the example of Stalinist Neo-Gothic Baroque housing for the new rich in Moscow and the Kandinsky Prize scandal to show how problematic it can be if we're indifferent towards the ideology behind the artworks.

Second, Žižek pointed out that some seemingly public cultural architecture actually strictly controls its accessibility. To make these programs more accessible and humanitarian, the cultural architecture should not be a giant decoration for the city, but merge into the neighborhood.



“The most dangerous philosopher in the West”

ADAM KIRSCH, *The New Republic*

LIVING IN THE END TIMES

SLAVOJ ŽIŽEK

Robert Venturi - Learning from Las Vegas

The most interesting part about Robert Venturi's Learning from Las Vegas is how to learn from the things that are already there, instead of just focusing on creating new things. I really admire his humble attitude, that instead of producing a very avant-garde manifesto and trying to overthrow everything, he tried to pay attention to the architecture that is despised by most architects.

In this book, he offered a view from which architects can learn from the existing culture and history and be inspired from that. As he said, "We look back at history and tradition to go forward. We can also look downward to go upward." The phenomenon that these methods of architecture are so common in Las Vegas proves that they are widely accepted by most people.

He also talked about how the styles, symbolism, and aesthetics work in such a business model that the main idea is to attract people from first sight.



73. "Long Island Duckling" from God's Own Junkyard



73. Duck



74. Road scene from God's Own Junkyard



74. Decorated shed



LEARNING FROM LAS VEGAS

Revised Edition

Robert Venturi Denise Scott Brown Steven Izenour

Jason Payne - Hair and Makeup

Jason Payne noticed a turn toward emotive expression in architecture. By analyzing the function of the hair in rock music, he argues that superficial is not superfluous. The hair is a part of rock music because it became a symbol of the musical goals that the musicians try to pursue. Similarly, in architecture, the metaphor should not be limited to the spatial forms, but it can also be revealed in ornamental details, decorative drawings, and carefully selected materials.

Nowadays the design work is very clearly divided, especially in some big architecture firms. The architects seem to only care about the flows and spatial qualities. While the interior qualities are left to interior designers. However, the design should be integrated. For example, for a musician, it really matters that your dressing styles and your demeanor use the same language as the music that you're making.

Log

1999
L'Espresso

47



ALADDIN SANE

Interview

Morgan Starkey is an architectural designer living in Los Angeles, CA. He is currently working with Lorcan O'Herlihy associates focused on social housing research and construction. Morgan holds a M.Arch I from Harvard Graduate School of Design where he received the James Templeton Kelley Prize for best graduating Thesis. Prior to architecture, Morgan worked in finance and litigation technology after receiving a B.A. in Economics from NYU.

Can you explain the project a little bit? I saw the course name, the Detail Space between God and the Devil. Can you explain your idea of this and how this detail means?

It's funny because I ended up doing my thesis later on kind of based on those ideas. What we were trying to get at was, can you inhabit a detail at the scale of a building instead of thinking of the detail as this thing? That is, when two small components come together, thinking about a detail at the scale of a building and where the components are not necessarily structural members, but they could be entire pieces of program or entire rooms or entire envelopes.

So what we were doing, it was kind of like a postmodern thing where we took the profile of, like, a Crown molding and use that to kind of carve out space in the building. That was a little bit more of, like a play on words, where the detail is becoming massive. But I'm trying to think what else is going on there. It was the idea of the concepts that govern how things are made at the small scale and making scaling those ideas to the full size of the

building.

So the way that we were handling inlays of one material into another at the scale of, like, a handrail, where we're conceptually the same at the scale of a room and scale of a stair. So just like making the conception of the building not top down, not like starting from mass and then going into organization and then going down to structure and then into the detail, like starting the conception of the building at the scale of the detail and building up from there, if that makes sense.

What inspired you to work with the ornaments? Like, when we think of details, we usually think of multiple layers of the wall: bricks, insulation, waterproof...

Yeah. There's a long history. This is what my thesis was eventually about. But basically, if you go back to Greek columns or something like that, the way that the capital of a column looks especially like an Ionic column, for example, where you have those Scrolls, a vestige of expressing the weight of the level above. So, it's supposed to look like this thing that's holding up this roof plate or floor plate. It's really feeling this weight and then it's curving out on itself and creating those capitals, which then became read as ornament later on.

So Ornament truly is like the act of the building doing work like you really trace back the origin. It's just this frivolous thing that you add to a building, and it's an application. But really, the purpose of it is to explain to the user

of a building and the reader of a building how the building is holding itself up, which then you can get into details as exactly that you must understand how a building works. You need to understand how these things come together.

And then how do you express the logic of that assembly? And that's how we review Ornament.

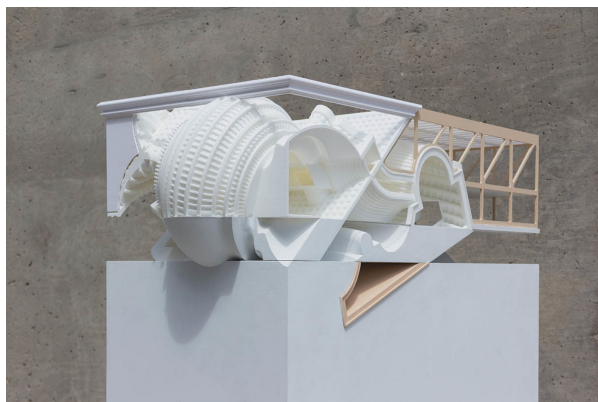
Yeah. And then the ornament later on became like people express their appreciation, their love for the building. So they start to add ornaments and statues and carvings and drawings on it. Right?

Yeah. I think that's what happened is the Ornament grew out of this logical expression of how the building is working, and we fell in love with them and then started to apply them in new ways that didn't really serve any function. Draw a line from there to Renzo Piano, who strips everything down to the structure. But in a way that becomes like ornamental. Again, I think everything is like these kind of cycles of building up and breaking down, building up and breaking down, but always really comes down to the expression of how the building is actually holding itself up.

What you did is trying to combine this classic ornaments with this computational design. What do you think of this combination?

I think that's an interesting thing. What I would say about that is computational design is all about smoothness, mostly. Parametricism allows for these smooth gradients of texture and of color and form. You can then think of that in terms of, like, the Baroque kind of was about smooth. And it's about the building becoming this one sculptural quality. In contrast to the Renaissance and classical architecture, where you really read the constituent part, you read the columns, you read the pieces. So it's like about smoothness and singularity versus components and pieces.

And I think that's also what we were trying to play with is like, yes, we're using computational design and all the ability that it affords us to create really smooth gestures. But you're always seeing the reading of this object of this ornament of that profile. And so it kind of breaks down the smoothness back into the singular object, something like that.



Offcut: A Museum in Los Angeles by Morgan Starkey (MARCH '19), Alexandru Vilcu (MARCH '19) Spring 2018

Case Study

Aesthetics is hardly ever a key design issue of the social housing or affordable housing projects. Les Espaces d'abraxas designed by Ricardo Bofill was a 600-dwelling social housing project in Paris suburb of Noisy-le-Grand and featured Neoclassical ornaments on its exterior. Bofill's design approach directly opposed the anonymous white-washed modernist concept, and was aimed to achieve monumentality by building this "Versailles for the people".

Architects' designs reveal what they think the user deserves. Besides how large the bedroom should be and how much public space is needed, the aesthetics reveal the image that architects depict their users. That's why most social housing projects have minimal aesthetics, revealing that the architects believe the most important goal of these projects is the vital function of housing- a place to live in. It's undoubtedly true. In this sense, aesthetics are adjectives of the word "place" and adverbs of the word "live", which pay attention to the individual experience. Thus, we can say that achieving monumentality in social housing is an effort to glorify the daily life and to commemorate the mundane. This is exactly how aesthetics functions: to recognize something historical, meaningful, or even extraordinary behind every behavior within the built space, and to display it, express our appreciation for it, even glorify it.

David Adjaye, a knighted British architect, claimed that, "It is a cliché that poor housing has to be 'pretty,'" and asked, "Why is it that this is 'cool' for rich people but 'tough' for poor people?" In 2014, David Adjaye's housing project in Sugar Hill, New York sparked controversy with

its iconic form and abstract rose patterns on the cladding. According to the architect, the practice worked closely with the client and the local community to ensure the design tied into the site's history as well as practical and aesthetic requirements.

The 13-story, 124- apartment affordable housing complex has cladding achieved with rose embossed graphite tinted pre-cast panels, and its staggered façade referenced the row houses in the surrounding neighborhood. Just like how Bofill believes people in social housing deserve Neoclassical ornaments as much as those who live in luxurious Haussmannian housing in Paris, Adjaye thinks this neighborhood deserves a cool design as much as his wealthier clients in London and UAE.

However, Adjaye's effort wasn't widely appreciated in the neighborhood. According to a report on interviews with local residents, it "looks like a prison" and "It's an affront to the historical fabric of the neighborhood". Obviously, it's the level of abstraction that sharply reduces the comprehensibility of the design. The roses are nearly unrecognizable from the cladding, which looks like it's covered in mold; The staggered facade is all colored in black, instead of sliced into different colors like the Gothic Revival row houses in the neighborhood, so the whole building feels like a terrifying BDO (Big Dumb Object).

Different from the neighborhood's comments, the housing complex is described as "a hidden gem" on Google Maps, for its brilliant Children's Museum of Art & Storytelling. Also, it is exclusively for low-income people, guaranteed by NYC Department of Housing Preservation and Development's strict limit on the applicants to rent.

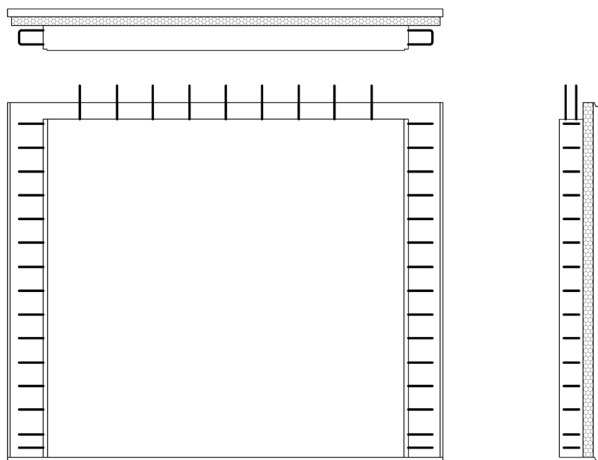
Just like Jason Payne claims that hairstyle is also part of rock music, the superficial isn't vital in architecture, but it matters.



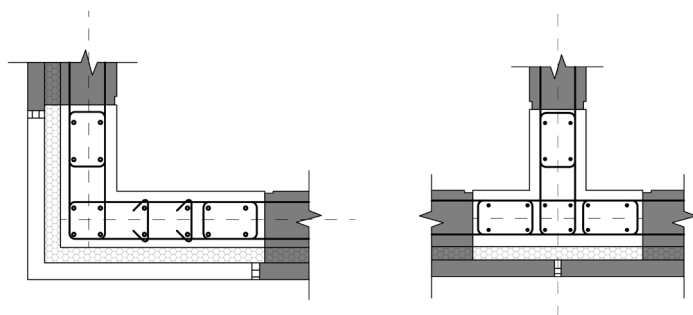
Details on Sugar Hill Mixed-Use Development

Project

Part I: Prefabricated Units



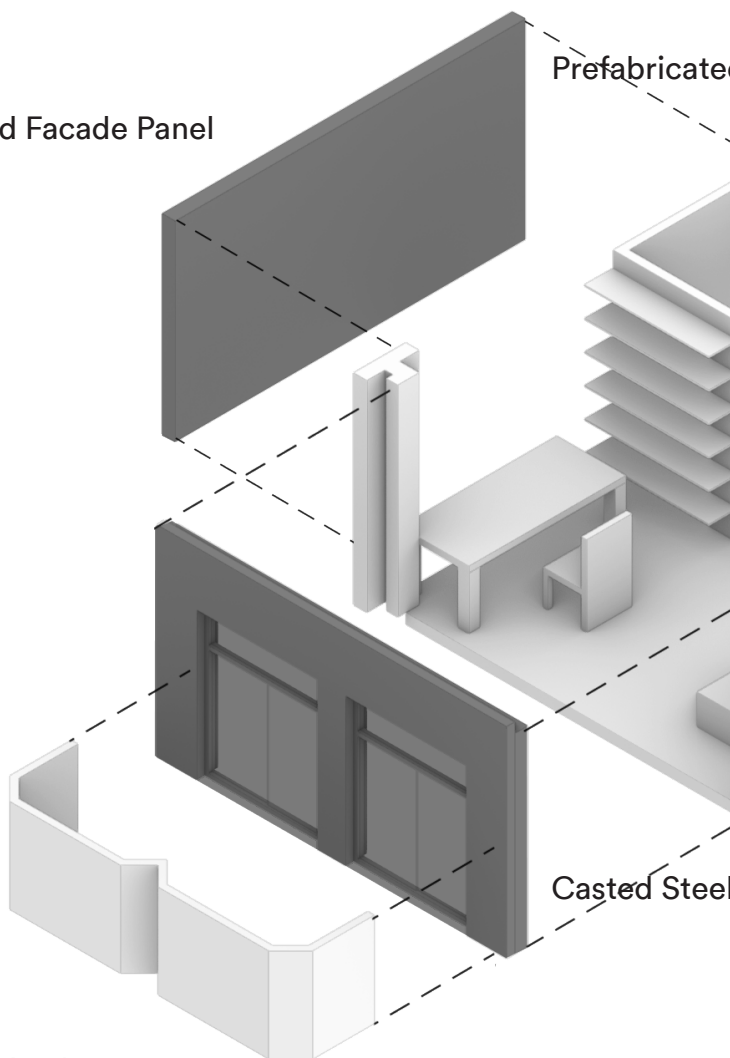
Prefabricated Facade Panel



Connection Details

Prefabricated Facade Panel

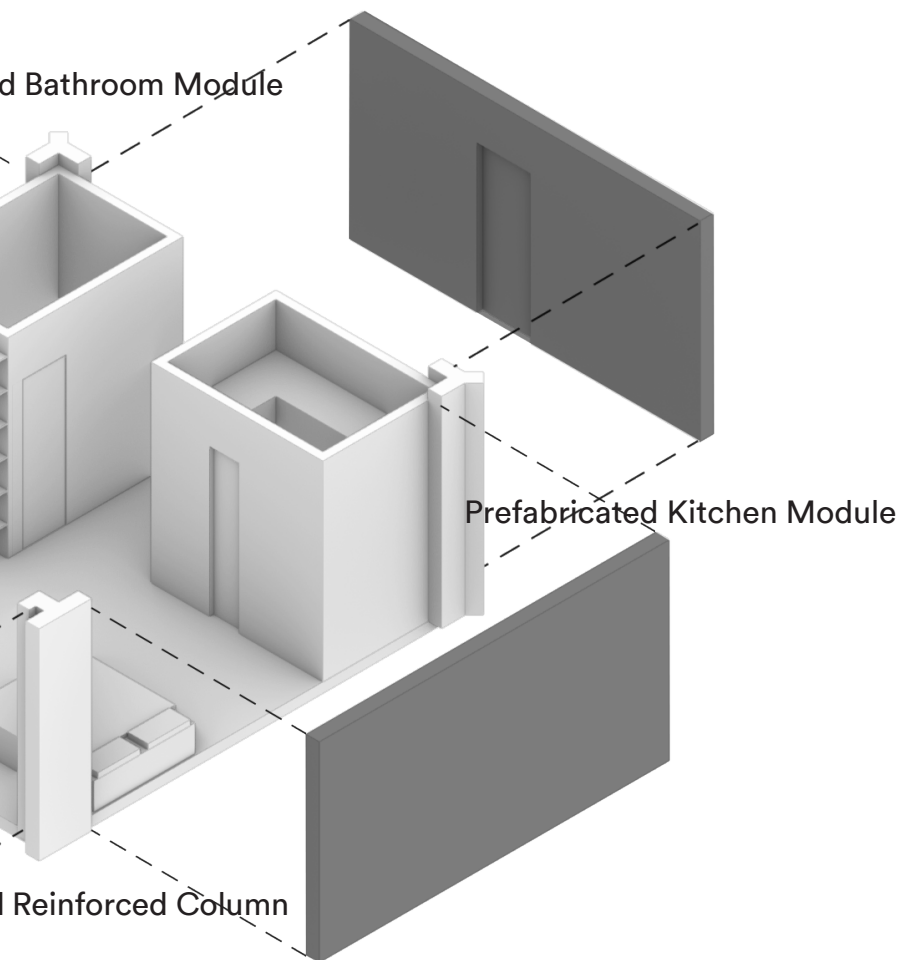
Prefabricated

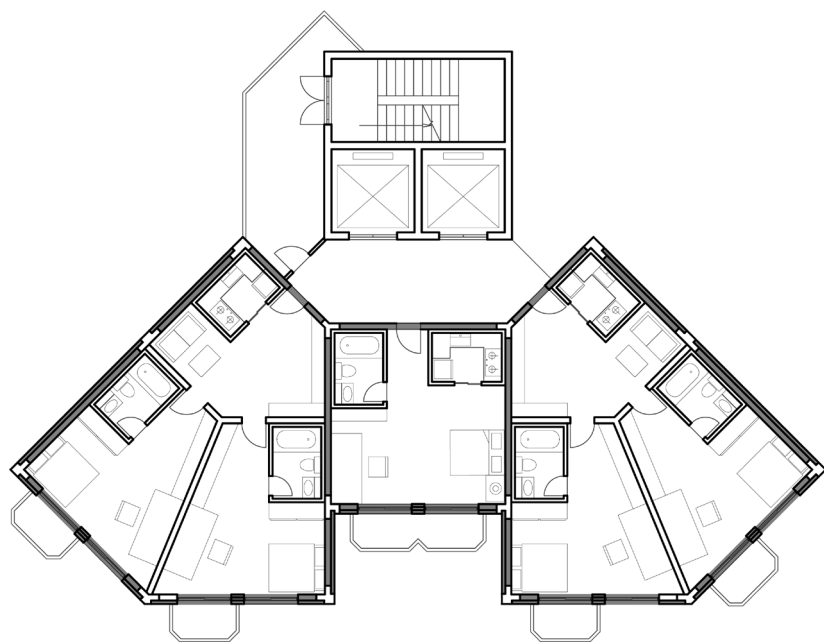


Casted Steel

Prefabricated Balcony

d Bathroom Module

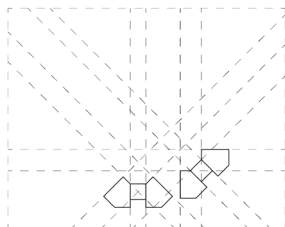




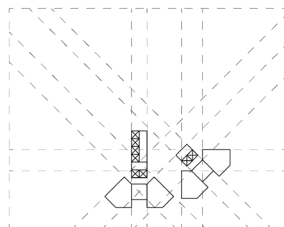


Project

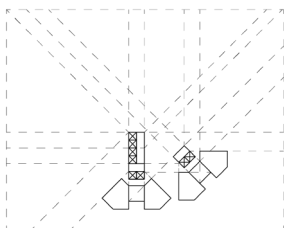
Part II: A Housing Complex



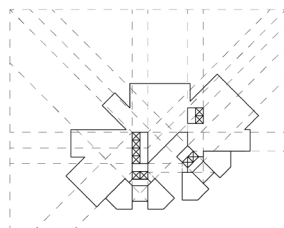
Axis Generation



Vertical Transportation



Axis Adjusted

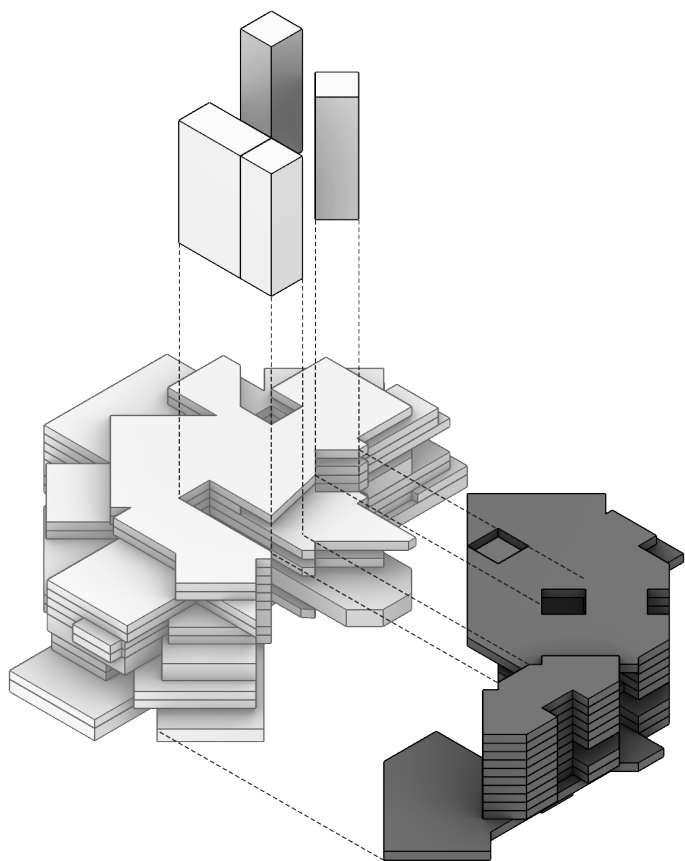


DQP Generation

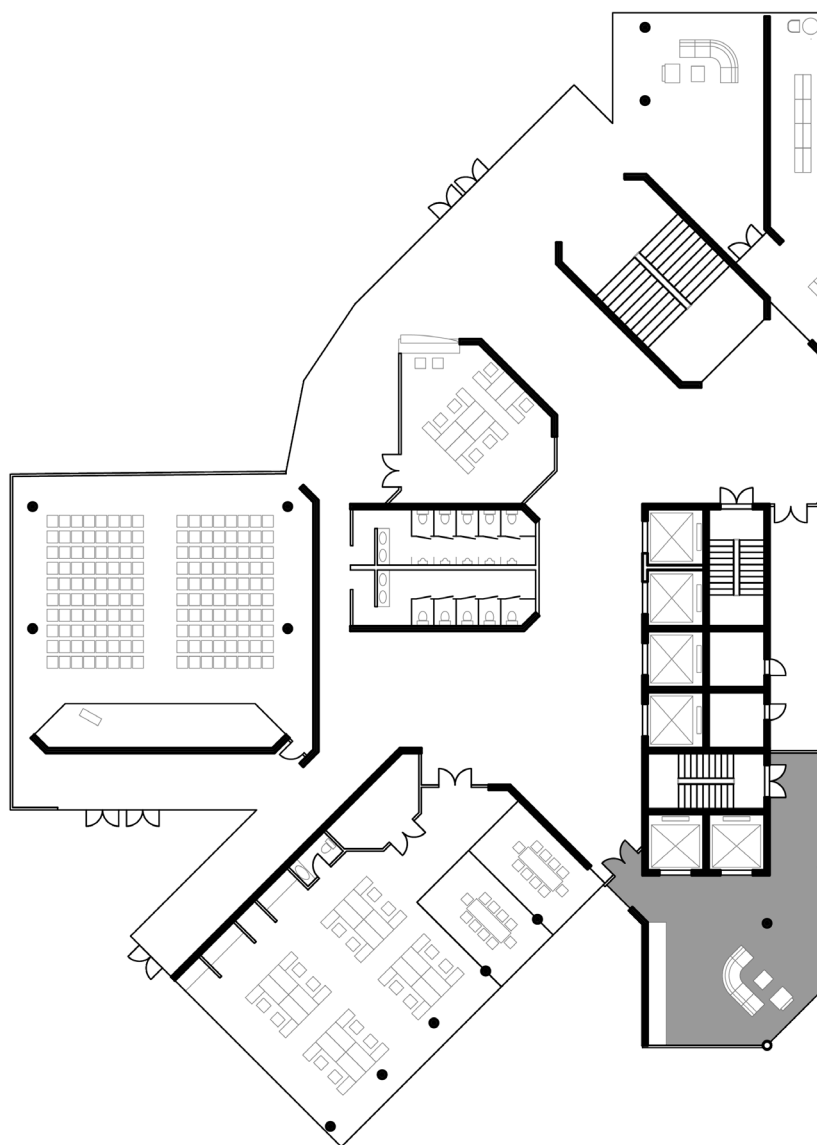
Complex Generation Diagram

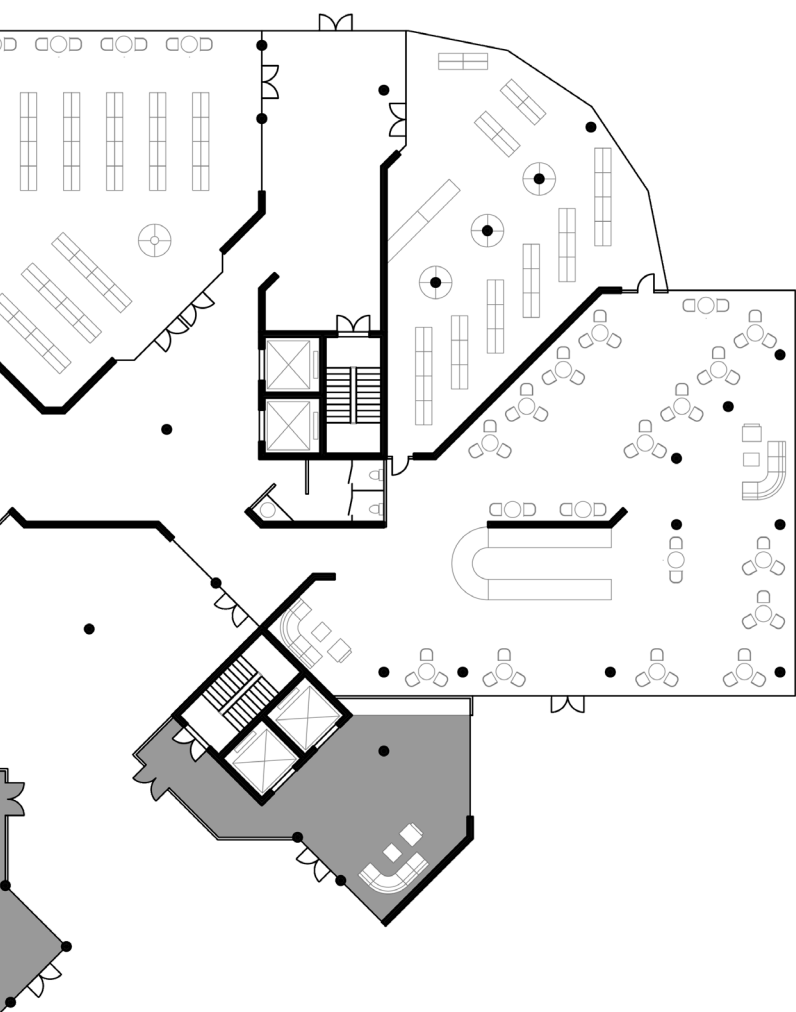


Complex Program Diagram









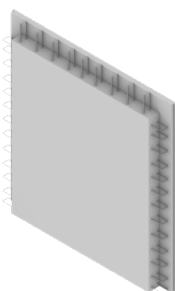
Project

Part II: Complexes

1. Tea House Complex



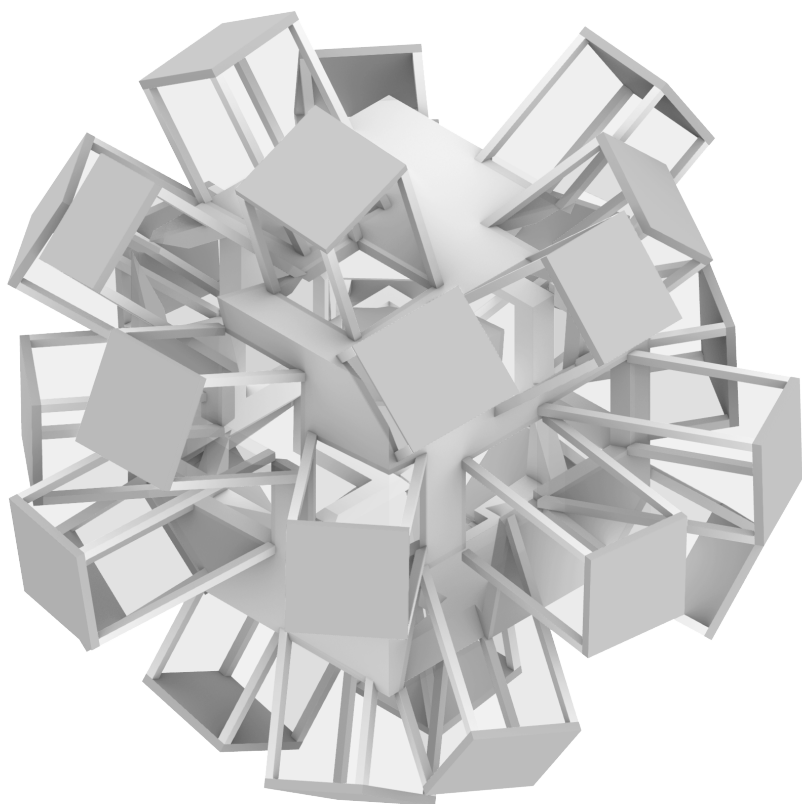
Tea House

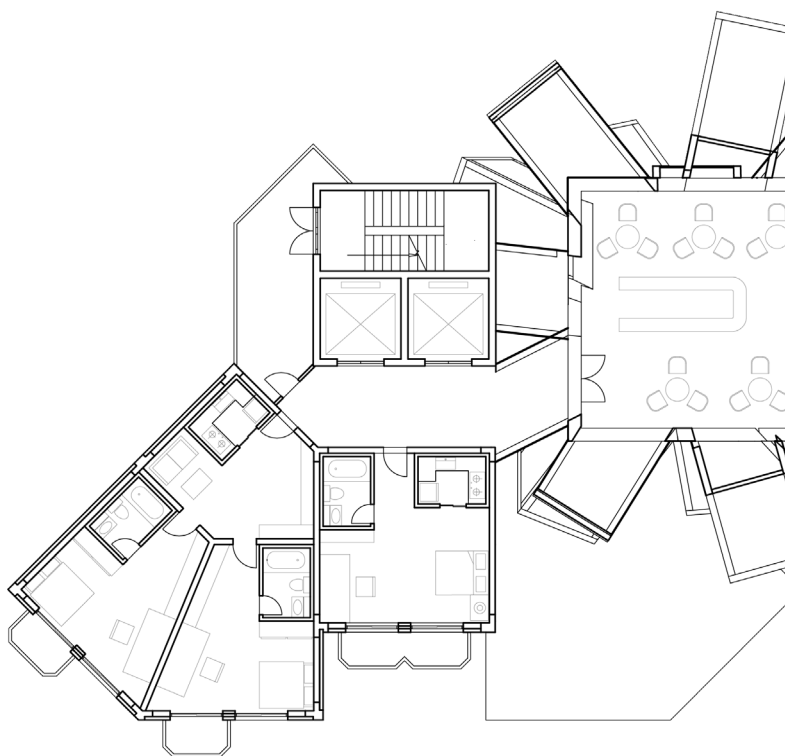


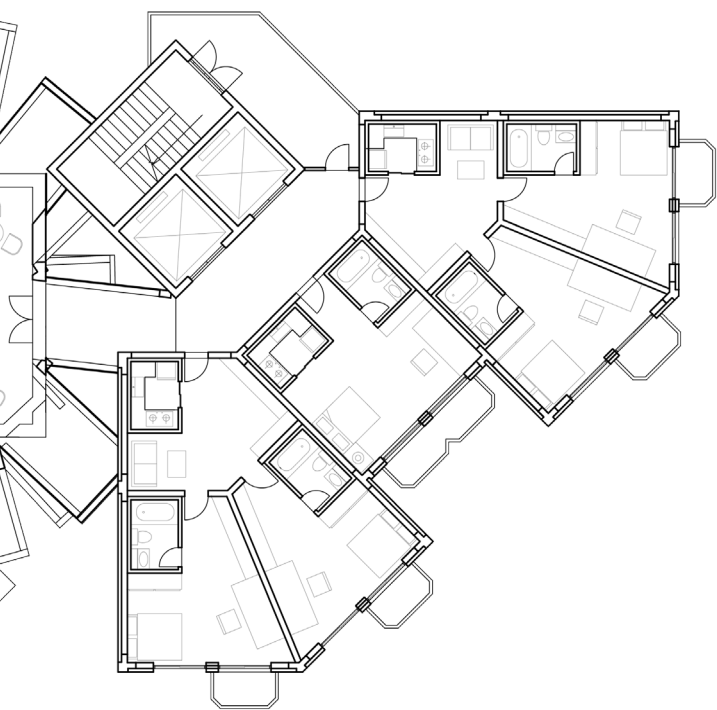
3m * 3m Facade Panel



Volume







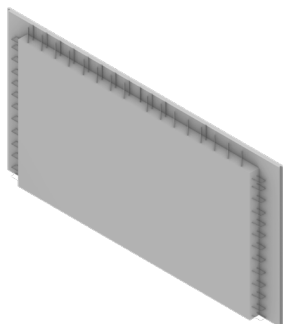




2. Community Library Complex



Community Library



6m * 3m Facade Panel



Volume



