

MixCity^{P5}

MixCity

Investigative Research & Evolutionary Design on Sustainable Densification in Shanghai's Living Neighbourhood

Graduation P5 Presentation

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Design for Urban Fabrics

Prof.ir. Rients.J.Dijkstra (1st Mentor)

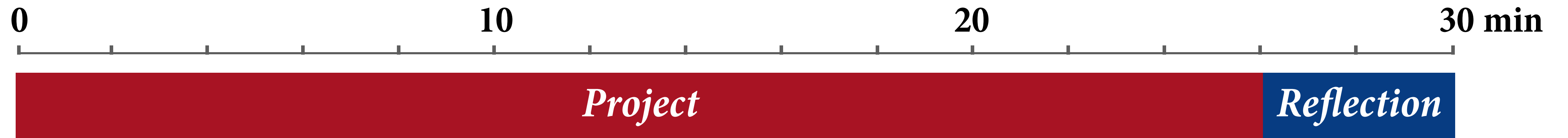
Dipl.ing. Ulf Hackauf (2nd Mentor)

2020.7.2

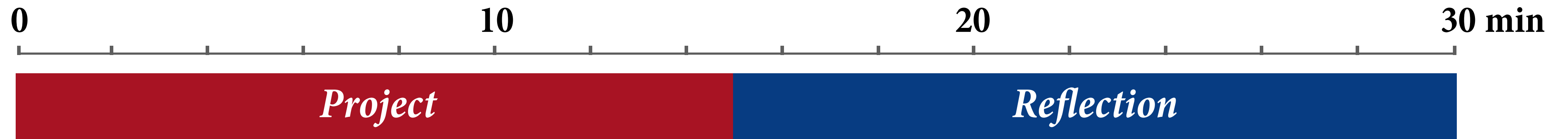
 **Thanks.**

Prof.ir. Rients.J.Dijkstra (1st Mentor)
Dipl.ing. Ulf Hackauf (2nd Mentor)

Presentation Timeline



Presentation Timeline



Project

Context

Analysis

Design

Context

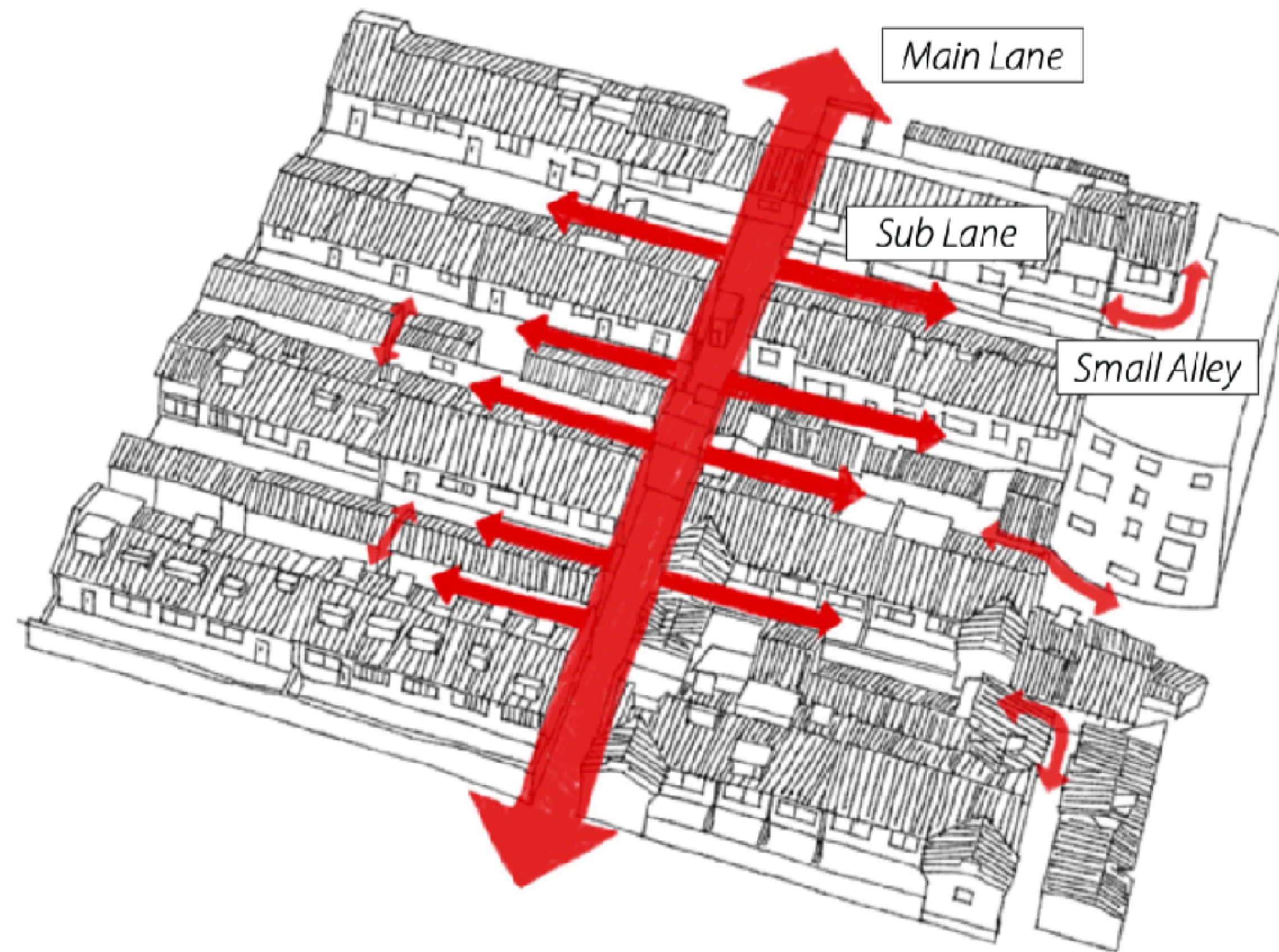


Shanghai 2000



Shanghai 2020

Lilong (里弄)



Lilong Buildings



Inside Lilong

Xiaoqu (小区)

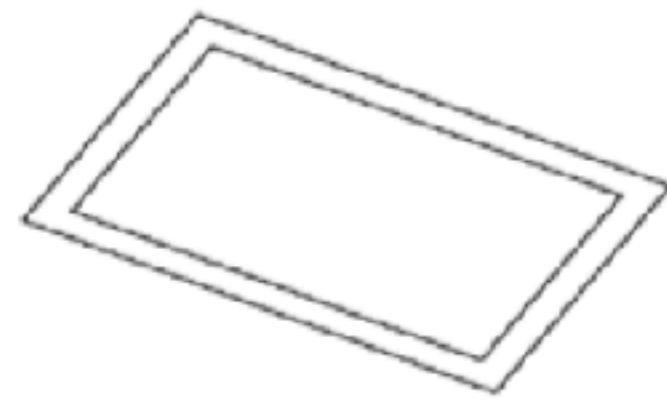


Xiaoqu Towers



Inside Xiaoqu

Xiaoqu (小区)



1. Take a plot

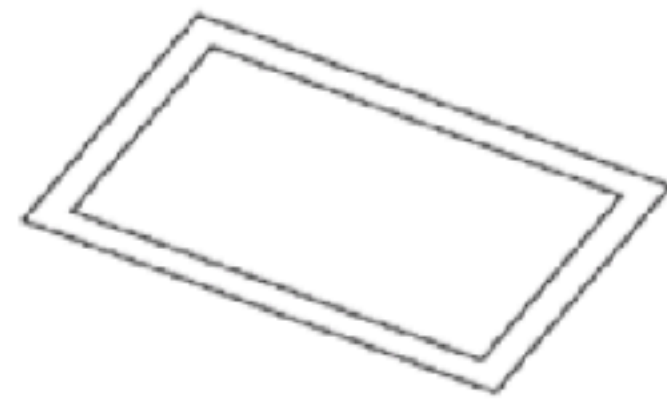


Xiaoqu Towers

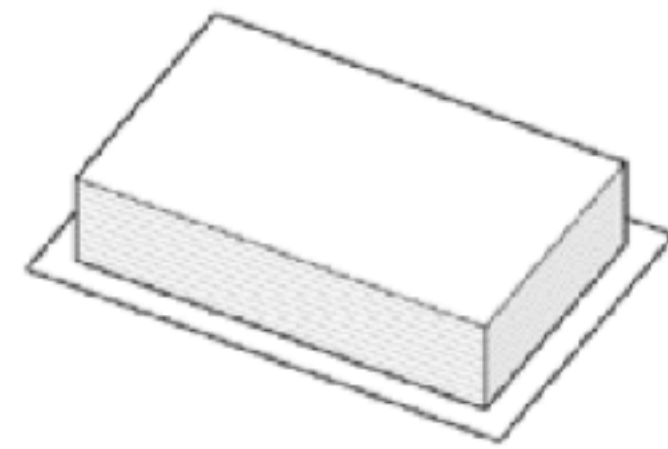


Inside Xiaoqu

Xiaoqu (小区)



1. Take a plot



2. Add 10 layer big building
to achieve FSI(FAR) 10.0

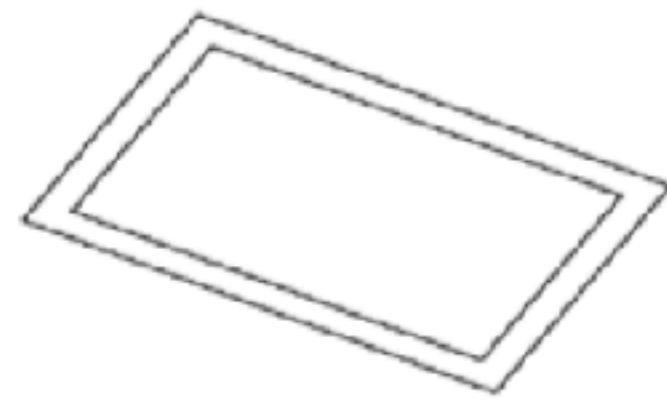


Xiaoqu Towers

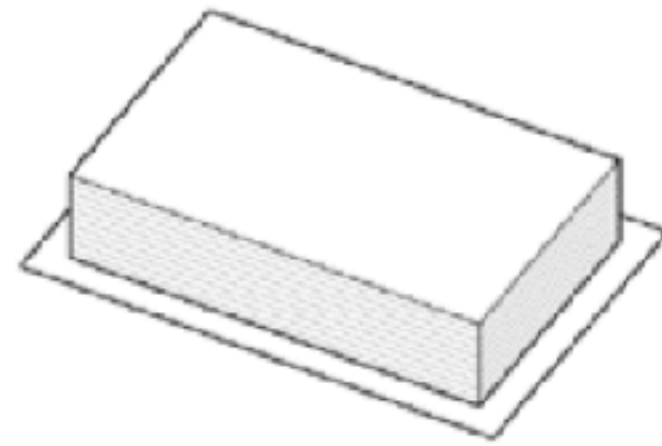


Inside Xiaoqu

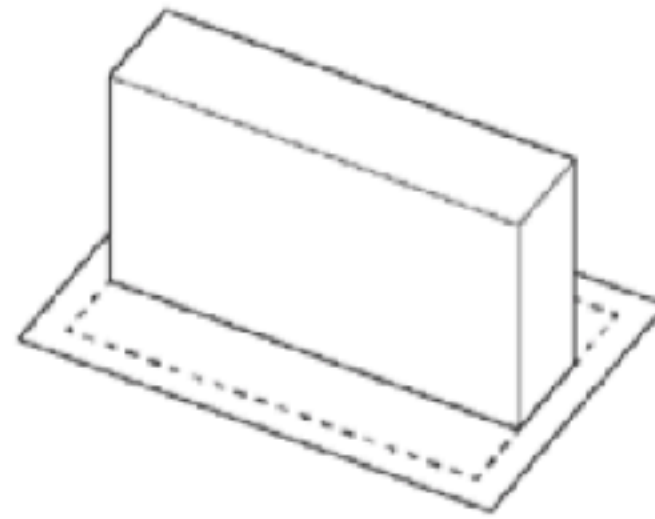
Xiaoqu (小区)



1. Take a plot



2. Add 10 layer big building to achieve FSI(FAR) 10.0



3. Transform to slab accroding to building code 40% density

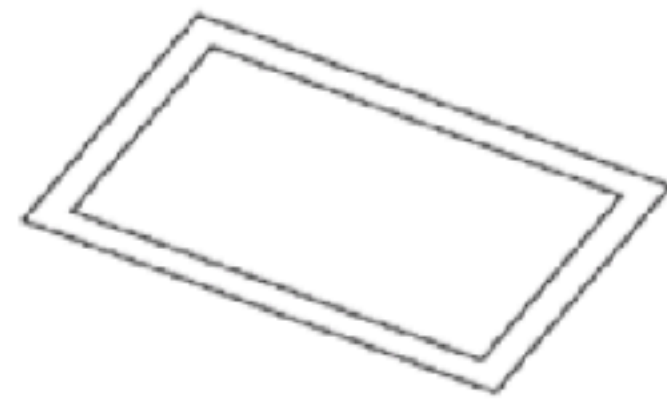


Xiaoqu Towers

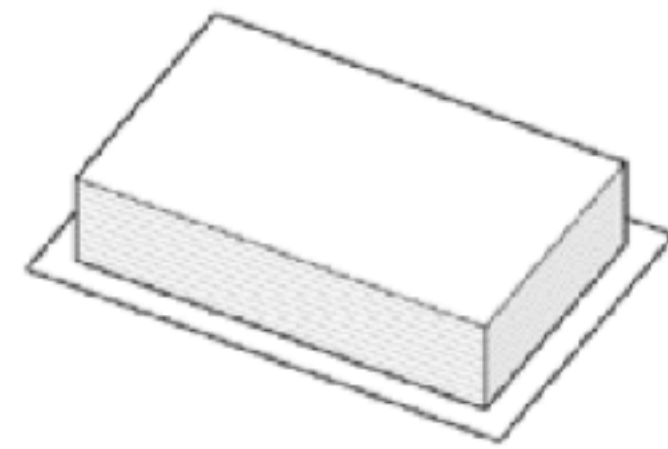


Inside Xiaoqu

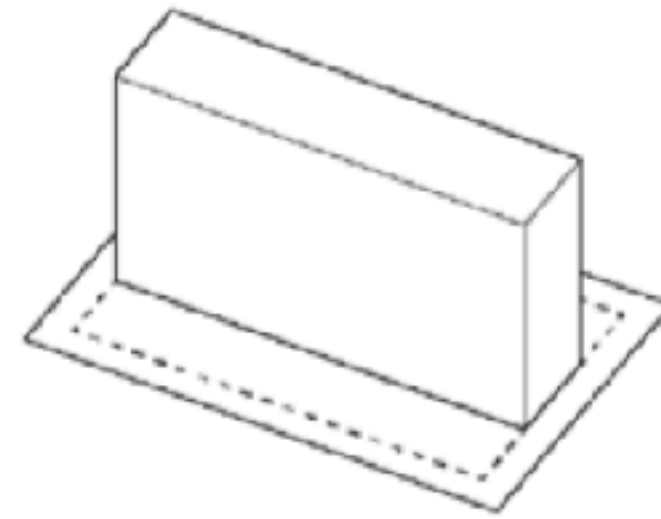
Xiaoqu (小区)



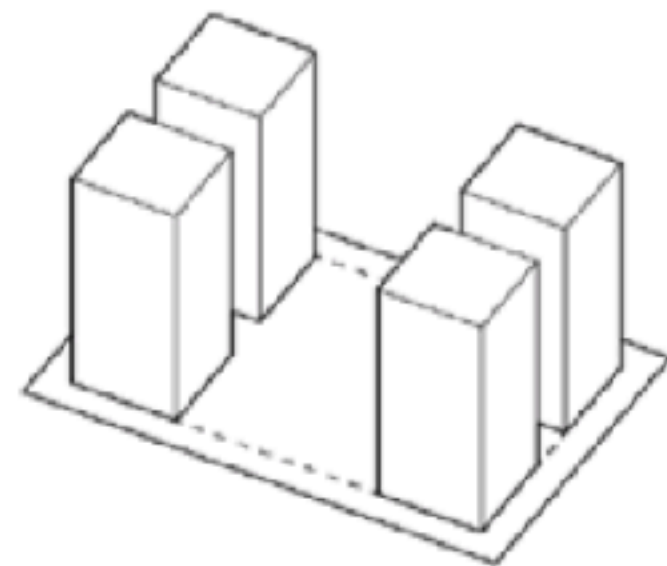
1. Take a plot



2. Add 10 layer big building to achieve FSI(FAR) 10.0



3. Transform to slab according to building code 40% density



4. Transform to 4 towers to keep fire prevention space

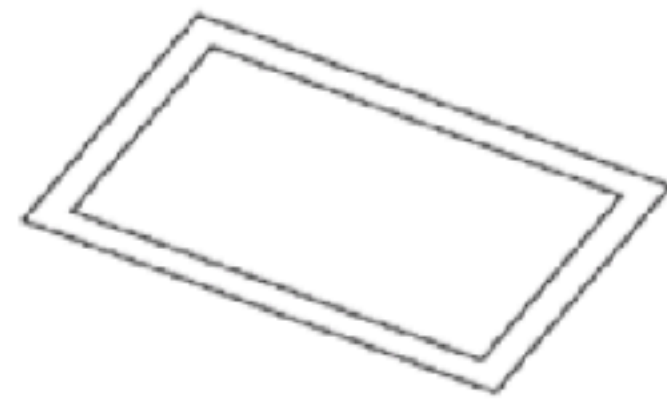


Xiaoqu Towers

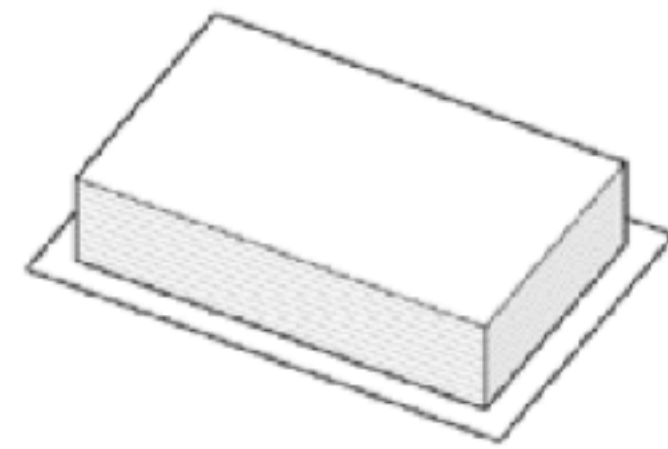


Inside Xiaoqu

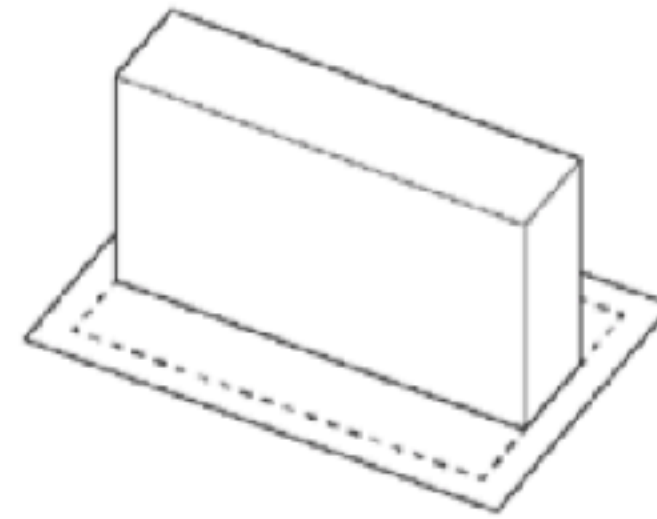
Xiaoqu (小区)



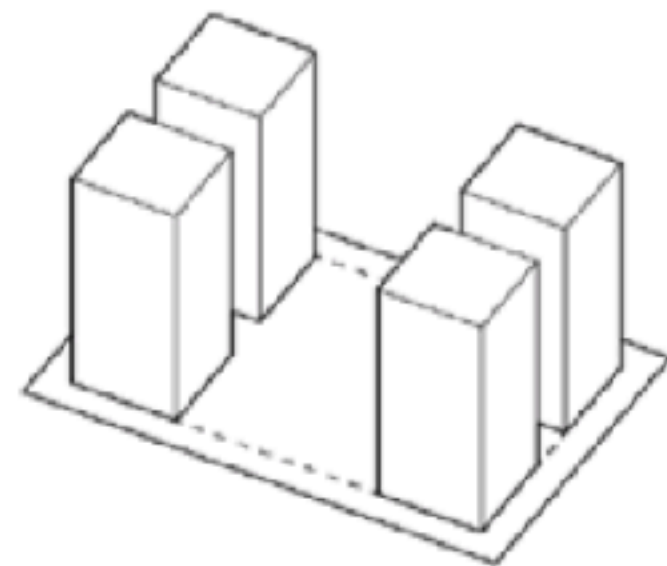
1. Take a plot



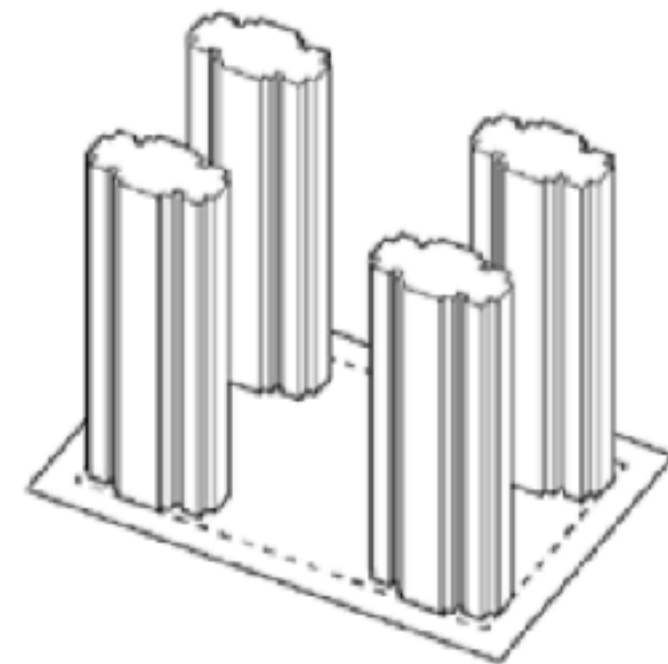
2. Add 10 layer big building to achieve FSI(FAR) 10.0



3. Transform to slab accroding to building code 40% density



4. Transform to 4 towers to keep fire prevention space



5. Change indoor layout to gain maximum sunlight

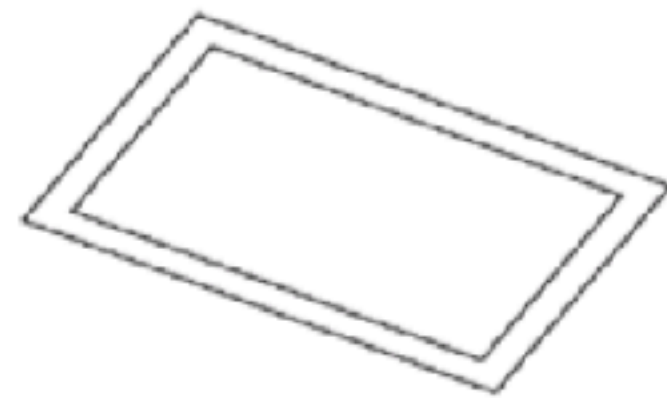


Xiaoqu Towers

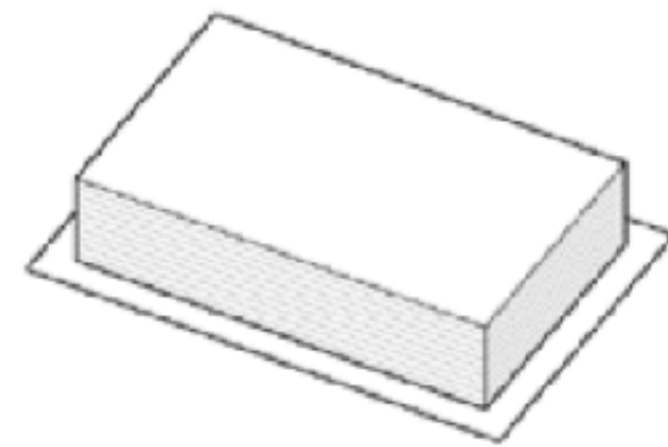


Inside Xiaoqu

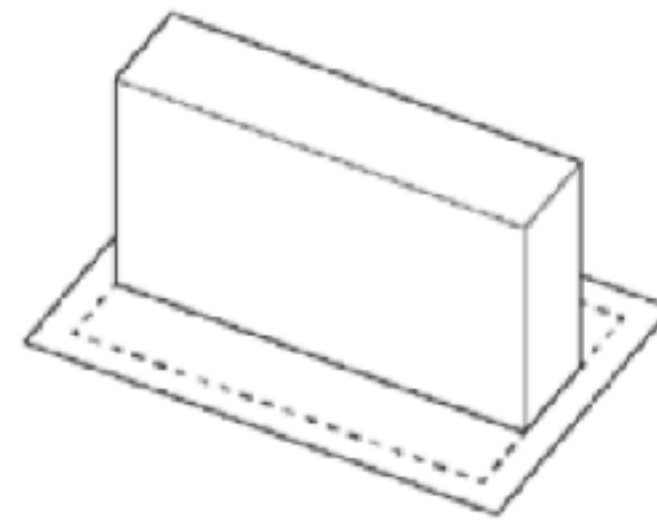
Xiaoqu (小区)



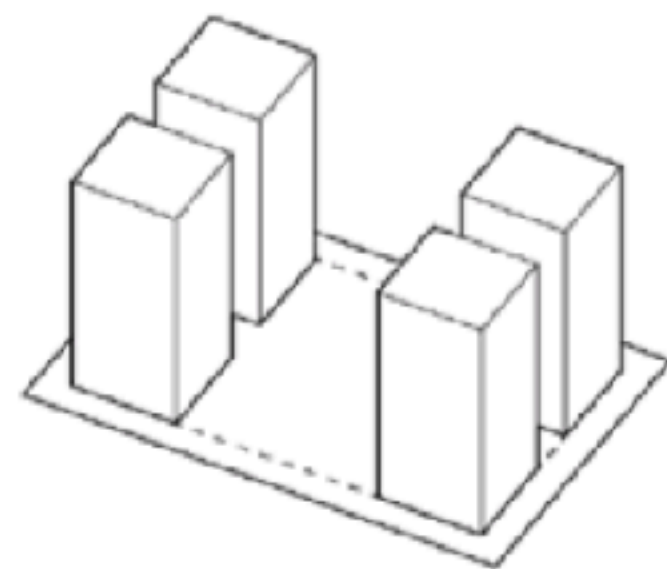
1. Take a plot



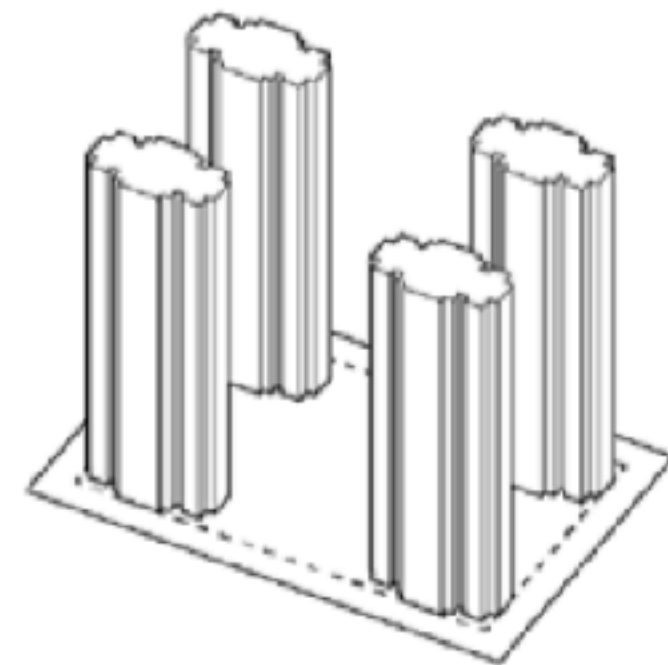
2. Add 10 layer big building to achieve FSI(FAR) 10.0



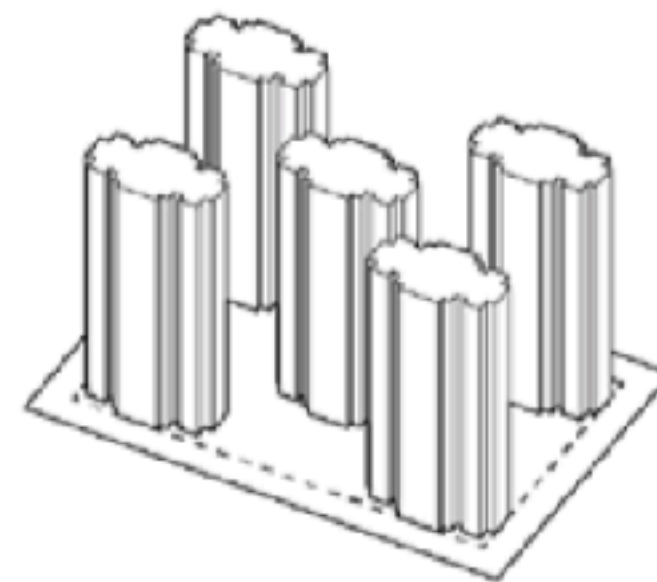
3. Transform to slab accroding to building code 40% density



4. Transform to 4 towers to keep fire prevention space



5. Change indoor layout to gain maximum sunlight



6. Adapt to optimised building density and height



Xiaoqu Towers



Inside Xiaoqu



Faceless Neighbourhood





1. Shanghaitan Huayuan



2. Donghuaihai Gongyuan



3. Dongdu Gongyu



4. Zhonghui Gongyu



5. Rende Fang



6. Jinrishijia



7. Lanxin Gongyu



8. Kaidemaomin Gongguan



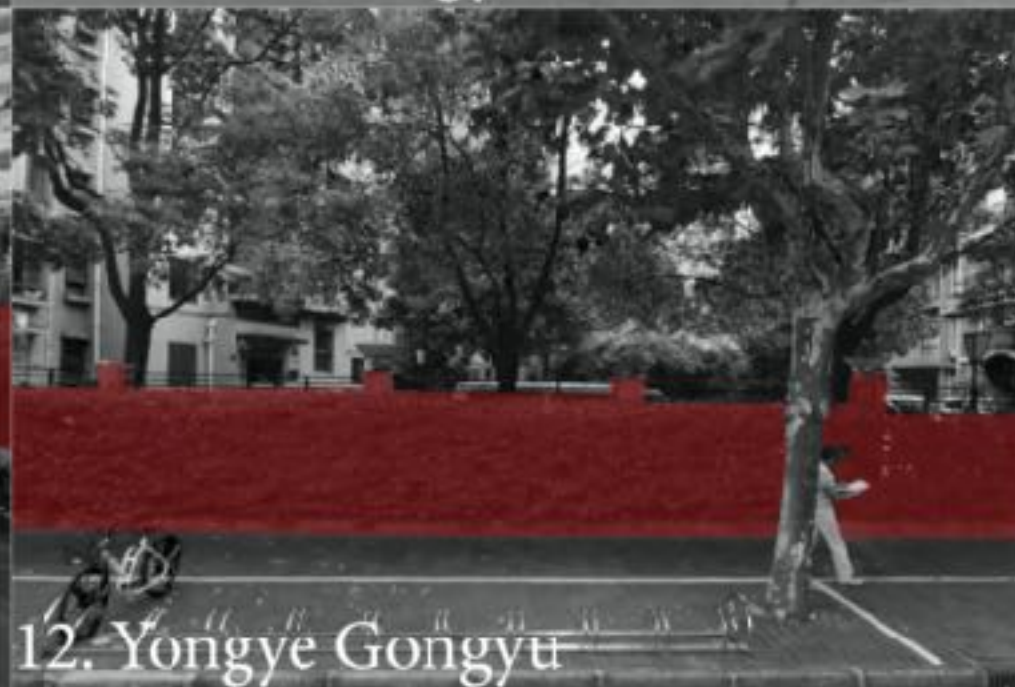
9. Huaren Waitanjiuli



10. Luwan Dushi



11. Minri Xingcheng



12. Yongye Gongyu



13. Huilong Xincheng



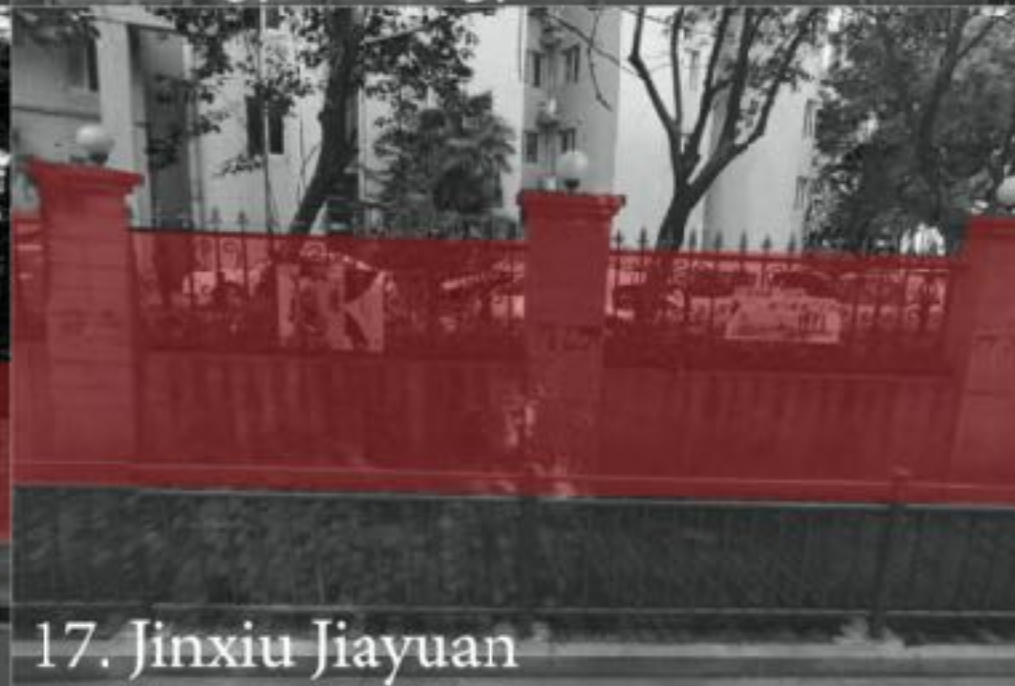
14. Lvcheng Huangpuwan



15. Cuihutiandi Yuyuan



16. Cuihutiandi



17. Jinxiu Jiayuan



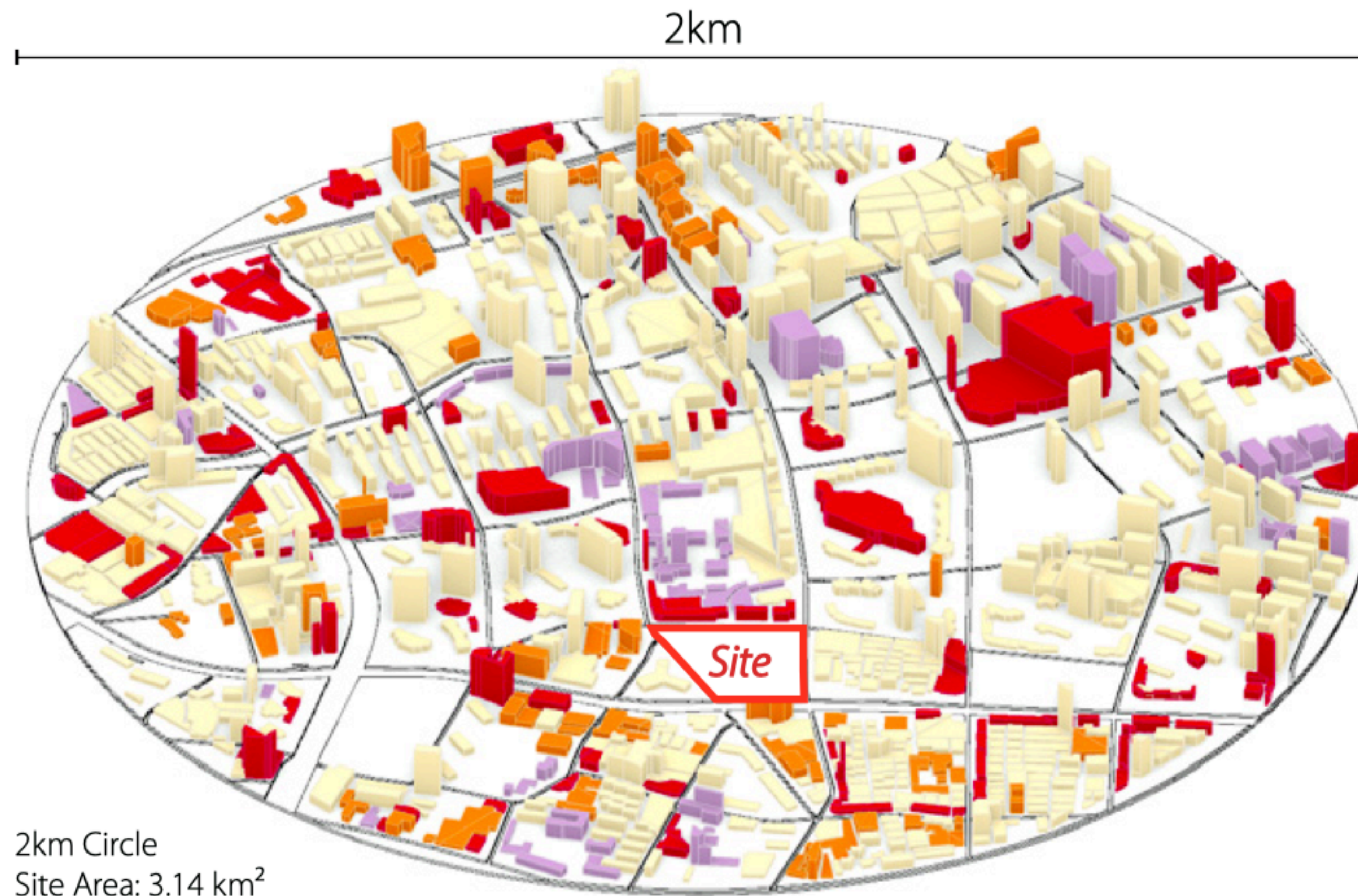
18. Changfeng Huiyuan



19. Junhu Du



20. Huangpu Xinyuan



	GFA(总建筑面积)	FSI(容积率)	Ratio(%)
2km Circle	6.326 km ²	2.01	100%
Residential	3.915 km ²	1.24	61.7%
Commercial	1.225 km ²	0.39	19.3%
Office	0.658 km ²	0.21	10.5%
Public Service	0.527 km ²	0.17	8.5%

Residential Com Off Pub FSI: 2.01

1. Typical Lilong, FSI: 1.2

Residential *Com* *P*

1. Typical Lilong, FSI: 1.2

Residential *Com* *P*

2. Typical Xiaoqu, FSI: 6.0

Residential

Com *P*

1. Typical Lilong, FSI: 1.2

Residential *Com* *P*

2. Typical Xiaoqu, FSI: 6.0

Residential *Com* *P*

3. Commercial Apartment, FSI: 5.0 (综合体)

Residential *Commercial* *Office* *P*

1. Typical Lilong, FSI: 1.2



2. Typical Xiaoqu, FSI: 6.0



3. Commercial Apartment, FSI: 5.0 (综合体)



4. Planning MixCity, FSI: 5.0



Problem

Green Shortage

Low FSI

Pedestrian-unfriendly

Bike-unfriendly

Homogenous

Single Function

Problem

Short-term Profit-driven Urbanism

Green Shortage
Low FSI
Pedestrian-unfriendly
Bike-unfriendly
Homogenous
Single Function

Vision

*How to achieve **sustainable** living neighborhoods rather than introducing Xiaoqu in the old Lilong area in Shanghai's densification Process?*

*Green Shortage
Low FSI
Pedestrian-unfriendly
Bike-unfriendly
Homogenous
Single Function*

Sustainability

For People

For Profit

For Planet

Green Shortage
Low FSI
Pedestrian-unfriendly
Bike-unfriendly
Homogenous
Single Function

Sustainability

For People

Pedestrian-friendly



Diversity



For Profit

High FSI



Mix-use



For Planet

Bike-friendly



Ecology



Green Shortage
Low FSI
Pedestrian-unfriendly
Bike-unfriendly
Homogenous
Single Function

Sustainability

For People

Pedestrian-friendly

Pedestrian-unfriendly



Diversity

Homogenous



For Profit

High FSI

Low FSI



Mix-use

Single Function



For Planet

Bike-friendly

Bike-unfriendly

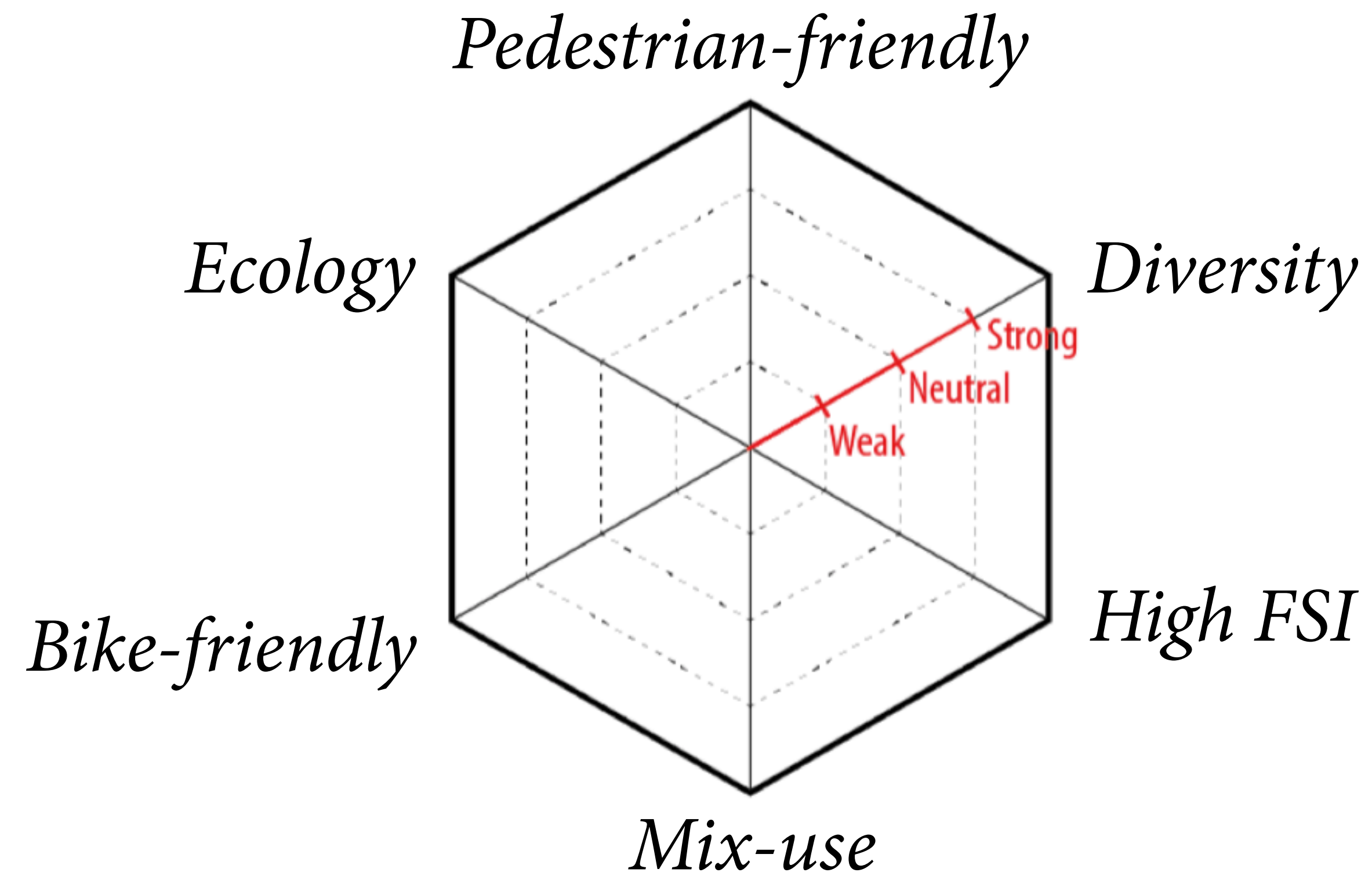


Ecology

Green Shortage



Evaluation



Analysis

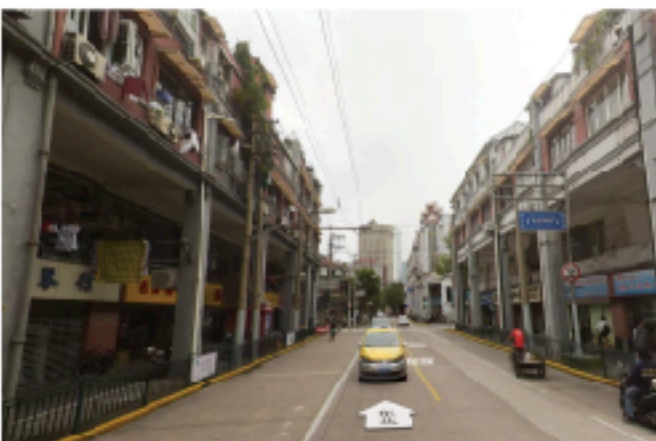
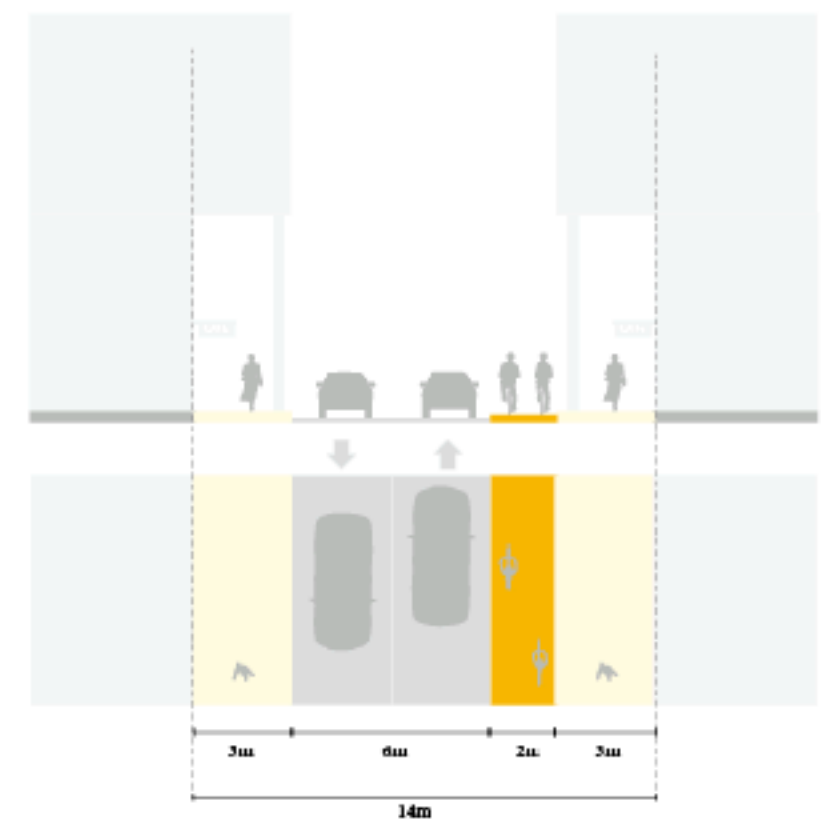
Sustainability for People

Human Scale Street

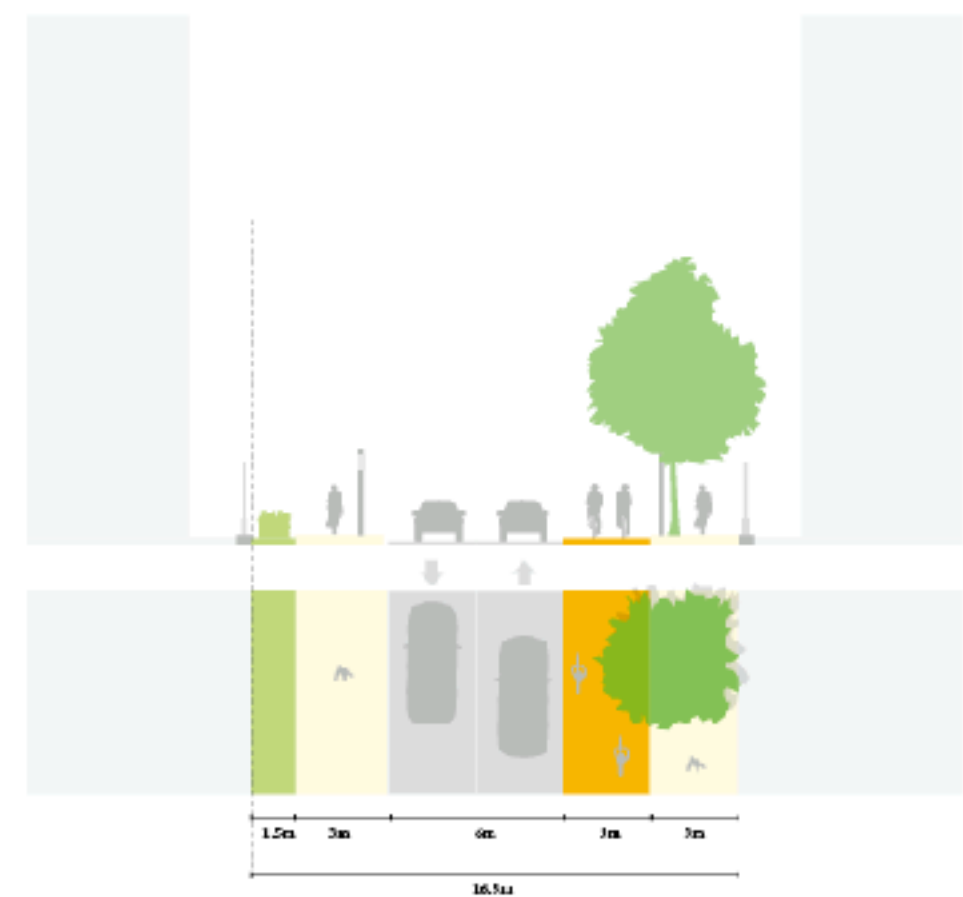
City Major Road
Designed for cars, too spacious for pedestrian



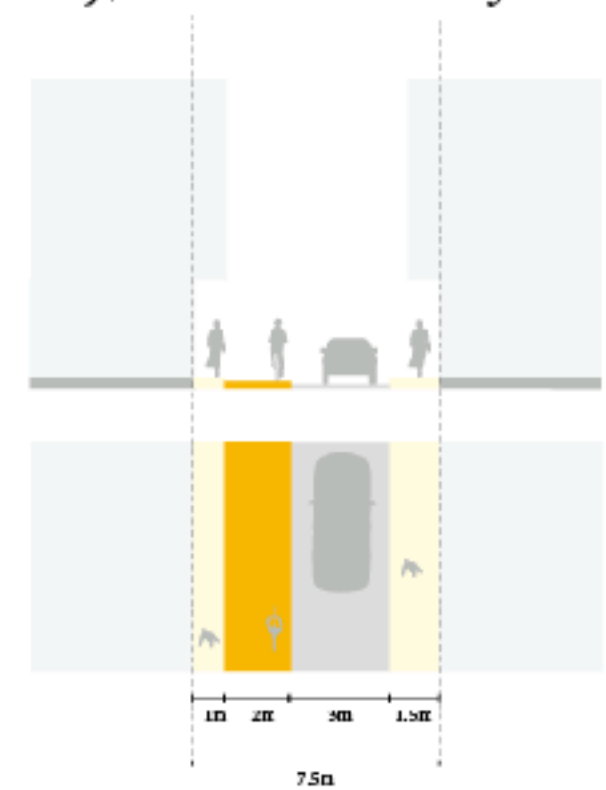
Lilong Main Road
Human scale feeling, friendly for people and bikes



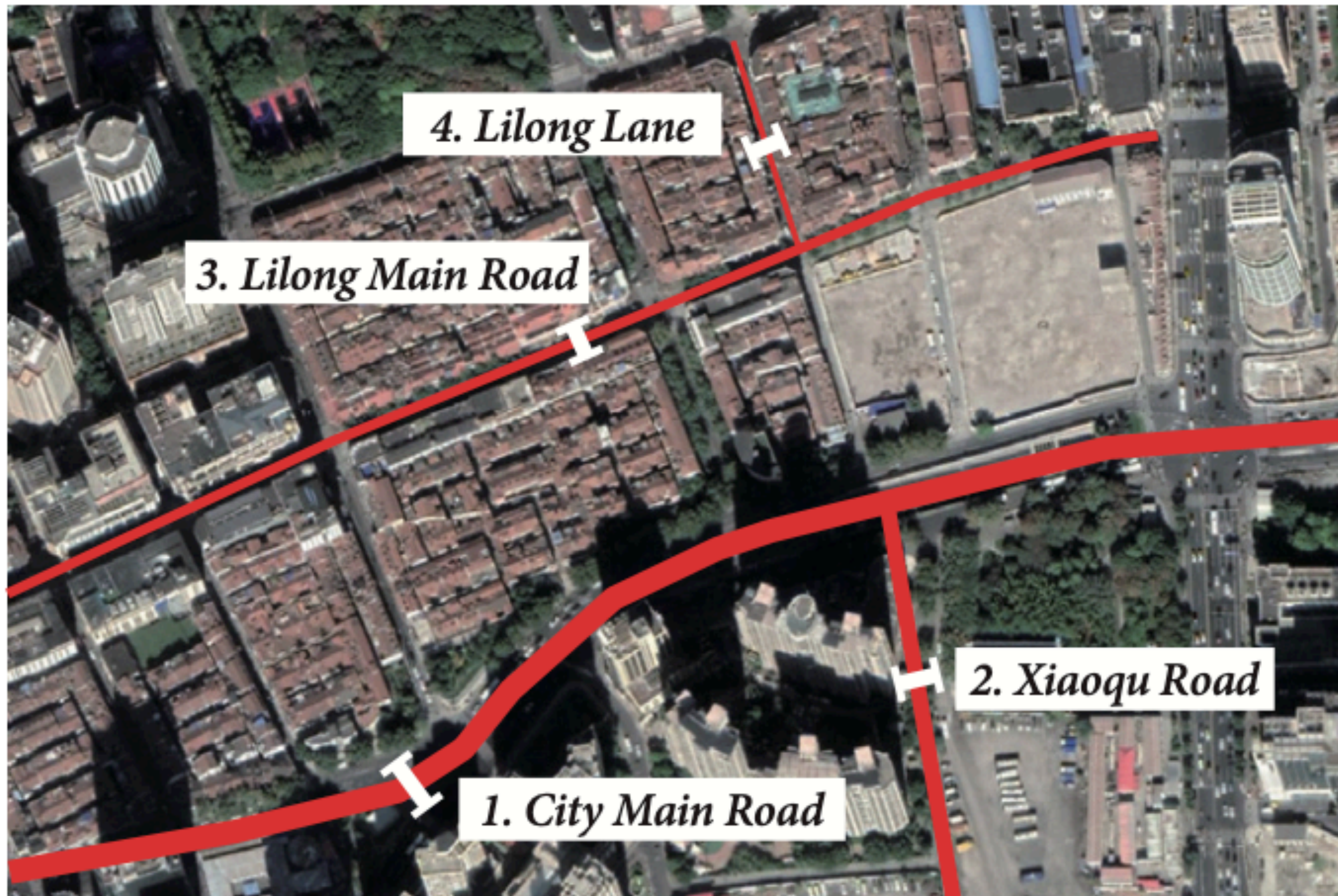
Xiaoqu Surrounding Road
Closed by fence, exclusive for pedestrian



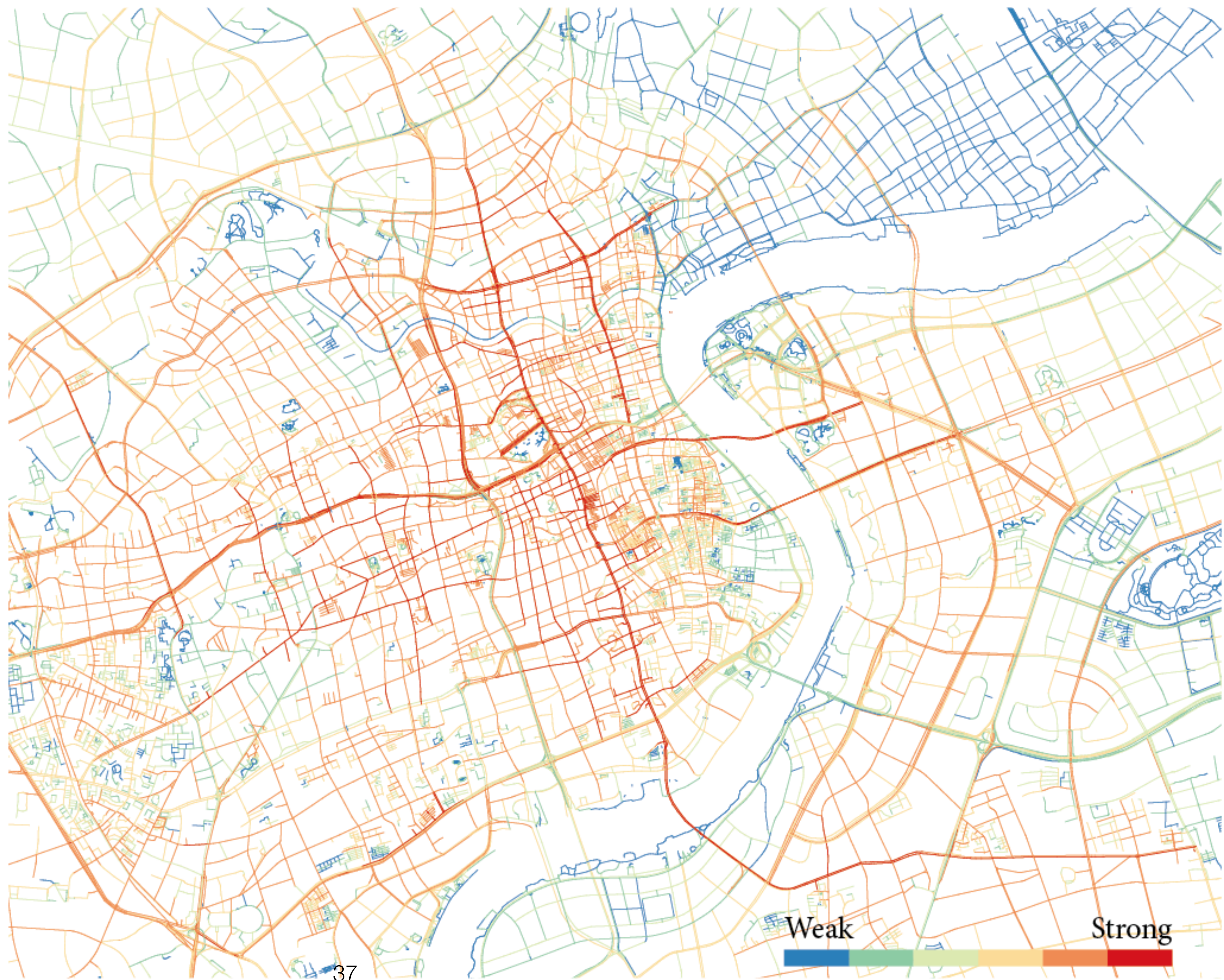
Lilong Lane
Cozy, a bit too narrow for both cars and pedestrian



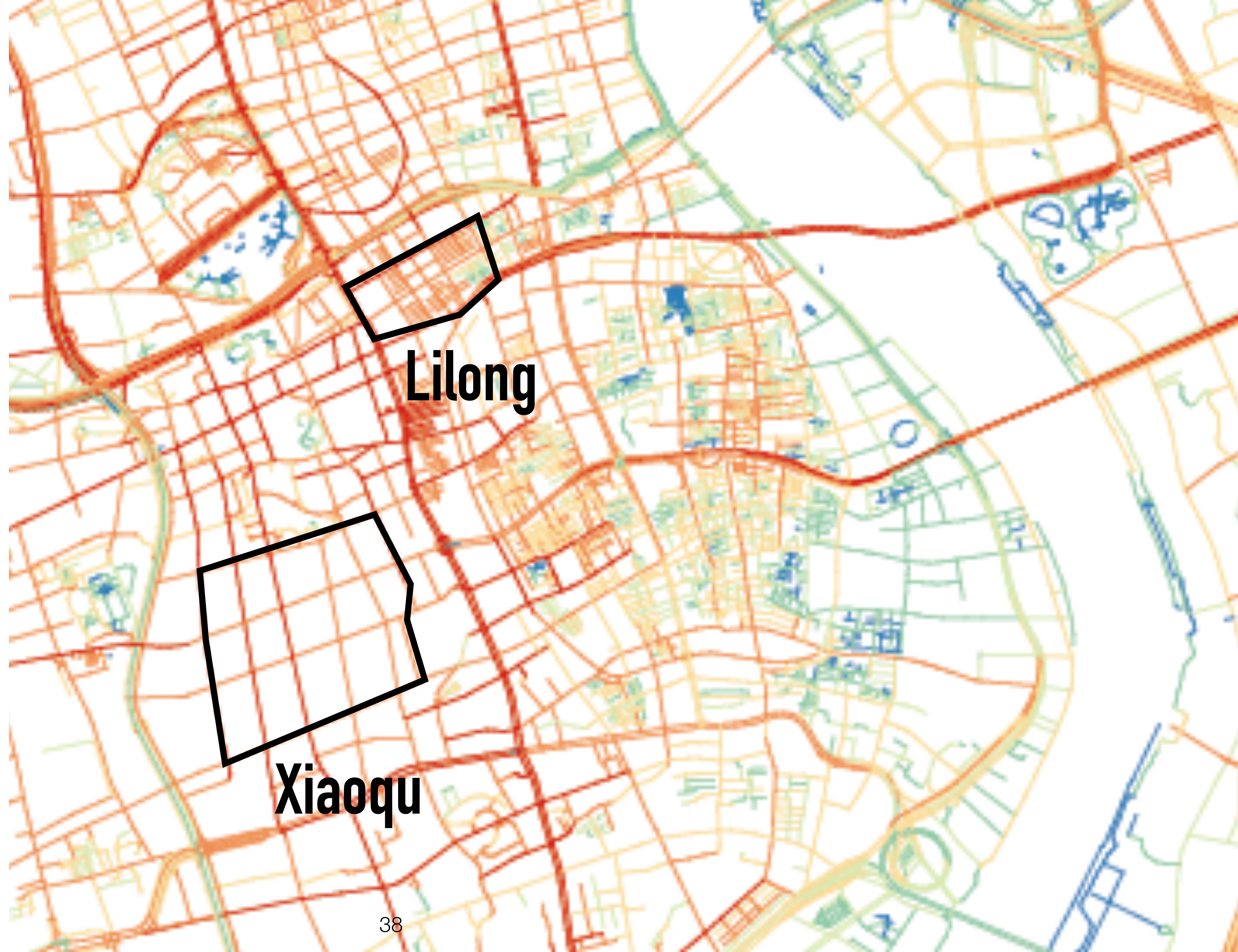
Human Scale Street



Accessibility



Accessibility



Xiaoqu

Lilong

Program Mix



source: 500px.com

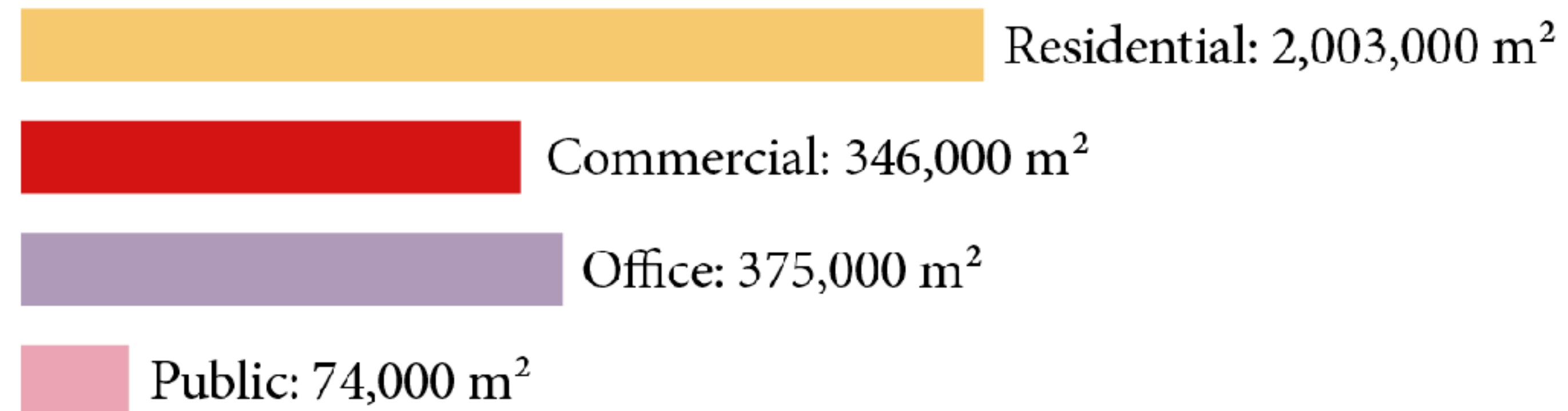


Program Mix

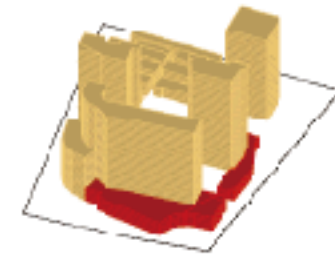
*Program Data Based on Baidu Streetview

Site Area: 570,000 m²

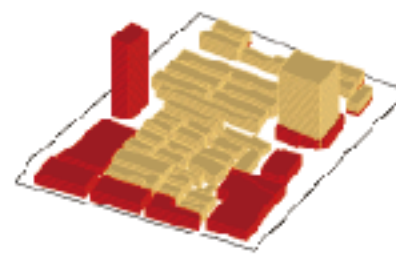
FSI: 2.6



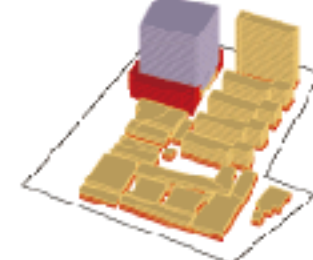
Low Mix Level



Site Area: 43,000 m²
FSI: 3.9
150,000 m²
15,000 m²
0 m²
0 m²



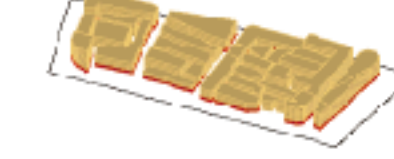
Site Area: 50,000 m²
FSI: 1.9
58,000 m²
34,000 m²
0 m²
0 m²



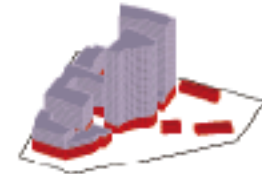
Site Area: 41,000 m²
FSI: 2.5
38,000 m²
26,000 m²
36,000 m²
0 m²



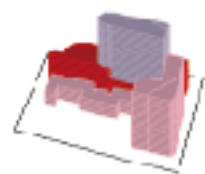
Site Area: 40,000 m²
FSI: 2.0
50,000 m²
14,000 m²
15,000 m²
0 m²



Site Area: 28,000 m²
FSI: 1.8
42,000 m²
8,000 m²
0 m²
0 m²



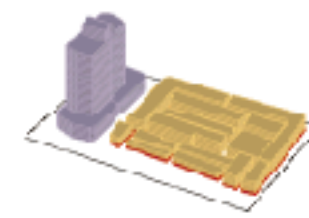
Site Area: 18,000 m²
FSI: 3.2
0 m²
15,000 m²
43,000 m²
0 m²



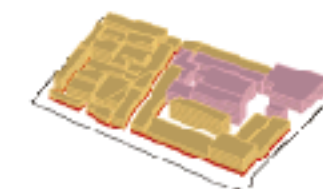
Site Area: 15,000 m²
FSI: 4.0
0 m²
19,000 m²
16,000 m²
26,000 m²



Site Area: 20,000 m²
FSI: 3.0
0 m²
60,000 m²
0 m²
0 m²



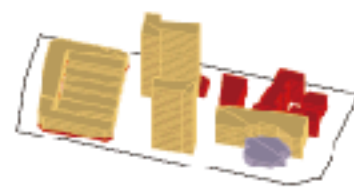
Site Area: 22,000 m²
FSI: 3.0
24,000 m²
4,000 m²
36,000 m²
0 m²



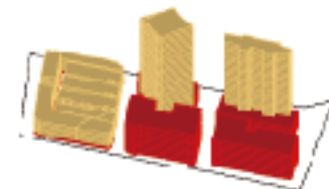
Site Area: 28,000 m²
FSI: 1.9
27,000 m²
7,000 m²
0 m²
18,000 m²



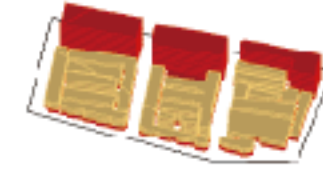
Site Area: 31,000 m²
FSI: 2.7
11,000 m²
3,000 m²
70,000 m²
0 m²



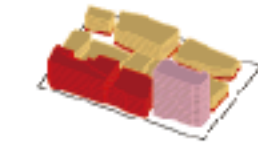
Site Area: 32,000 m²
FSI: 2.1
51,000 m²
15,000 m²
2,000 m²
0 m²



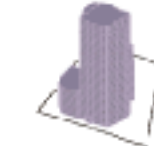
Site Area: 24,000 m²
FSI: 4.2
58,000 m²
42,000 m²
0 m²
0 m²



Site Area: 30,000 m²
FSI: 2.2
21,000 m²
44,000 m²
0 m²
0 m²



Site Area: 15,000 m²
FSI: 3.0
16,000 m²
19,000 m²
0 m²
9,000 m²



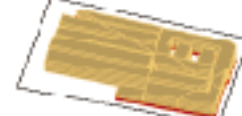
Site Area: 8,000 m²
FSI: 4.9
0 m²
0 m²
43,000 m²
0 m²



Site Area: 13,000 m²
FSI: 2.0
4,000 m²
1,000 m²
0 m²
21,000 m²



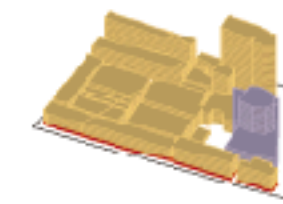
Site Area: 17,000 m²
FSI: 1.4
22,000 m²
2,000 m²
0 m²
0 m²



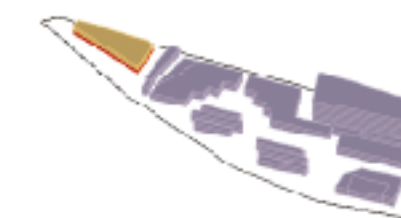
Site Area: 19,000 m²
FSI: 1.7
28,000 m²
3,000 m²
0 m²
0 m²



Site Area: 17,000 m²
FSI: 4.1
0 m²
6,000 m²
63,000 m²
0 m²

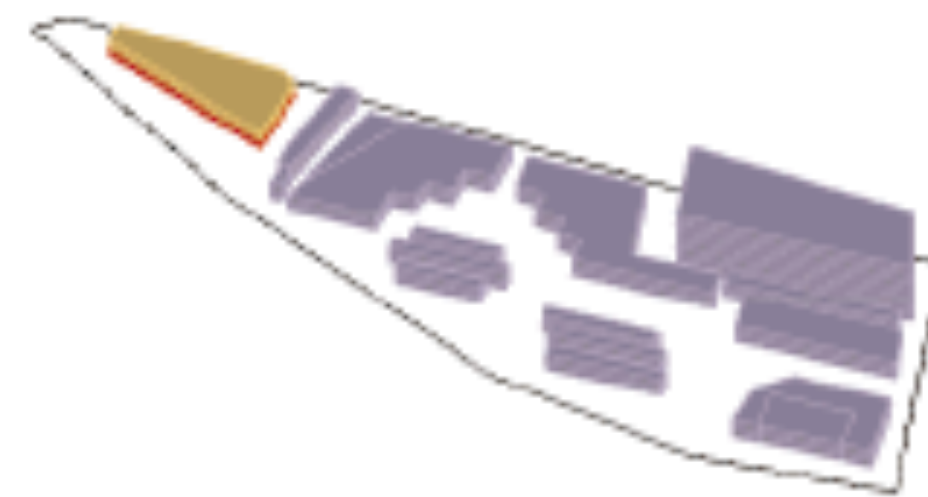


Site Area: 25,000 m²
FSI: 3.5
63,000 m²
6,000 m²
21,000 m²
0 m²



Site Area: 30,000 m²
FSI: 1.2
2,000 m²
1,000 m²
35,000 m²
0 m²

Low Mix Level



Site Area: 30,000 m²

FSI: 1.2

| 2,000 m²

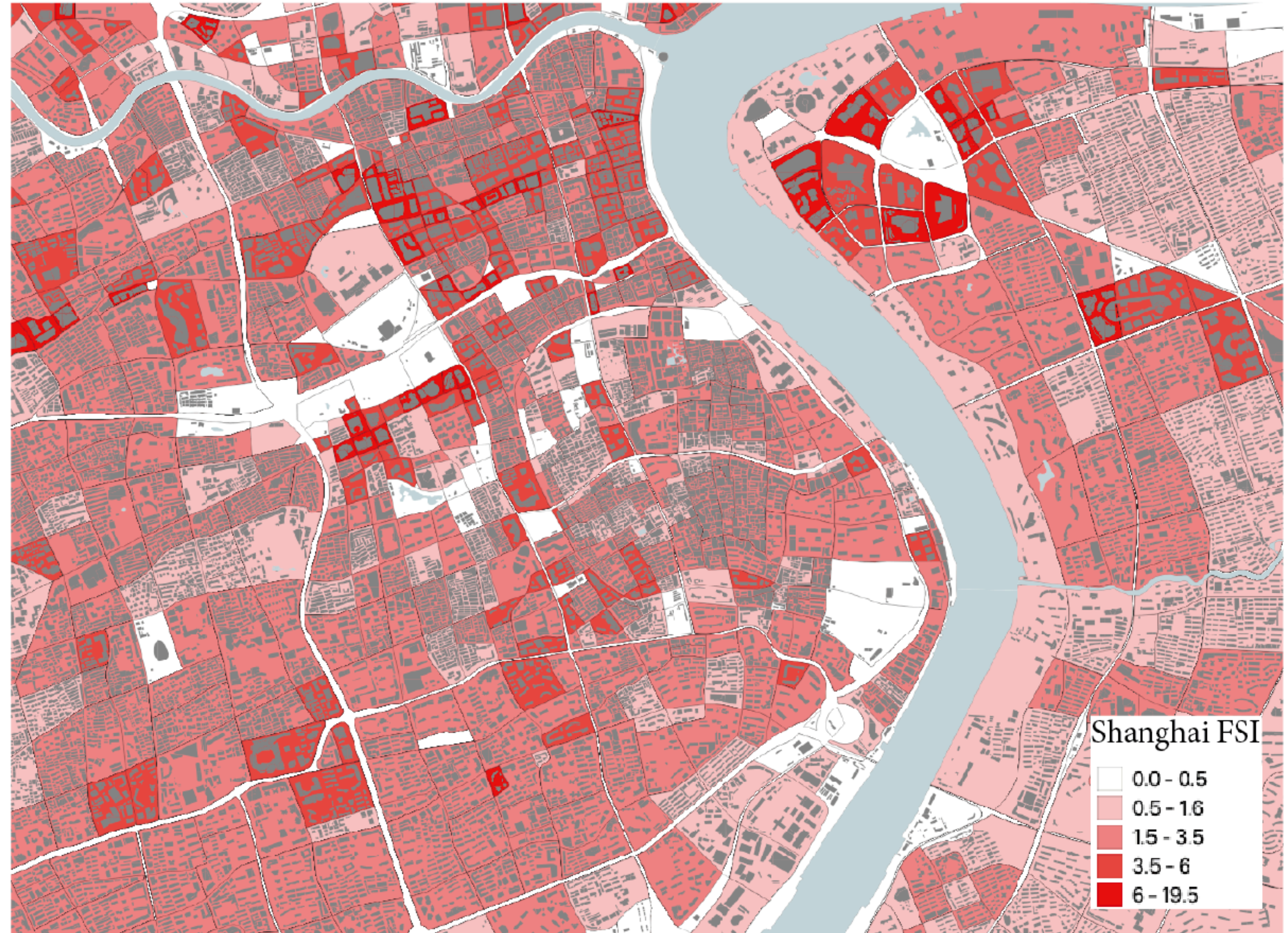
| 1,000 m²

| 35,000 m²

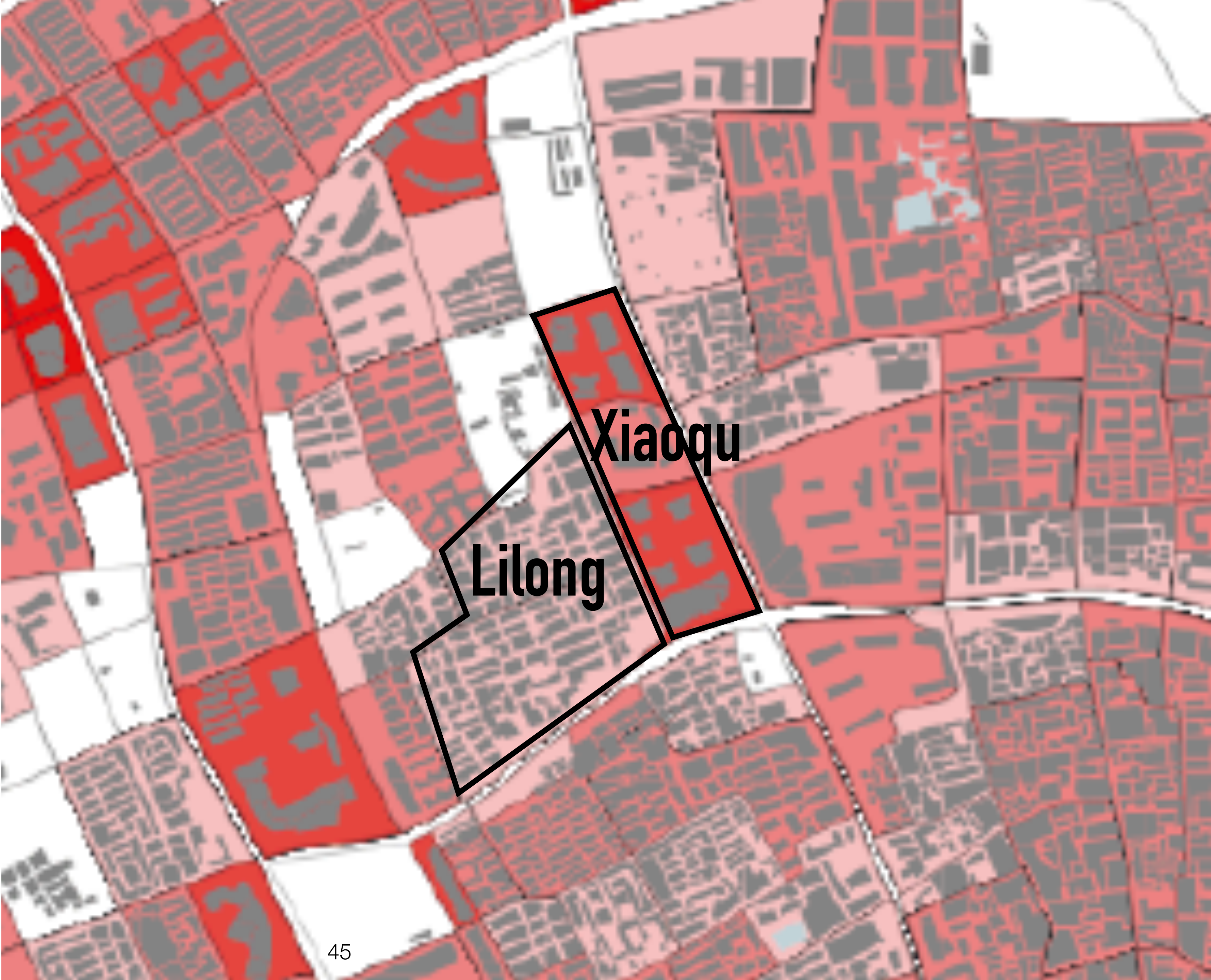
| 0 m²

Sustainability for Profit

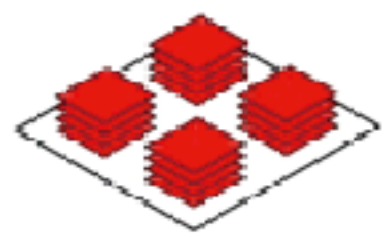
Sufficient Housing Capacity



Sufficient Housing Capacity



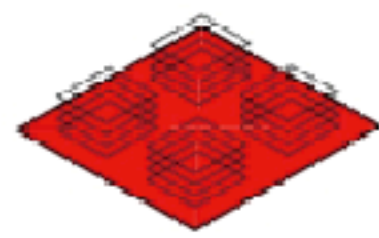
Spacemate



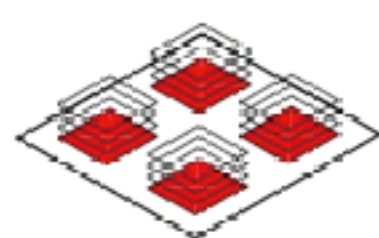
FSI (Floor Space Index)
The FSI expresses the built intensity of an area.
 $FSI = \text{gross floor area} / \text{plan area}$



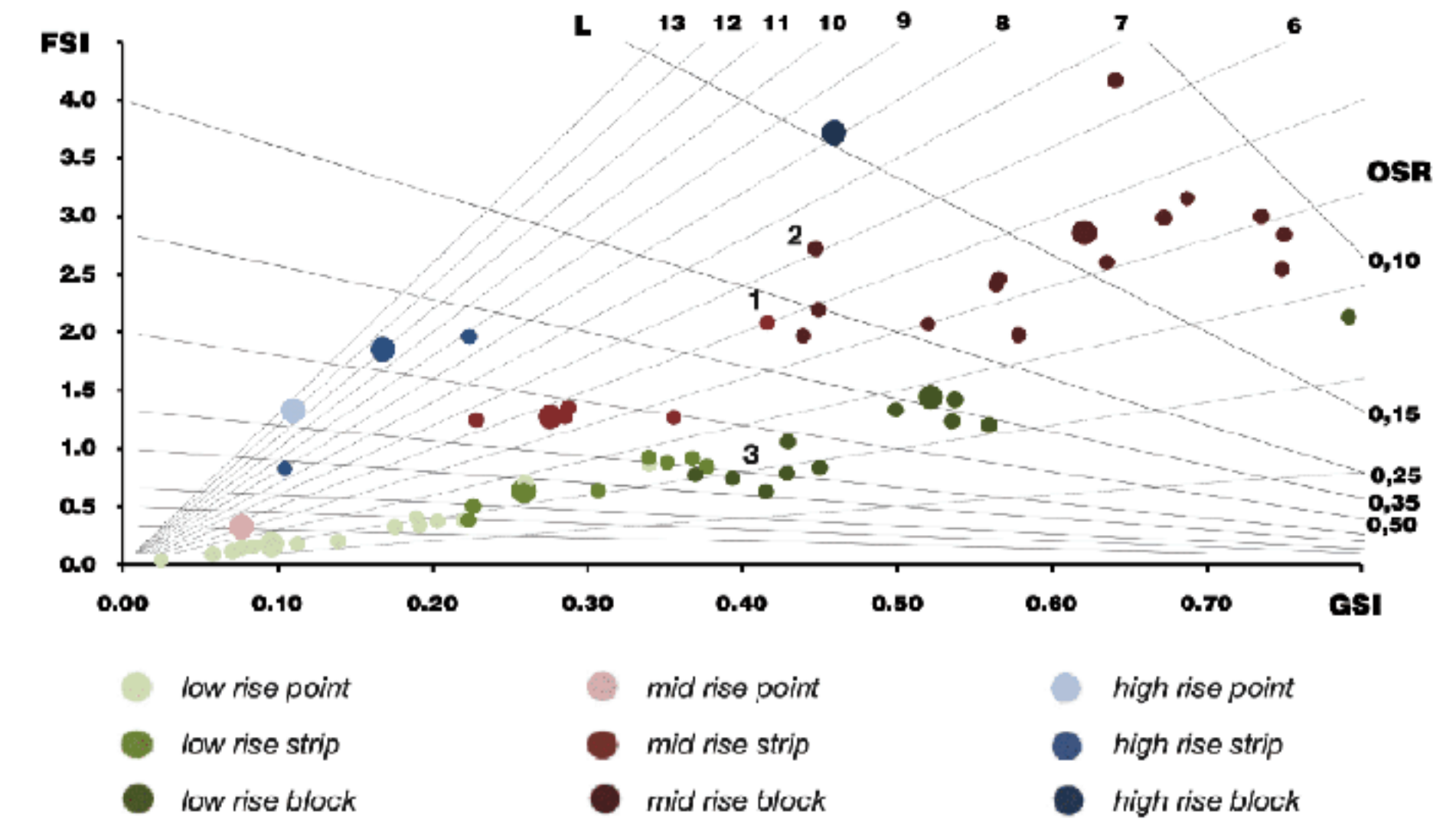
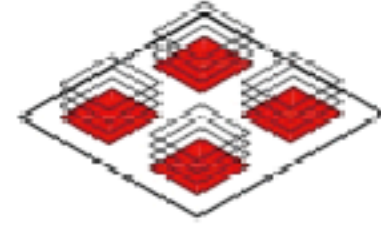
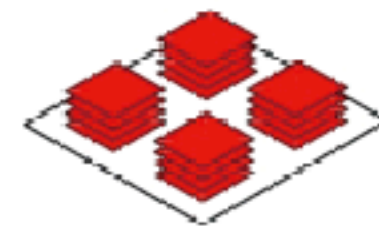
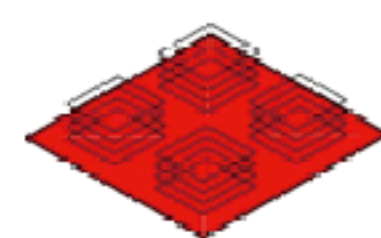
OSR
The variable OSR, or spaciousness, is a measure of the amount of non-built space at ground level per square meter of gross floor area.



GSI (Gross Space Index)
GSI, or coverage, demonstrates the relationship between built and non-built space.



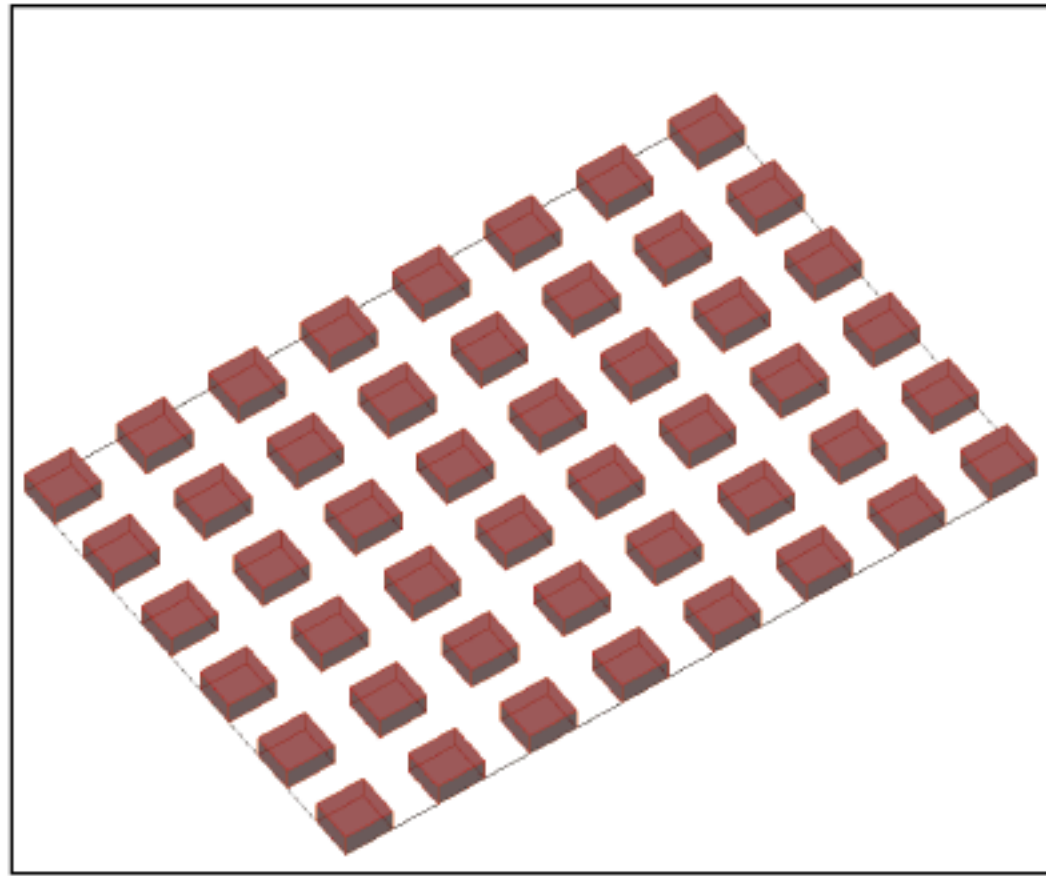
L
Average number of floors.



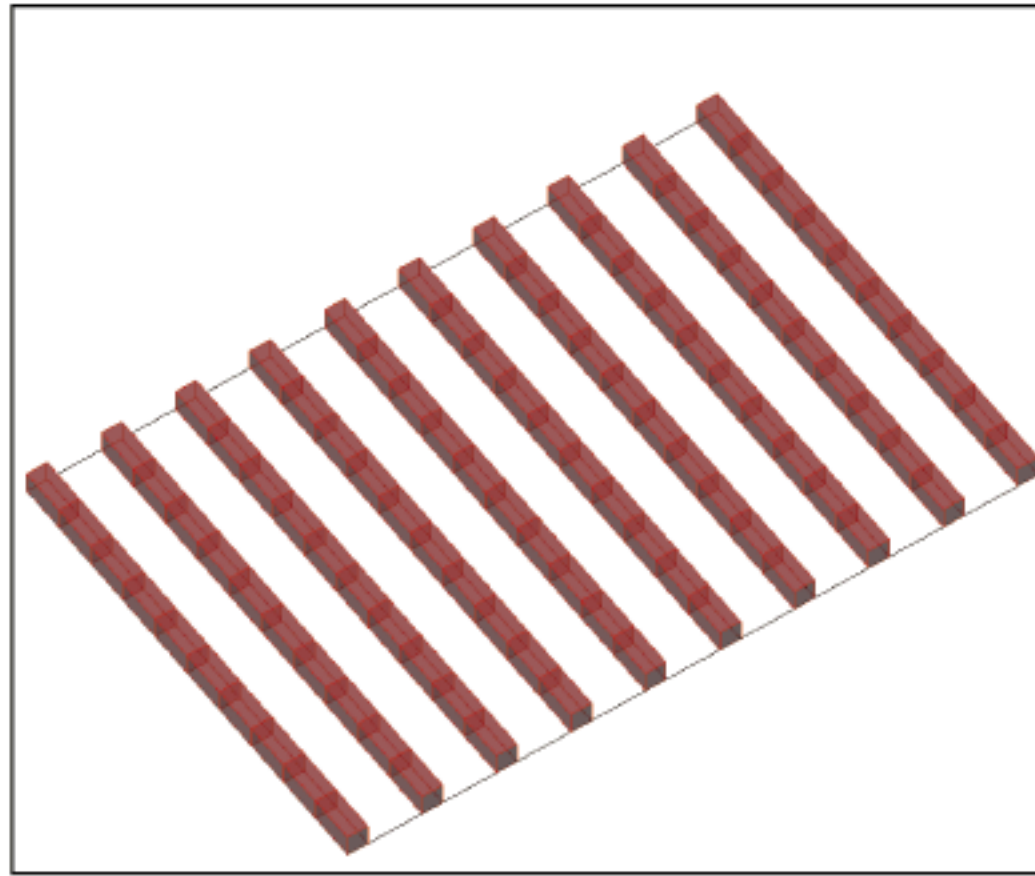
All dutch samples in Spacemate, (Meta.B, 2010)

Diverse Building & Public Space: TypologyMaker

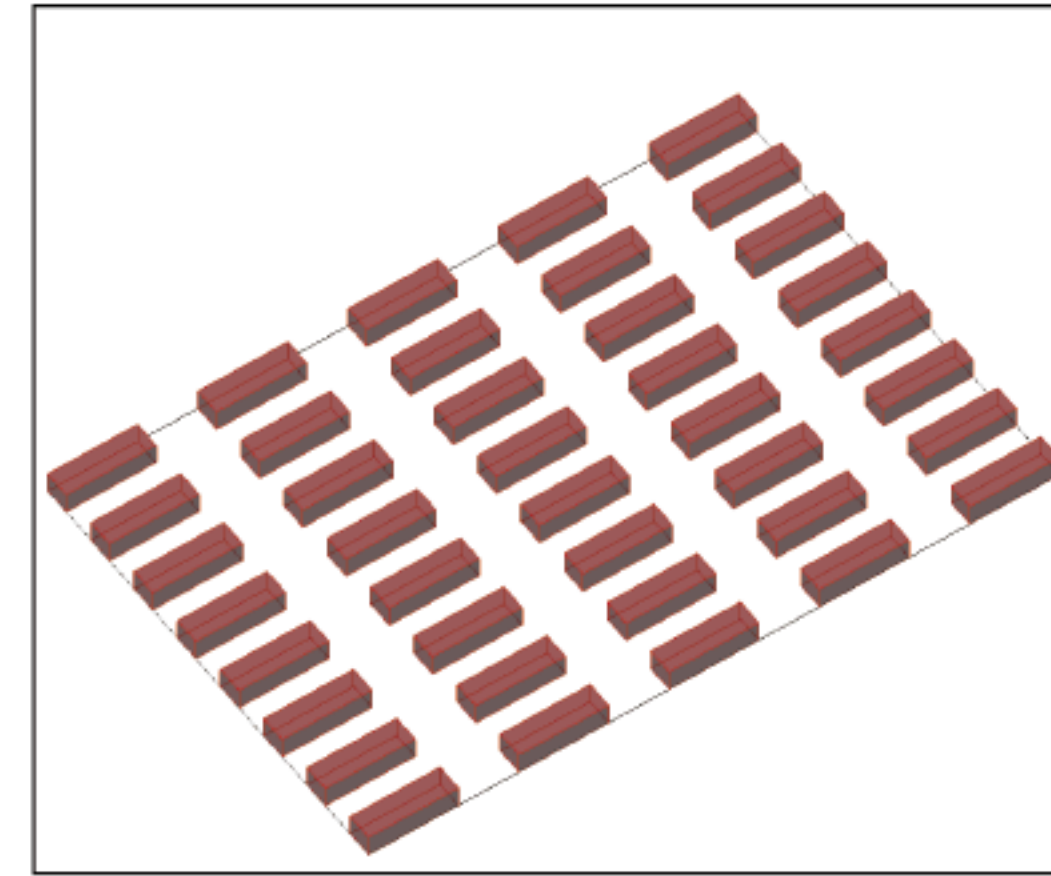
Villa, FSI: 1.0, GSI: 0.3



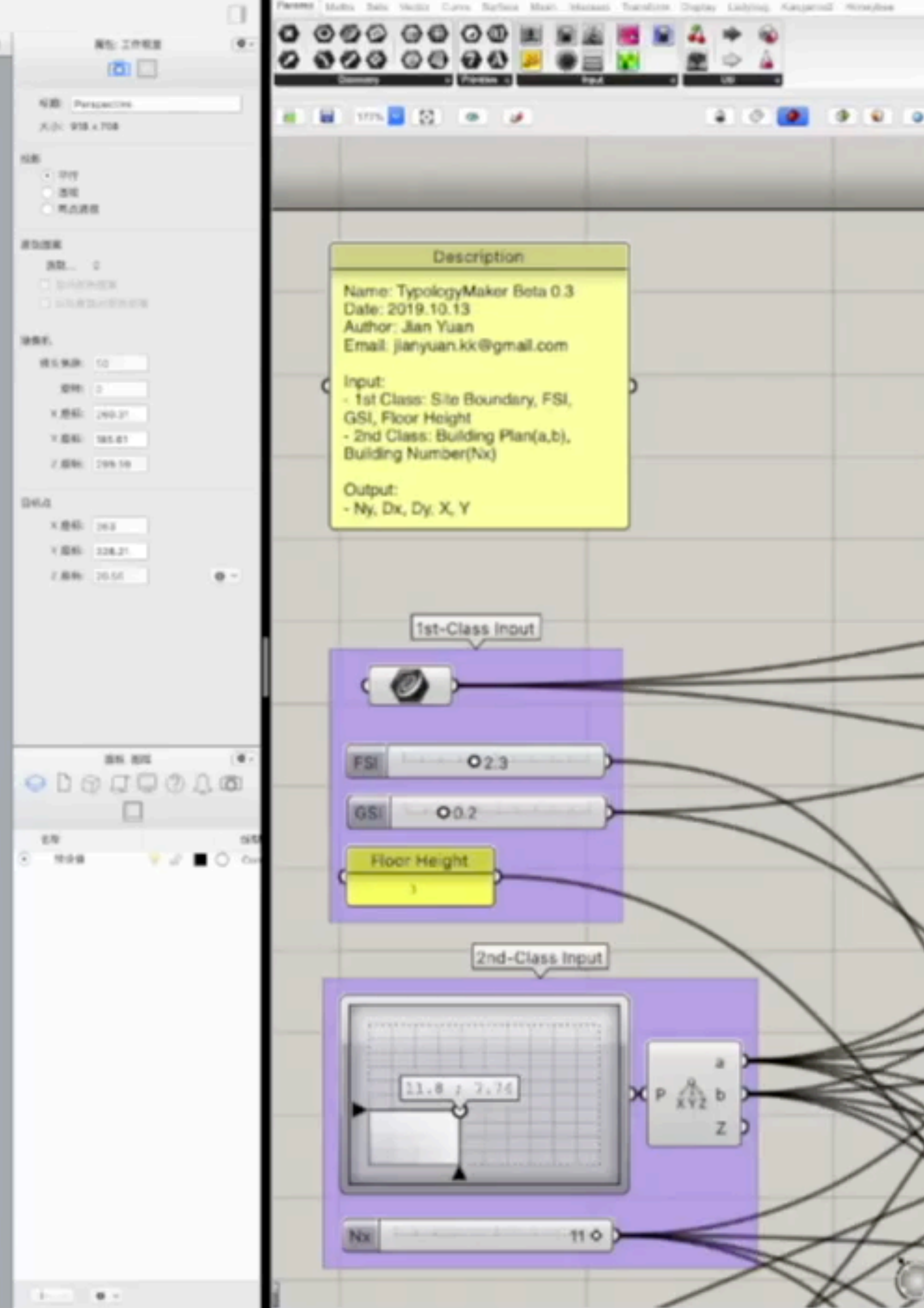
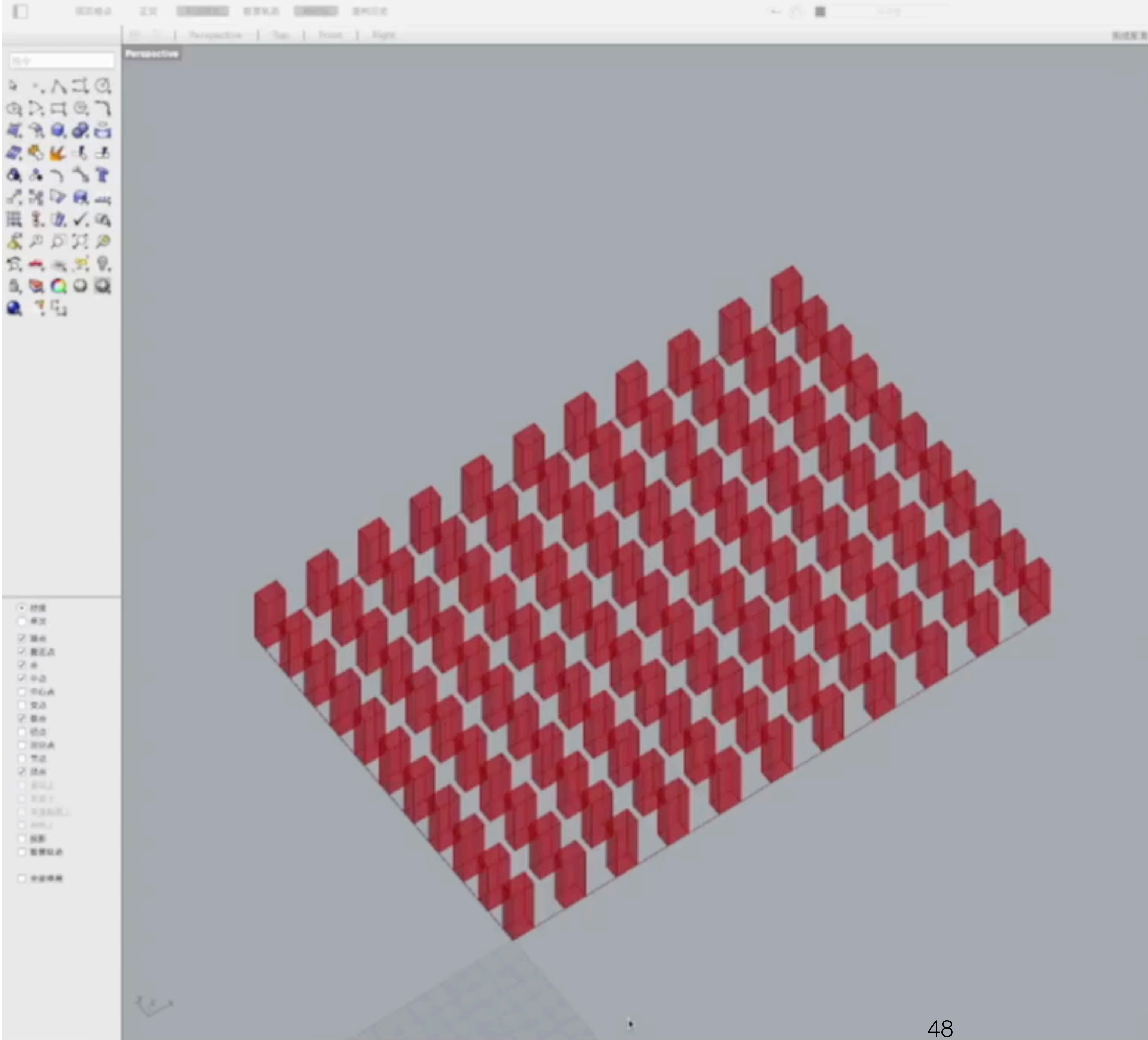
Row, FSI: 1.0, GSI: 0.3



Slab, FSI: 1.0, GSI: 0.3



Different Building Typologies in Same Density Index



Sustainability for Planet

Green Space in SH





source: 500px.com

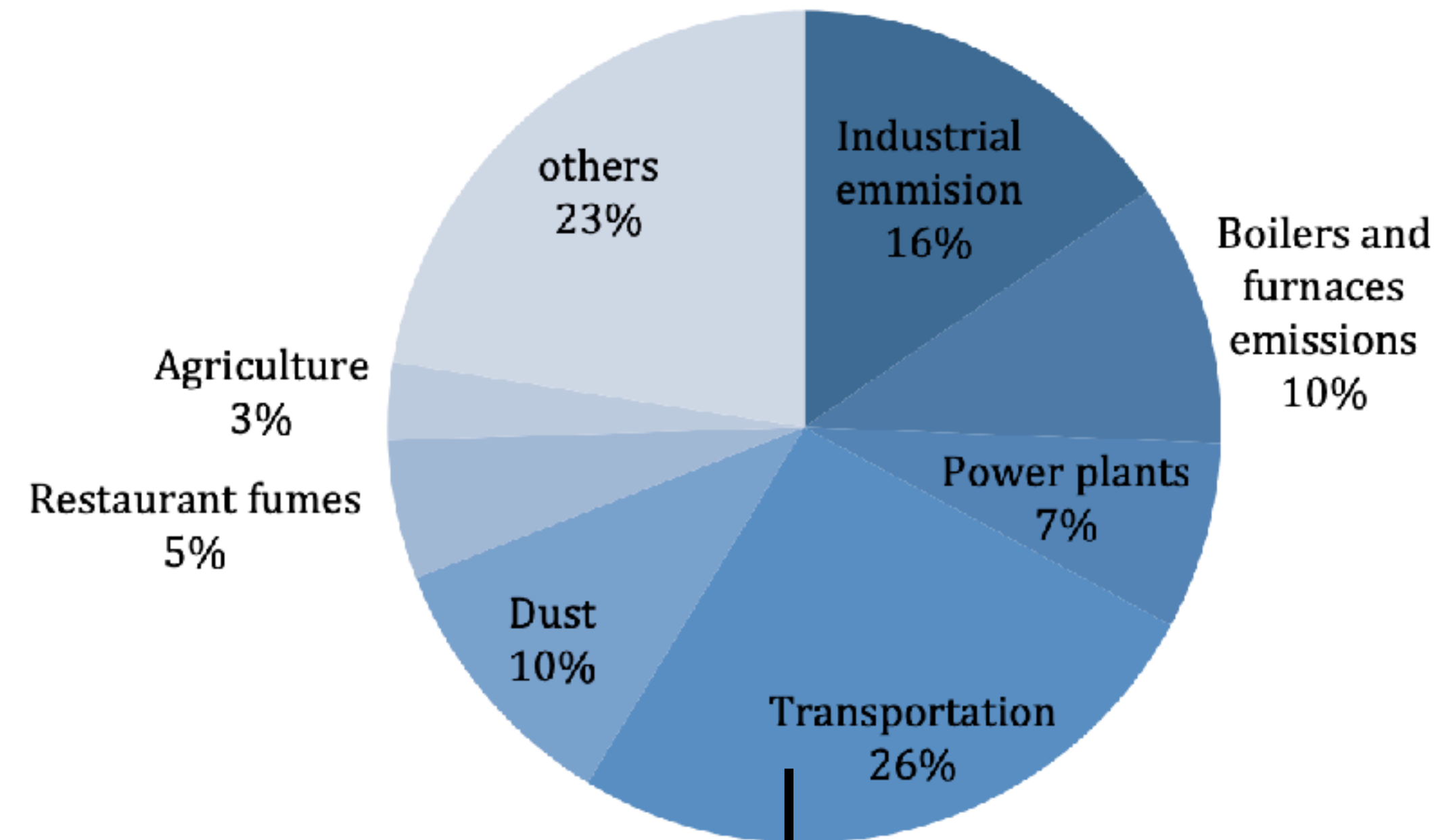


Figure 3 Major pollution sources in Shanghai 2013

Major air pollution source, fan yang, 2013, The research of long-term haze pollution in Shanghai, China

Transportation

Green Transportation



source: bbs.voc.com.cn

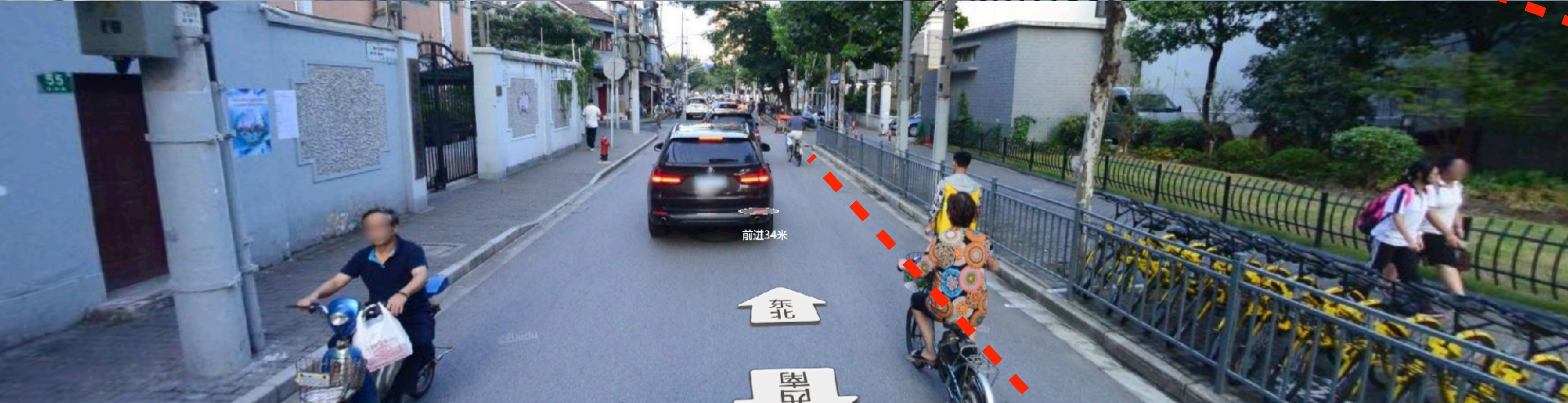
1980s



Shanghai 2015, source: dfic.cn

Now





Forbidden Cycleway Map



source: dicj.com



source: sohu.com



Design

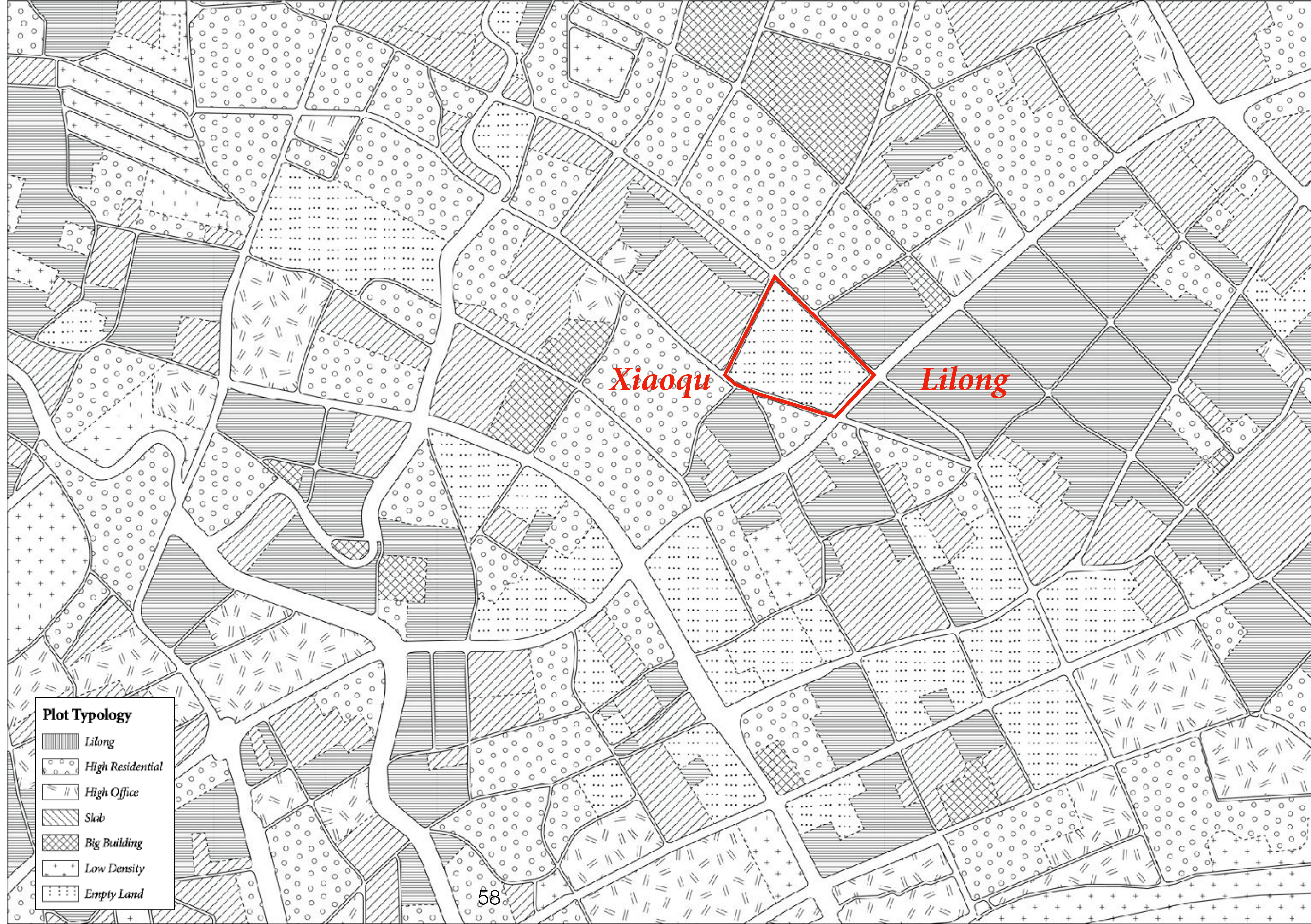
Site

200m
↑
N

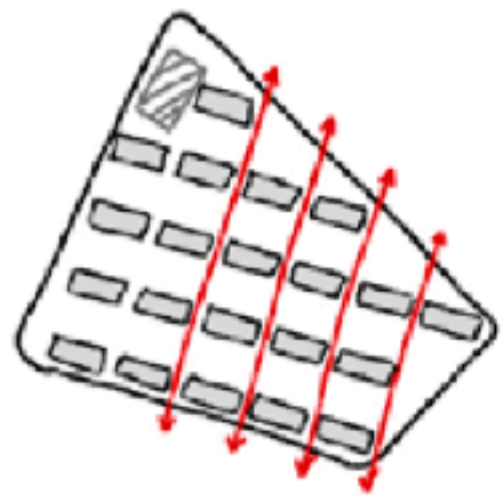


Site

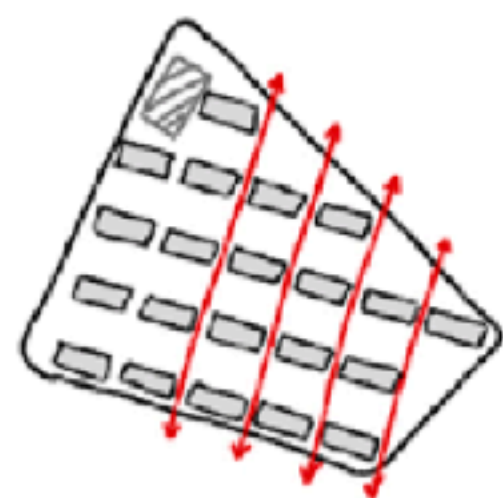
200m
↑
N



Design Test



Design Test



Criteria

Judgement

Accessibility

Step 2

Quite good grid streets, need to connect surrounding roads.

Human Scale

Step 3

Trangular space near streets can be nosiy.

Mix

Step 6

Poor function mix, can mix function slong streets, like public service or commercial

FSI

Step 4

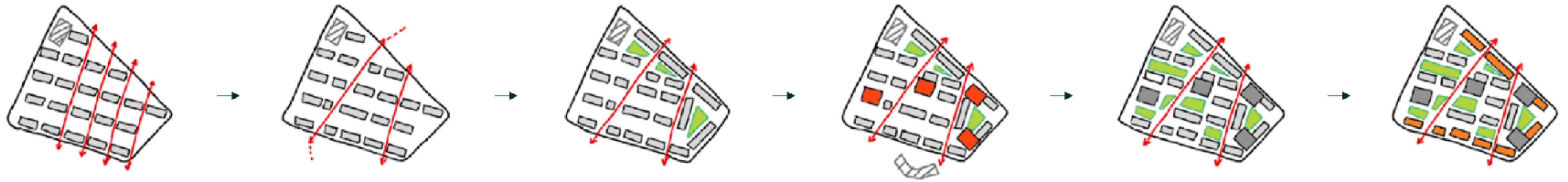
Low FSI level, need to add tow-ers to increase total area. (GSI is already quite high)

+ *Others*

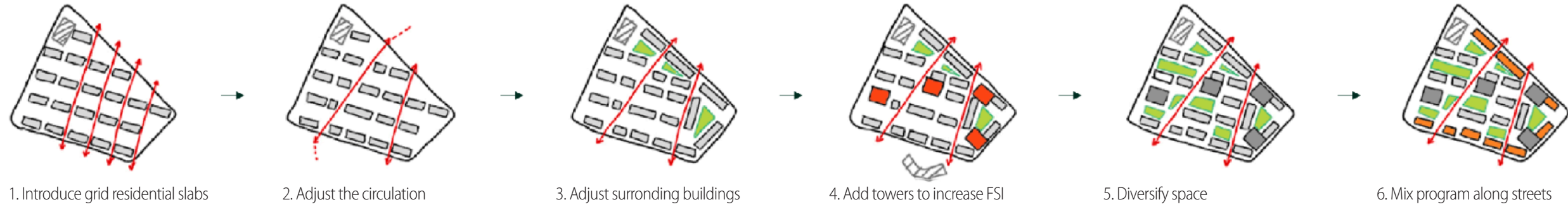
Step 5

- Space is too homogenous
- Sunlight condition is great

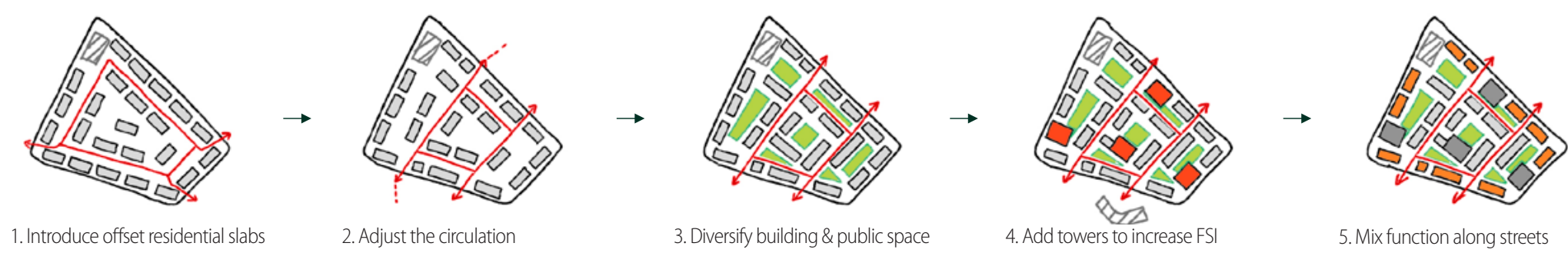
Design Test



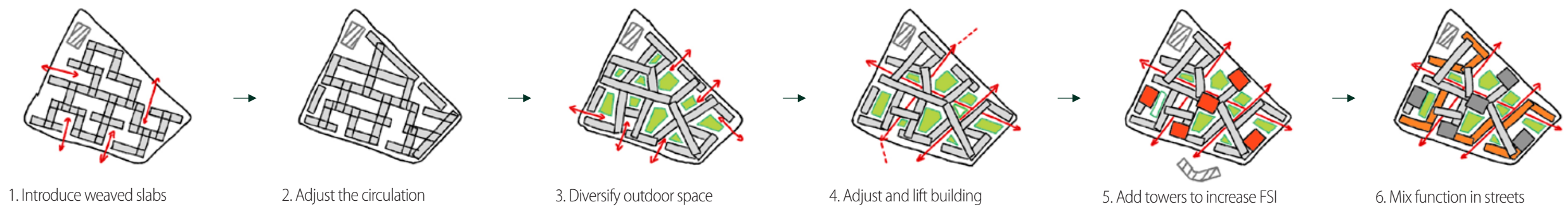
Grid Slab



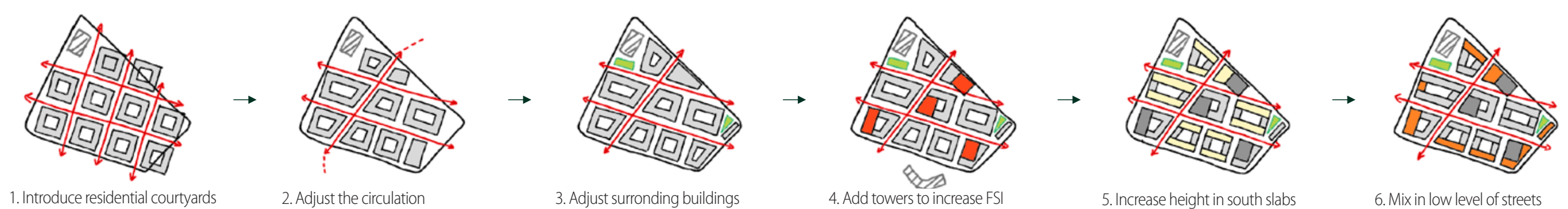
Offset Slab



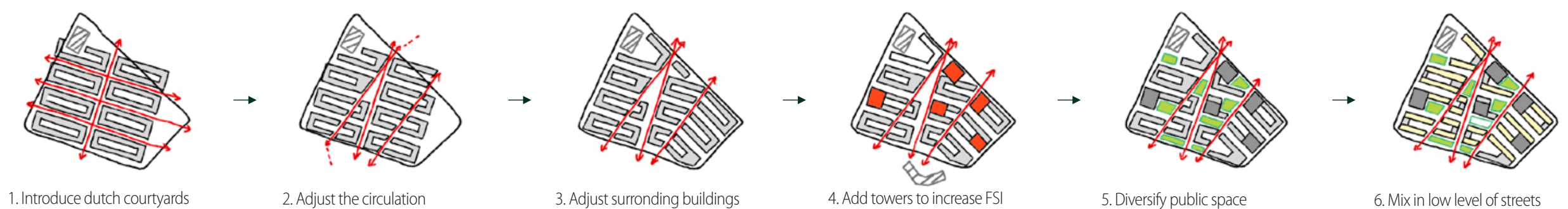
Weaved Slab



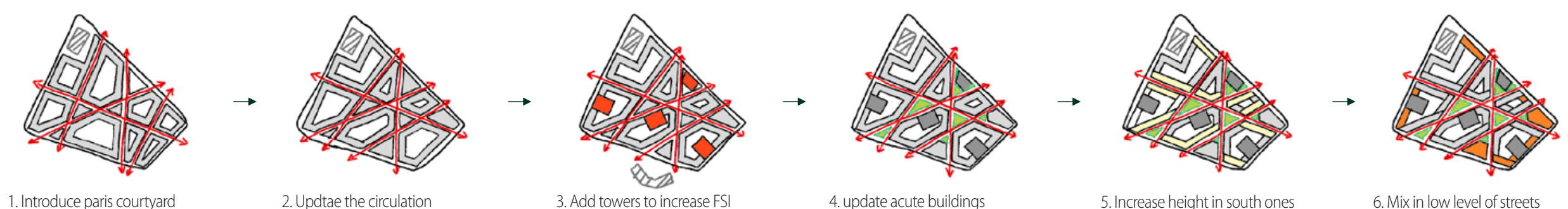
Courtyard



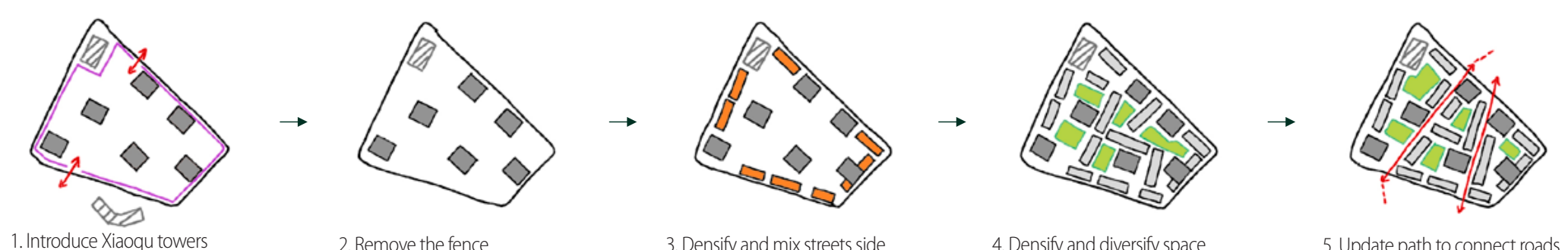
Dutch Courtyard

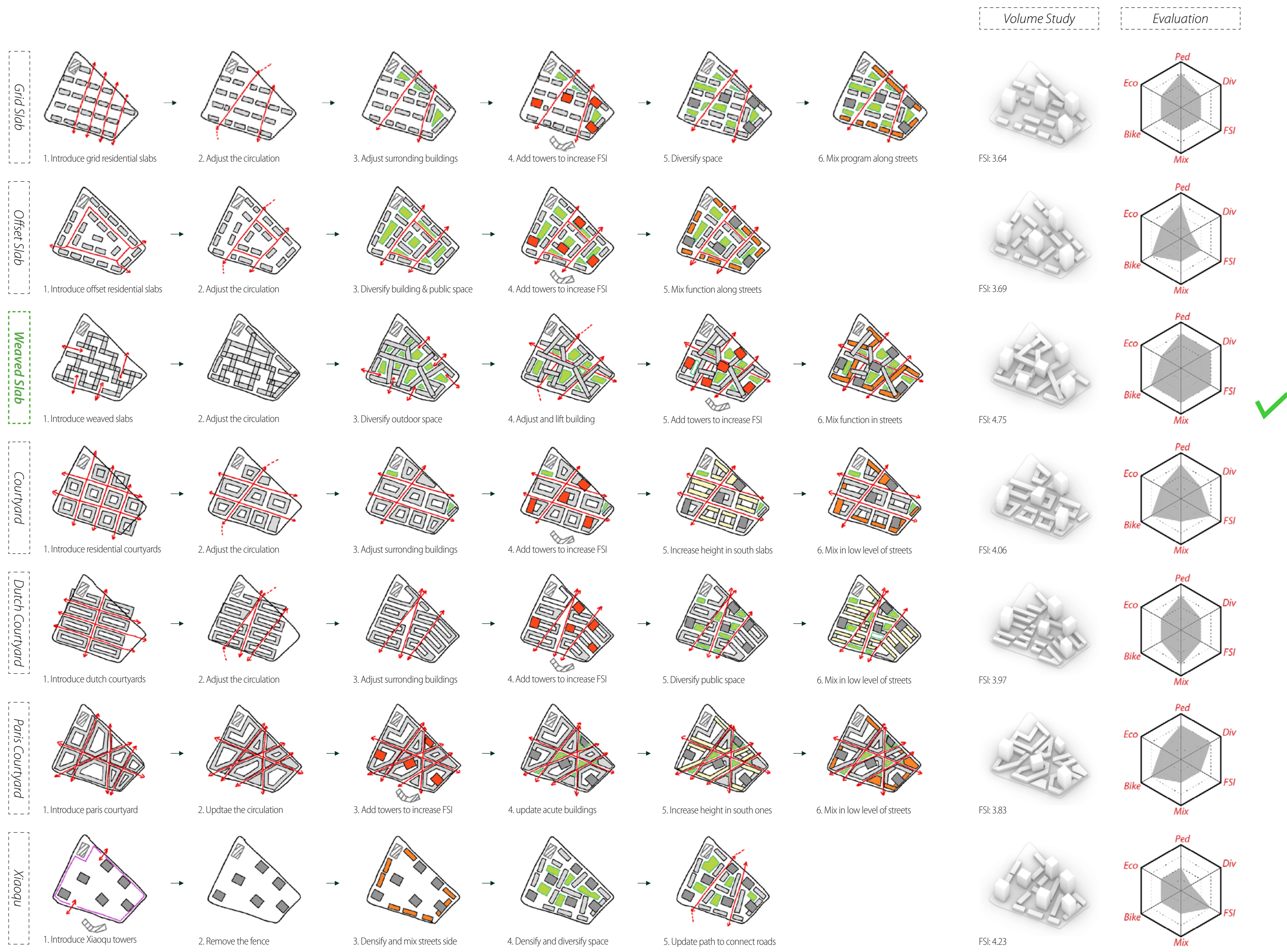


Paris Courtyard



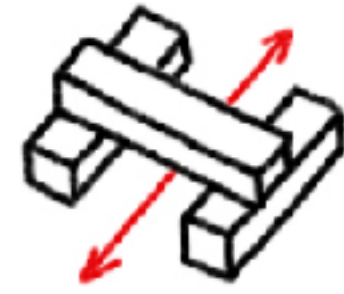
Xiaoqu





Design Action *for Weaved Slabs*

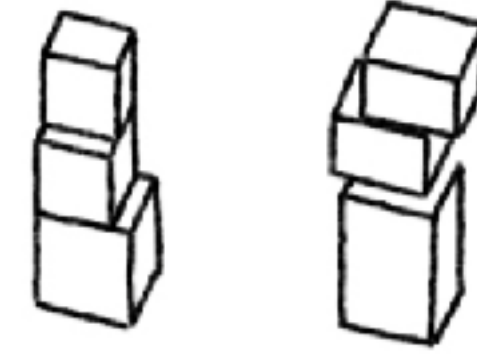
Lift Building



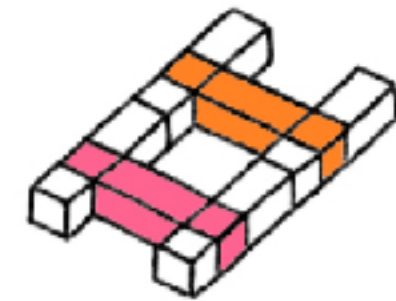
Secondary Level Public Space



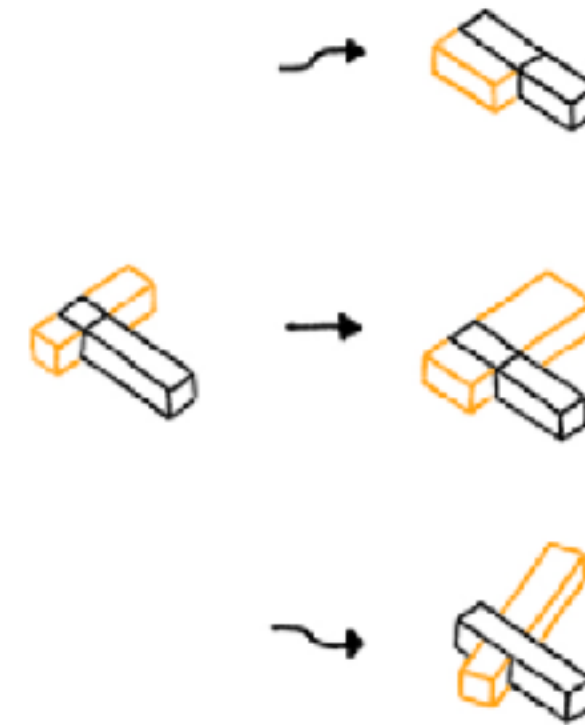
Stepped Towers



Mix in Weaved Slabs

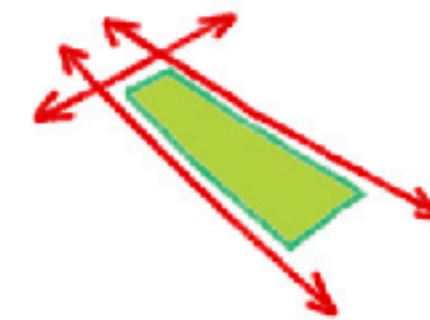


Transform Slabs

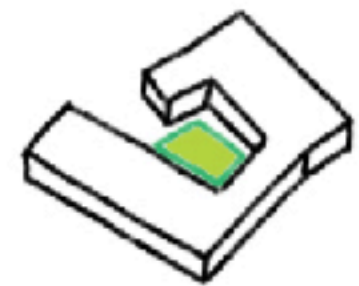


Various Green

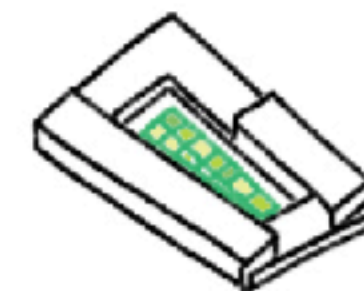
Public Bio Forest



Open Greenland



Collective Bio Garden



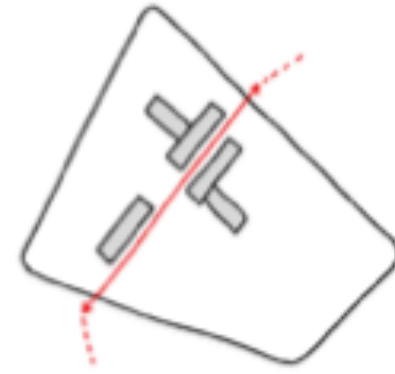
“Private” Sky Garden



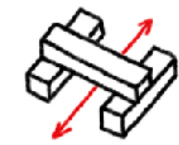
Design Action for Weaved Slabs

Bike-friendly

Building along Main Path



Lift Building



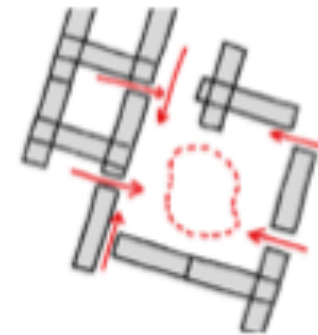
Open Door



Add Sky Path



Centralised Accessible Space

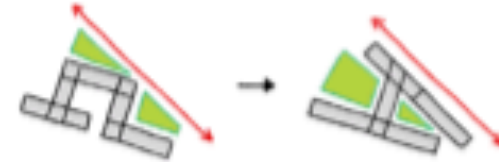


Series Courtyards



Pedestrian-friendly

Intimate Street



Postive Courtyard Garden



Secondary Level Public Space



Highrise Collective Space



Step Back Slabs

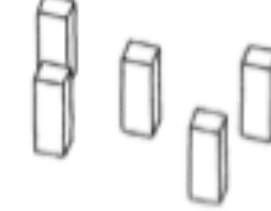


Bike/Walk First Path

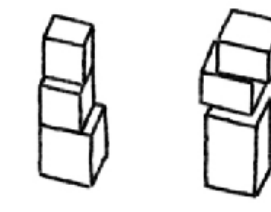


High FSI

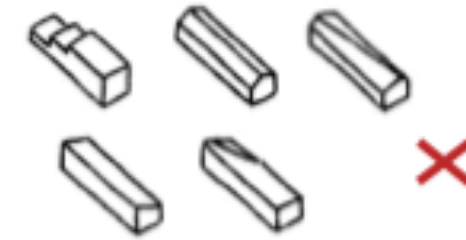
Add Towers



Stepped Towers



Sunlight Friendly Roofs

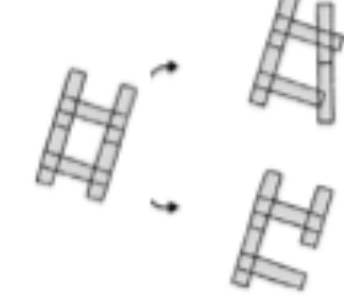


Non-Residential Densification

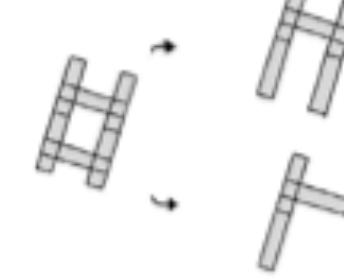


Diversity

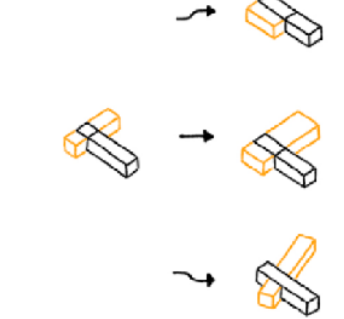
Rotate & Split Courtyard



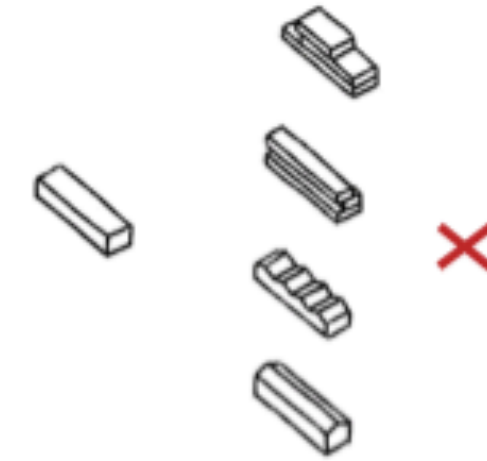
Open Courtyard



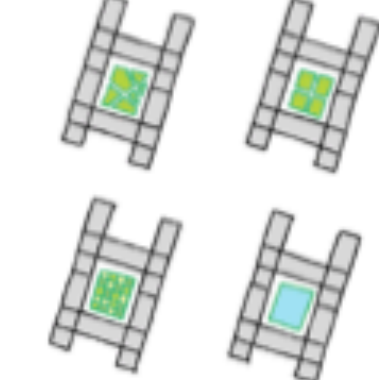
Transform Slabs



Diversify Slab Roofs

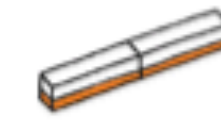


Diversify Open Space

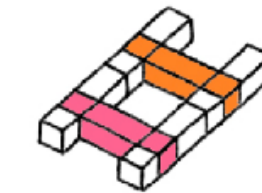


Mix-use

Mix Low Level along Streets



Mix in Weaved Slabs

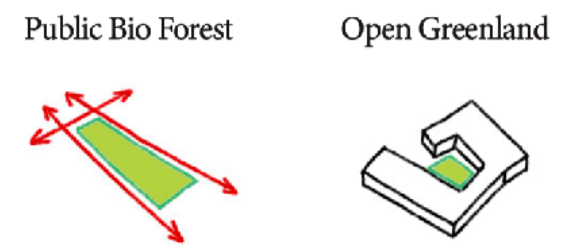


Flexible Program Space

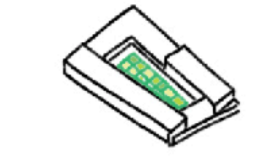


Ecology

Various Green



Public Bio Forest



Open Greenland

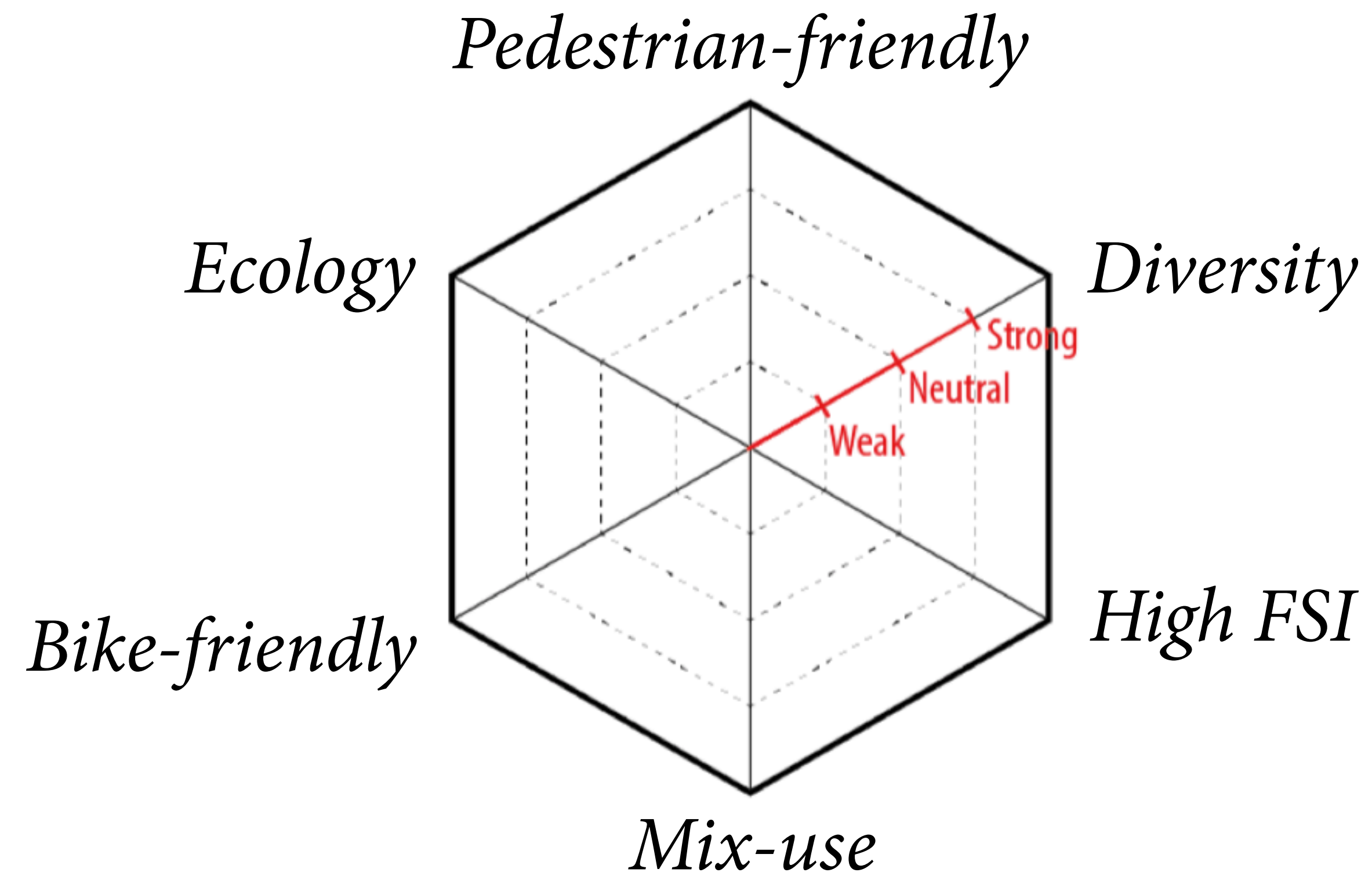


“Private” Sky Garden

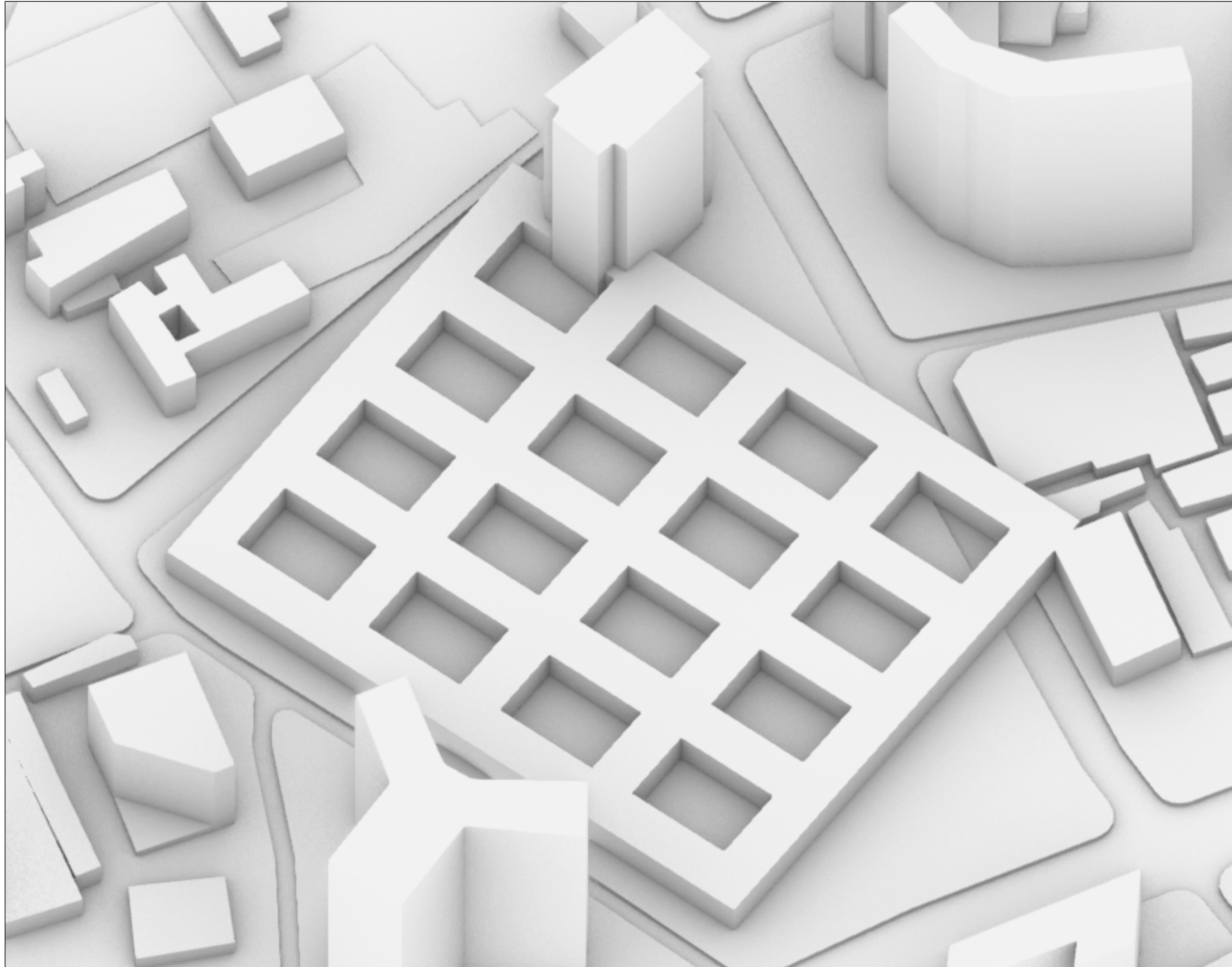
Solar Panel + E Bike Charger



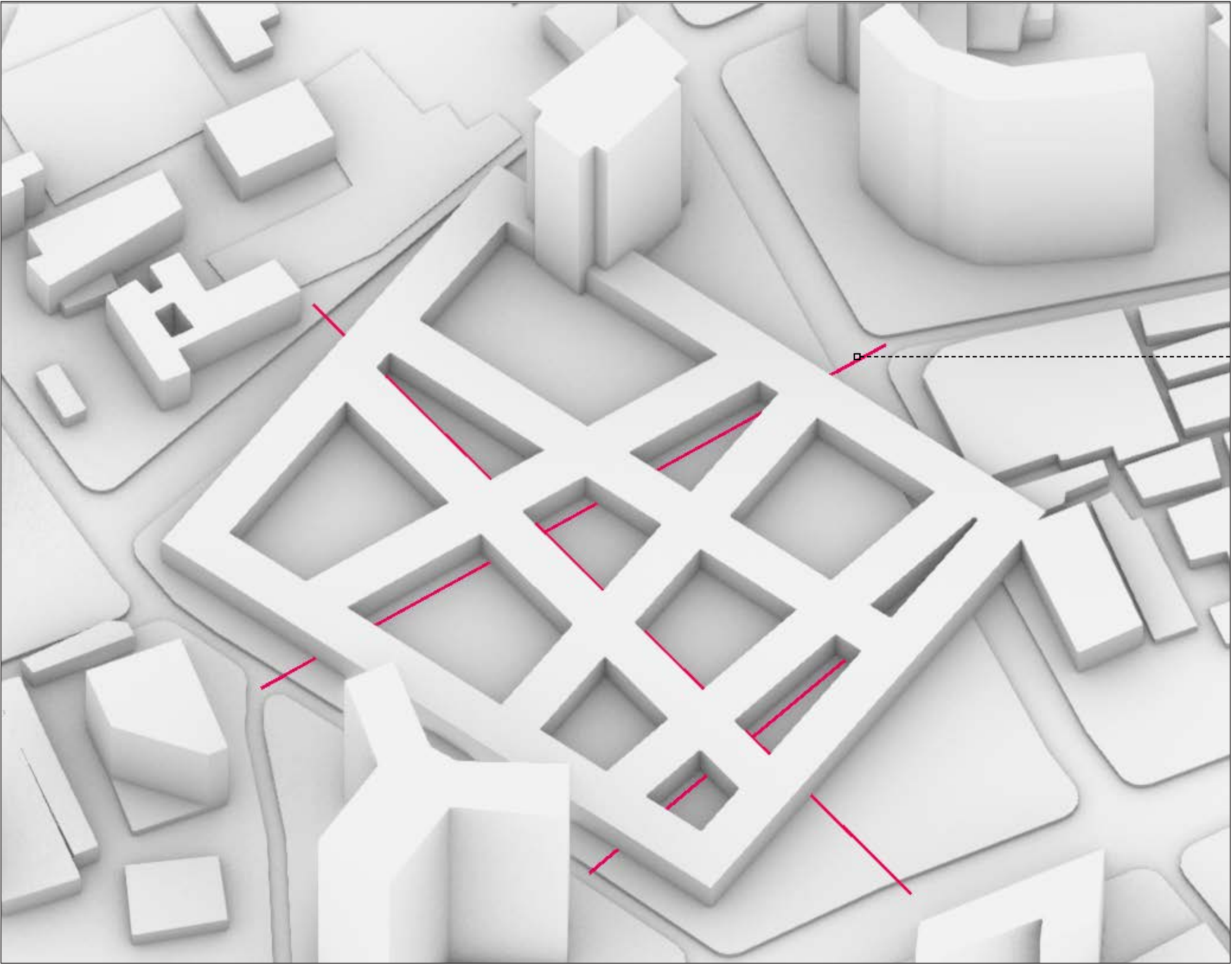
Evaluation



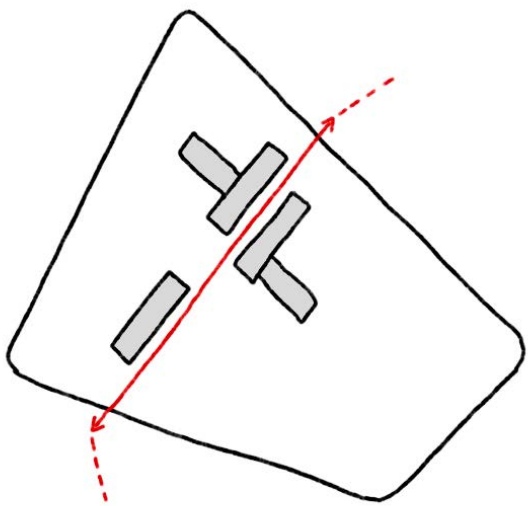
1 Weaved Slabs



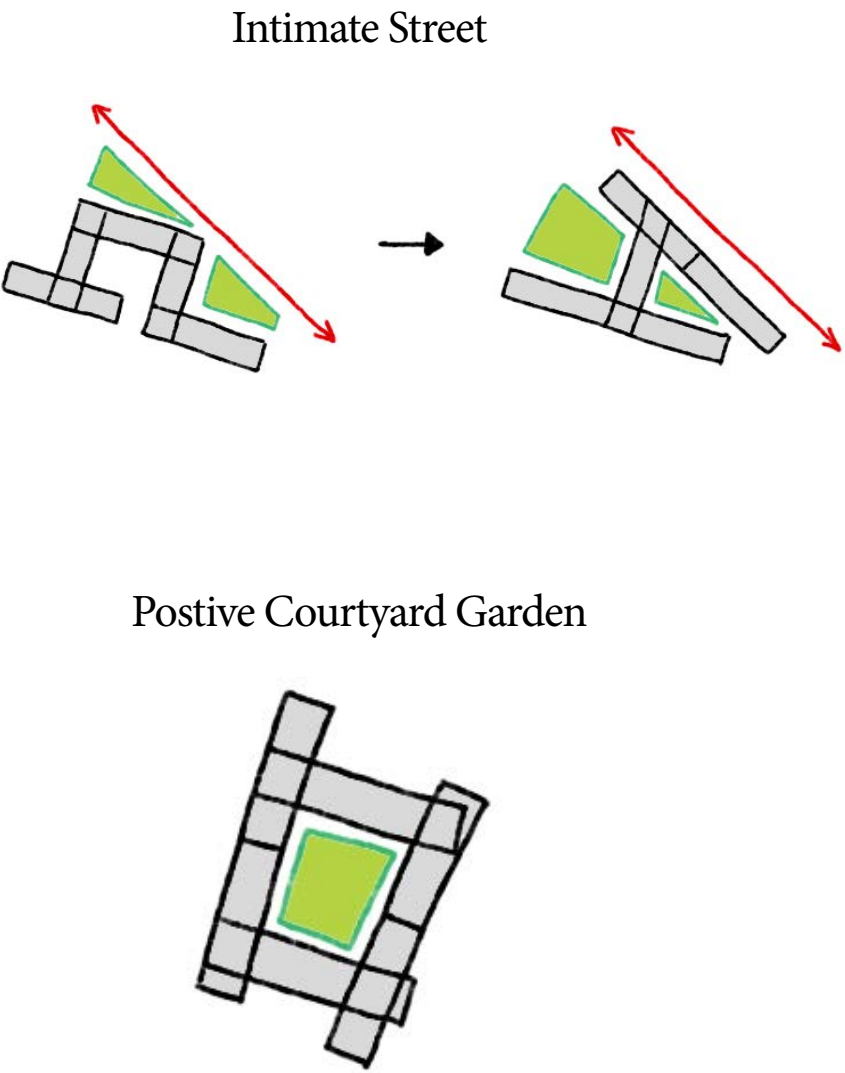
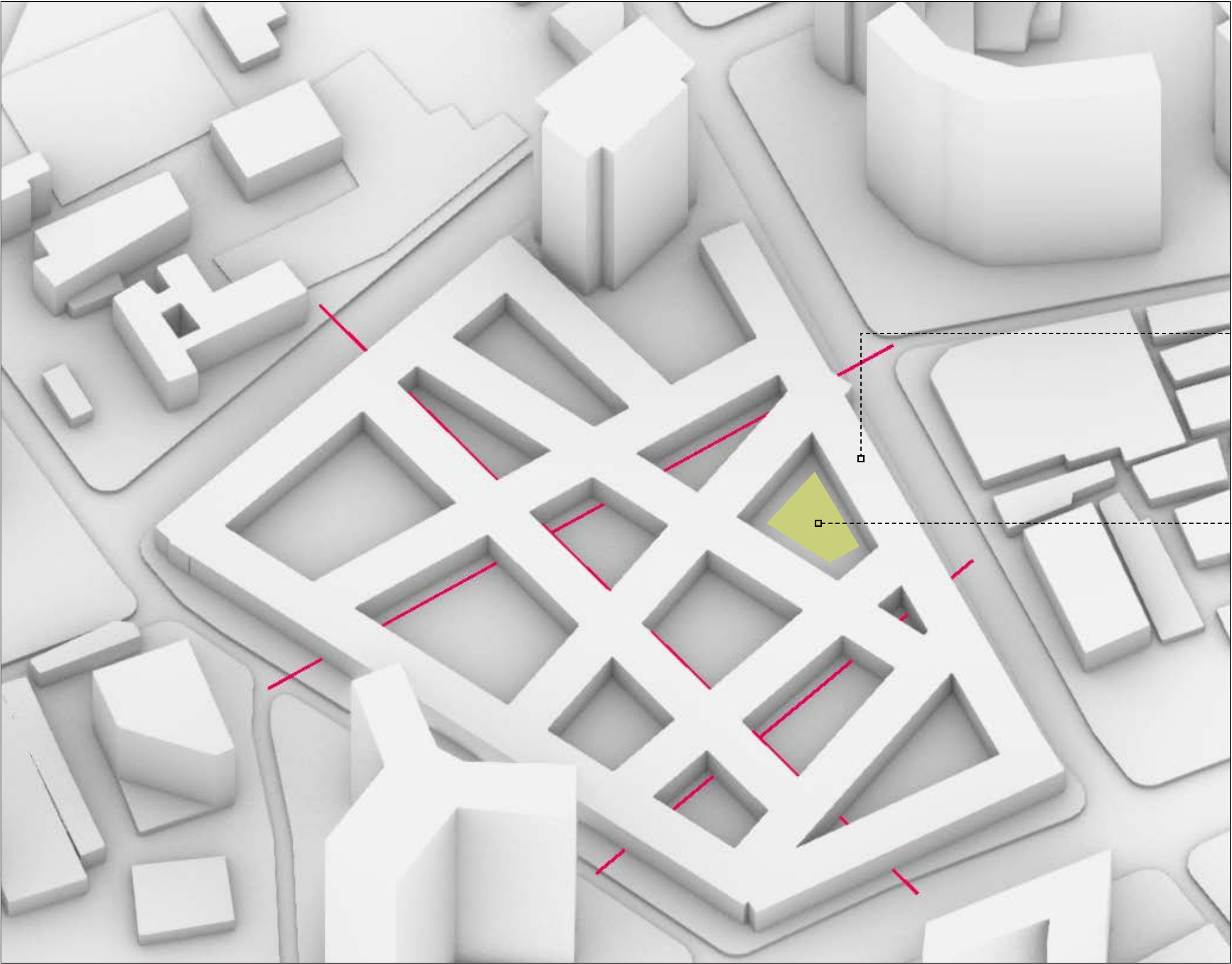
2 Connect City Roads



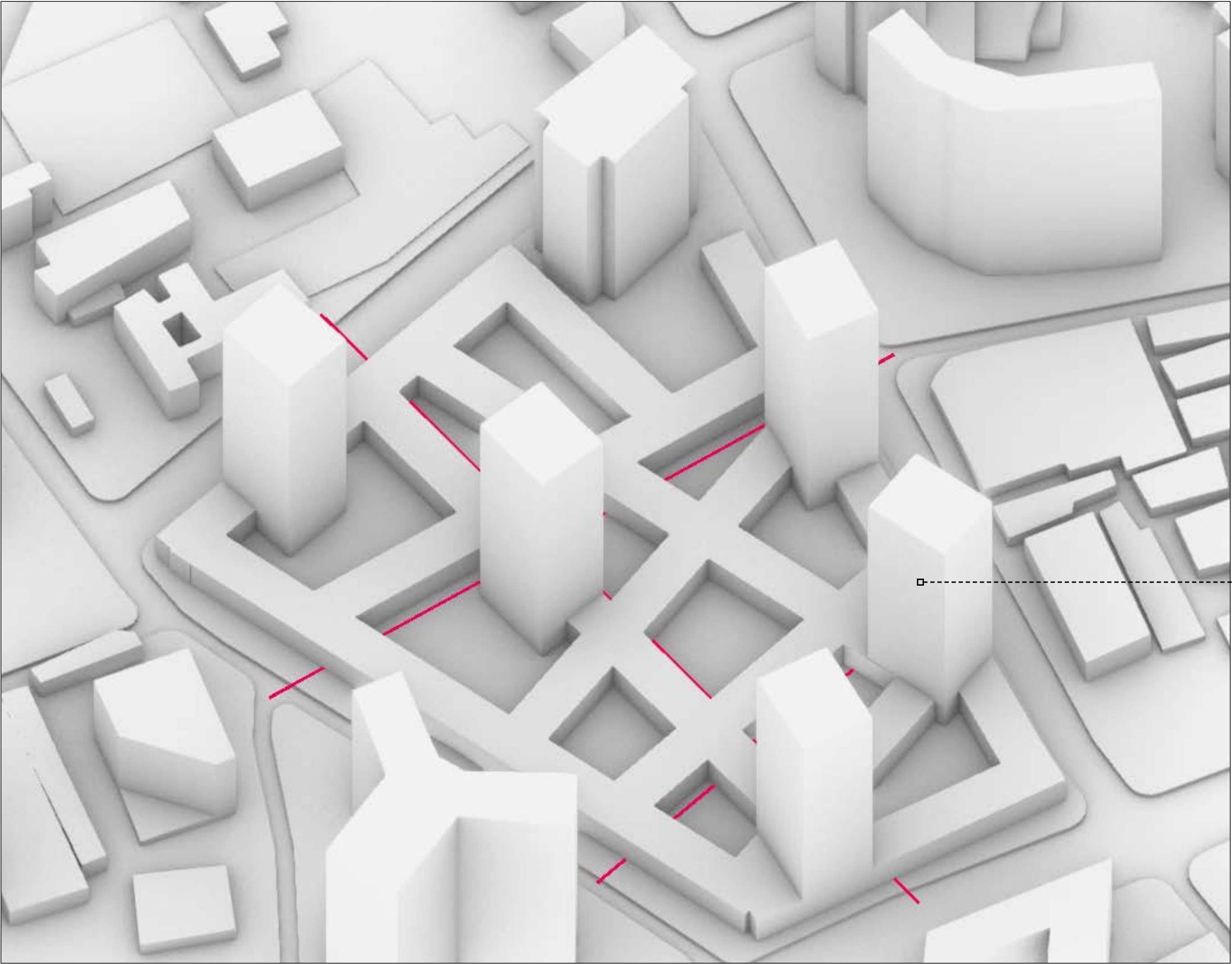
Building along Main Path



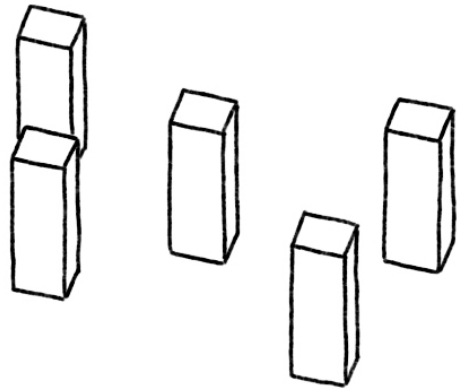
3 Adapt Site



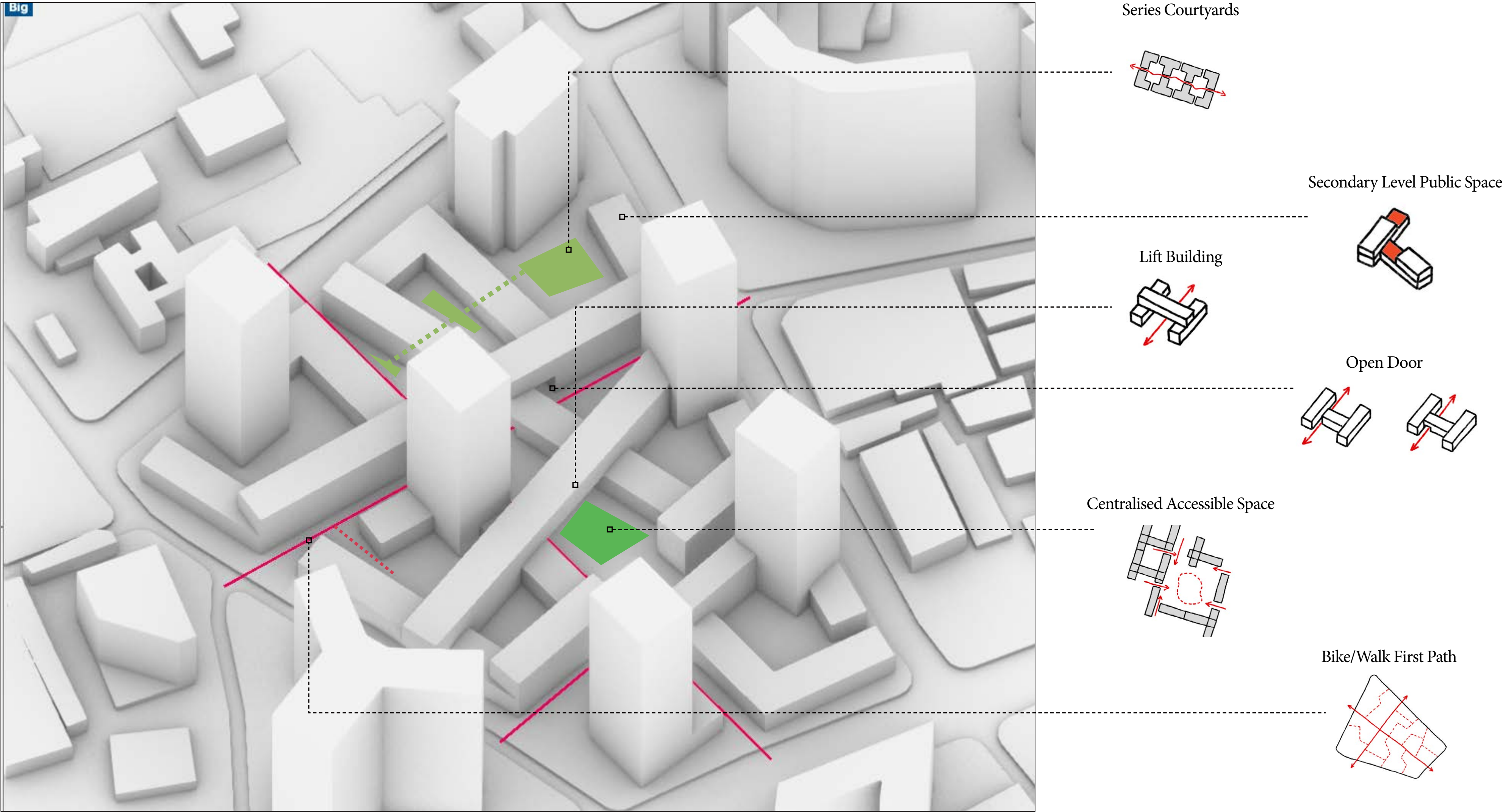
4 Add Towers



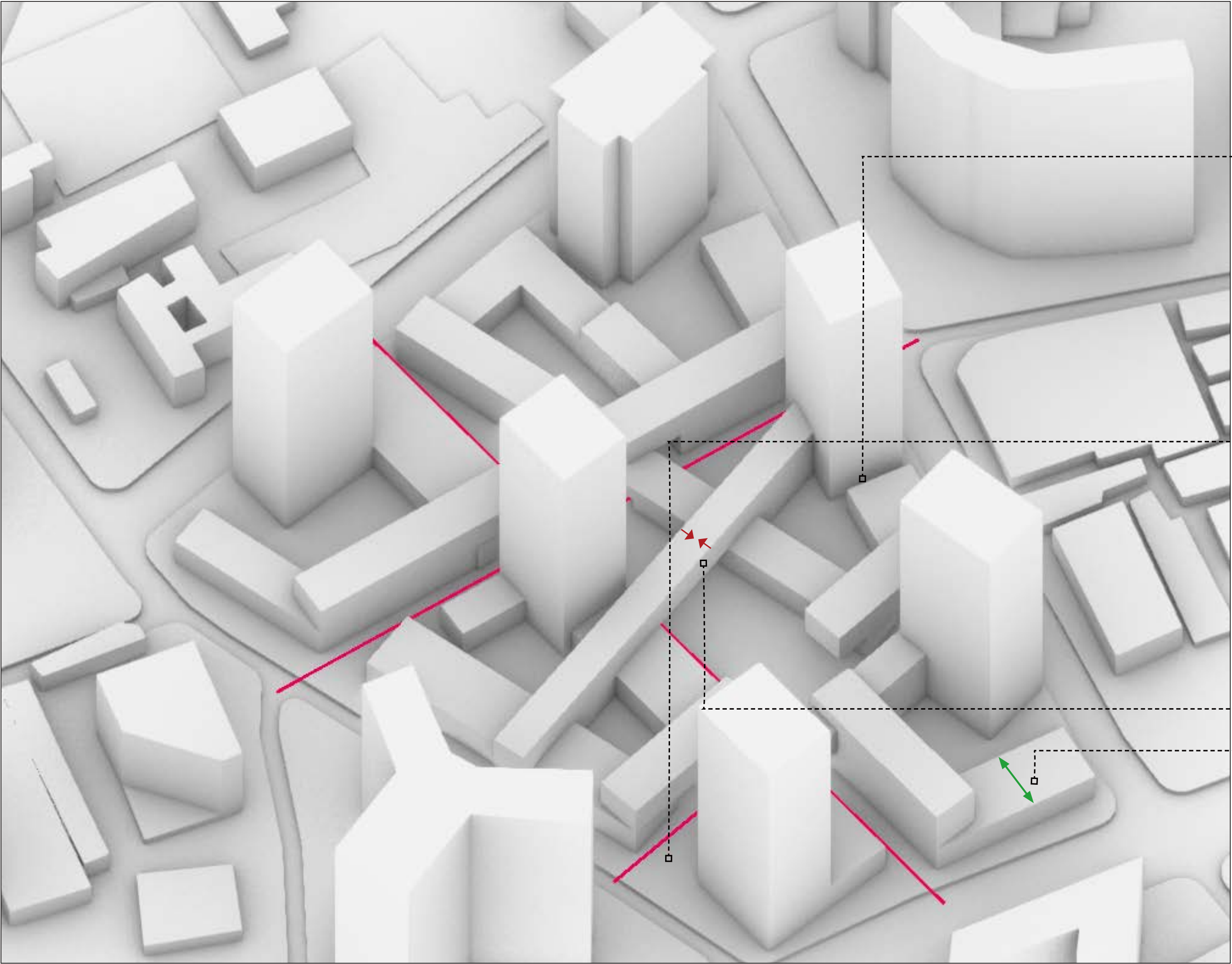
Add Towers



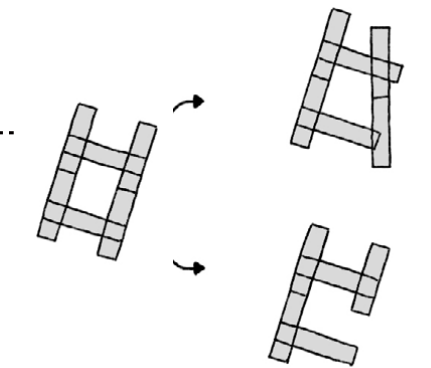
5 Spilt, Lift Slab



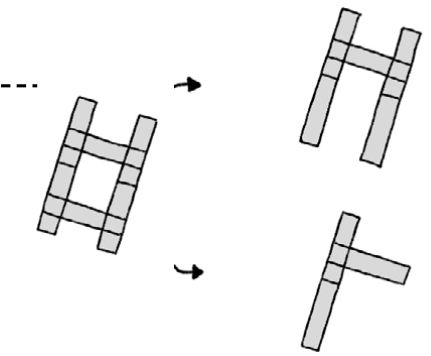
6 Transform Slab



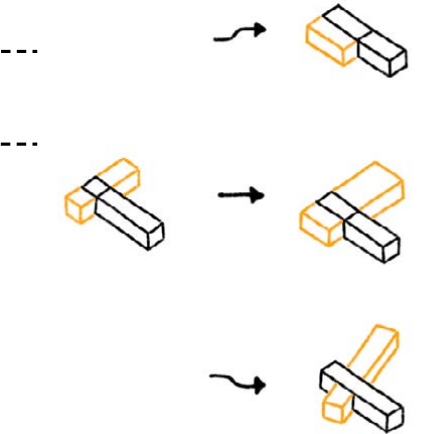
Rotate & Split Courtyard



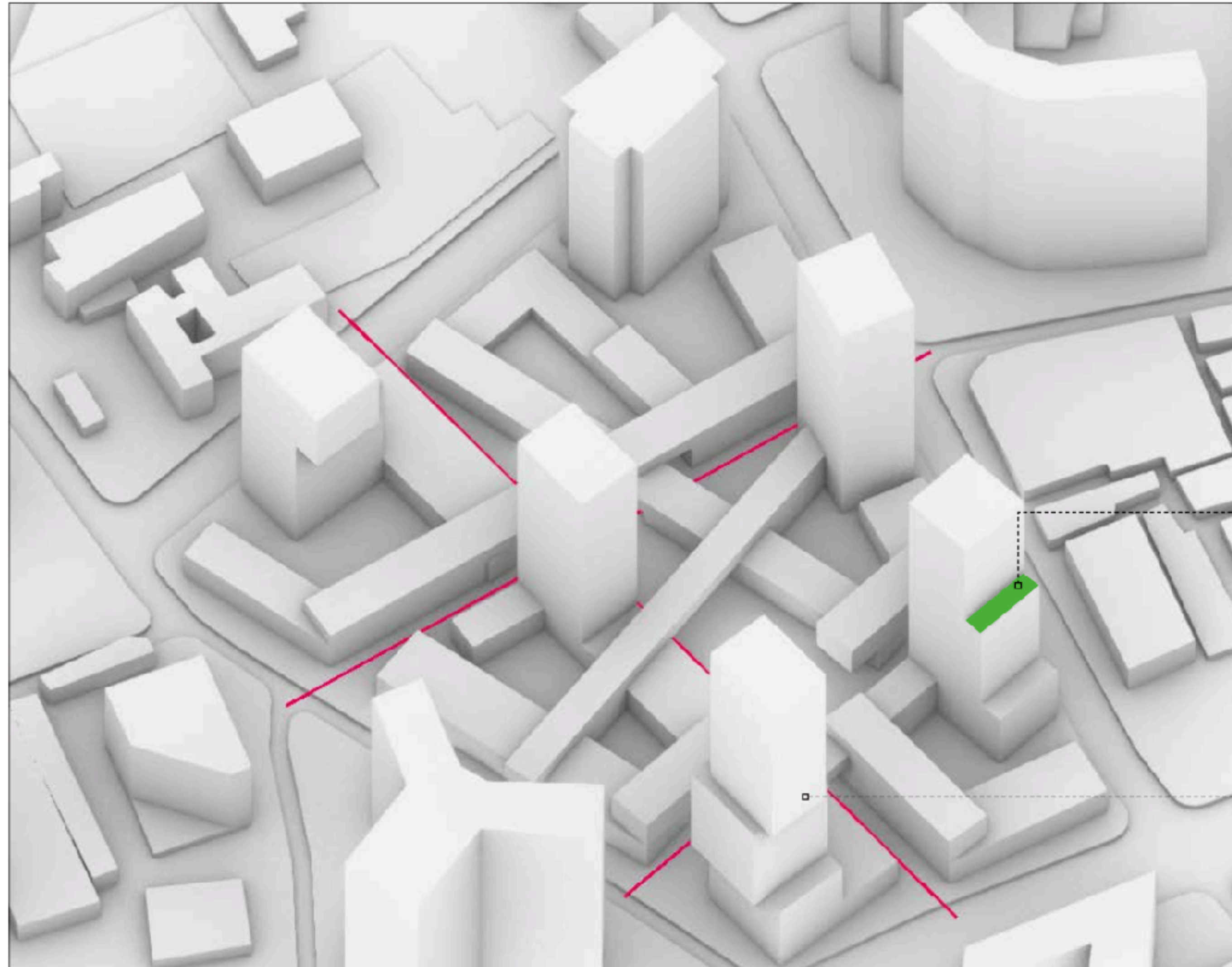
Open Courtyard



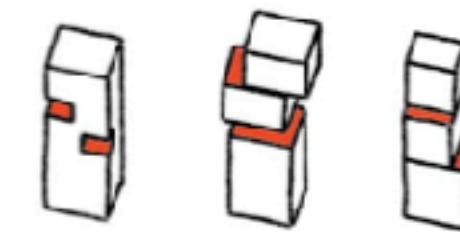
Transform Slabs



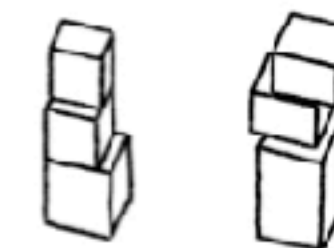
7 Transform Tower



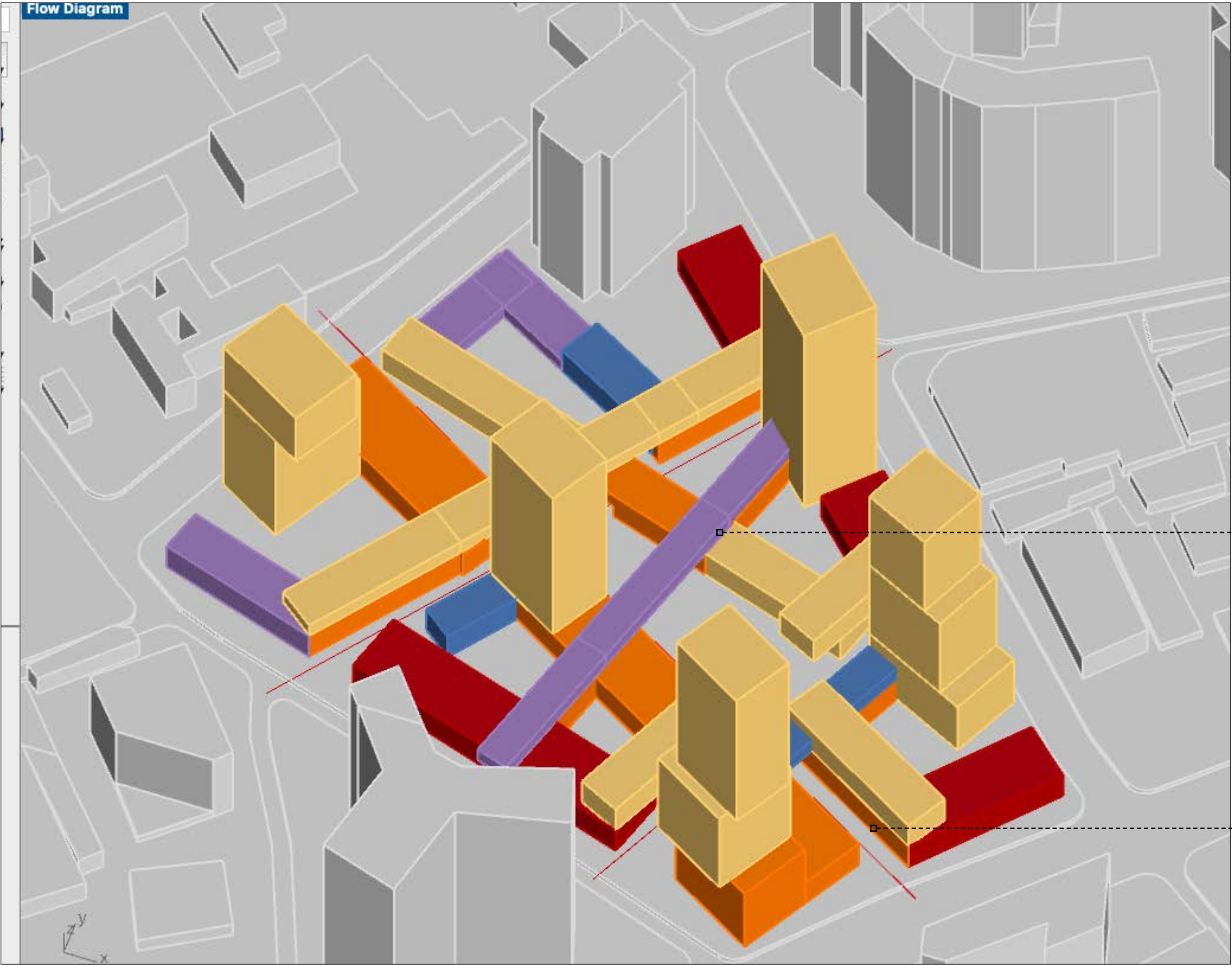
Highrise Collective Space



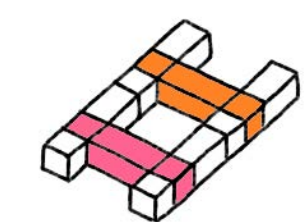
Stepped Towers



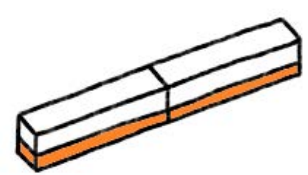
8 Mix Program



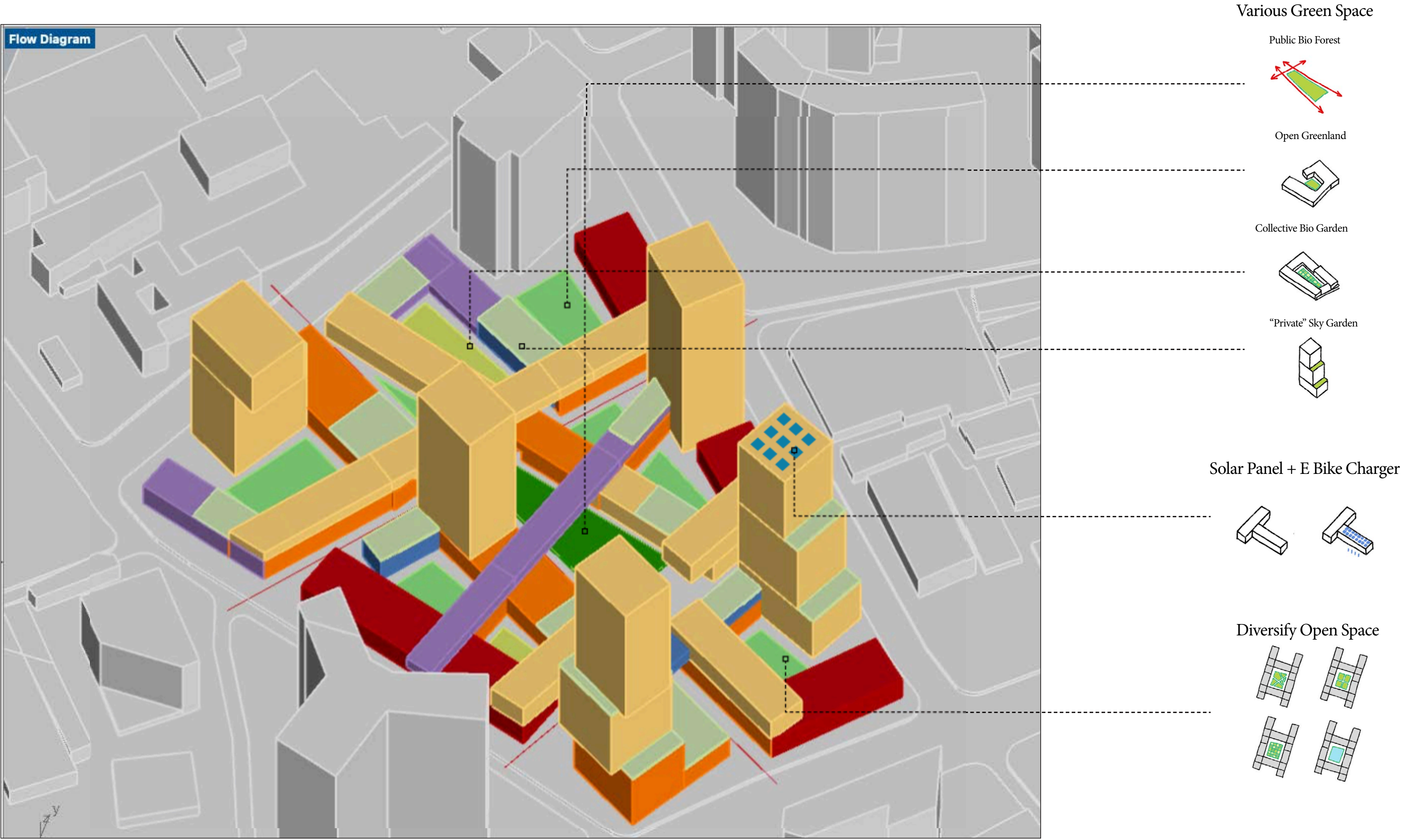
Mix in Weaved Slabs



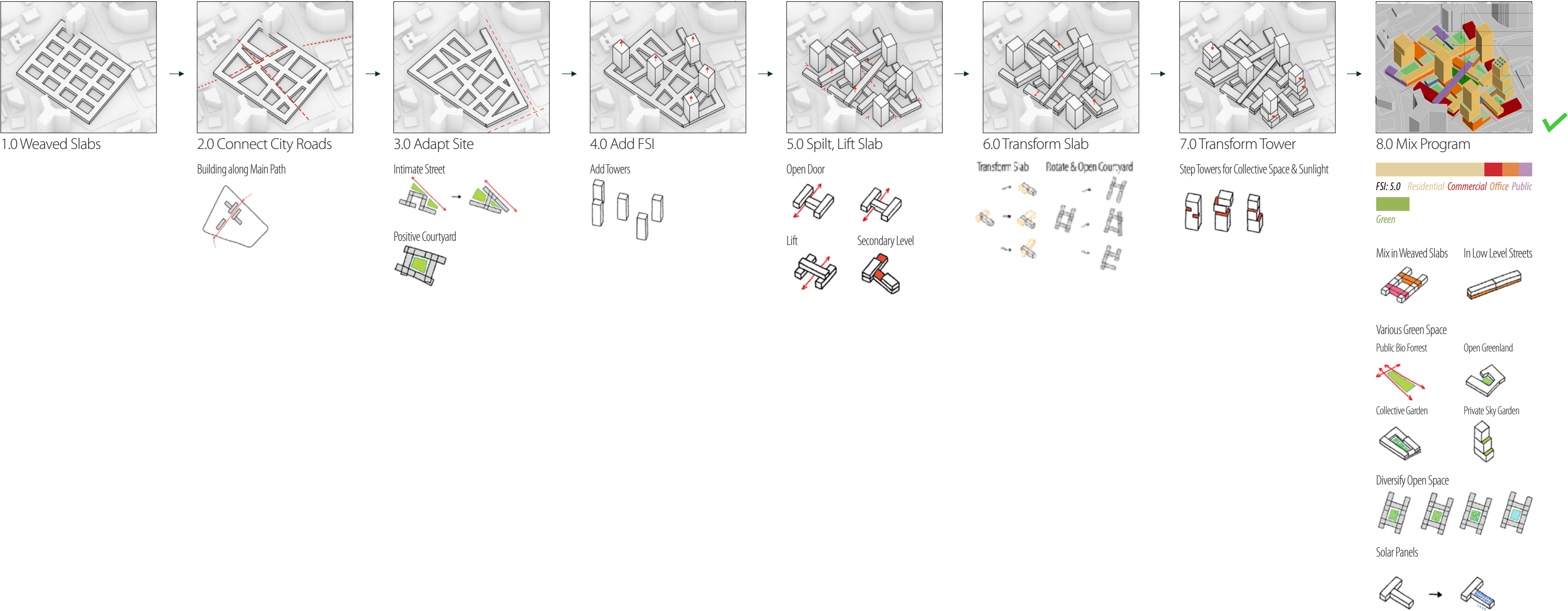
Mix Low Level along Streets



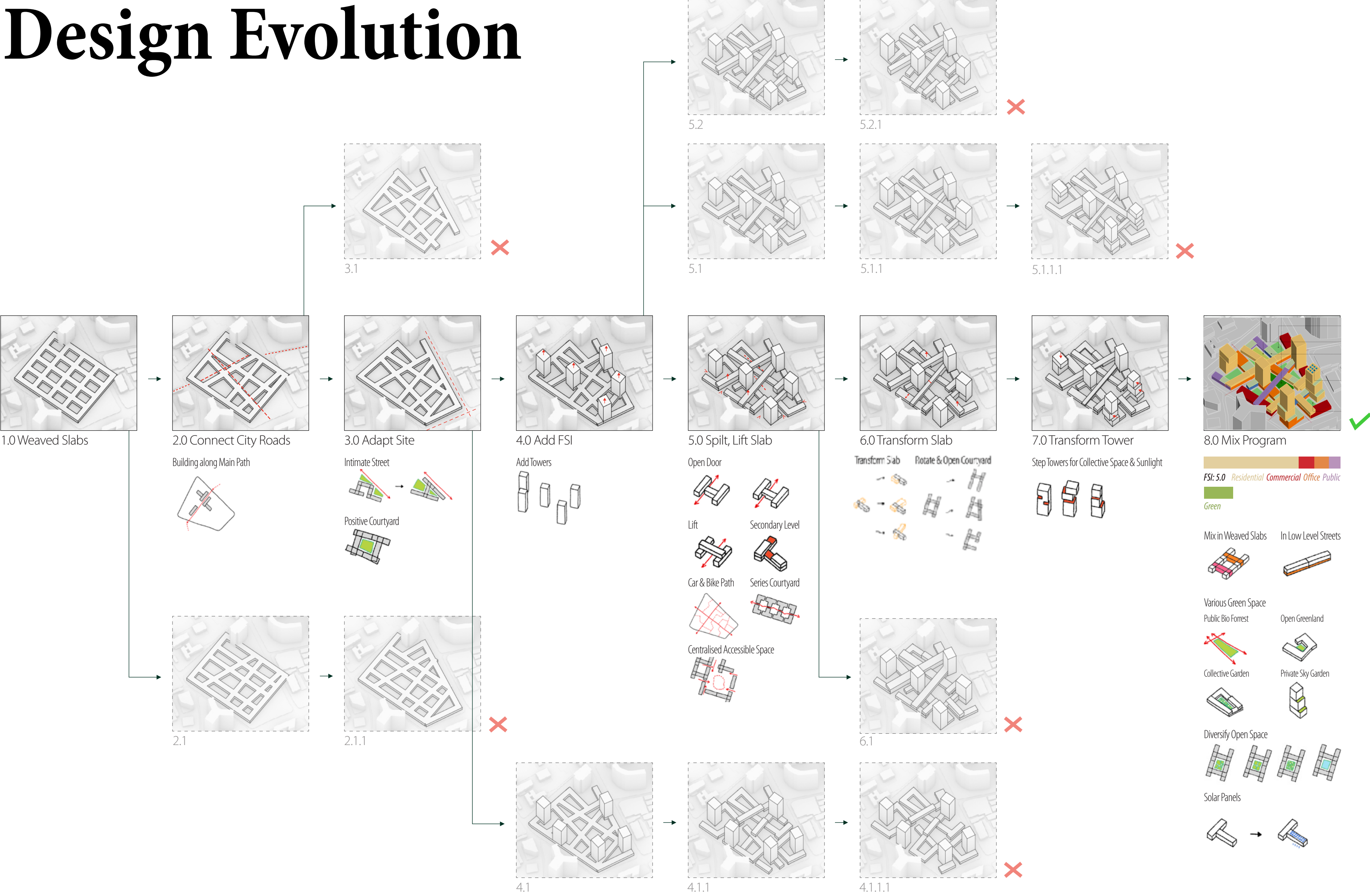
9 Various Green



Design Evolution

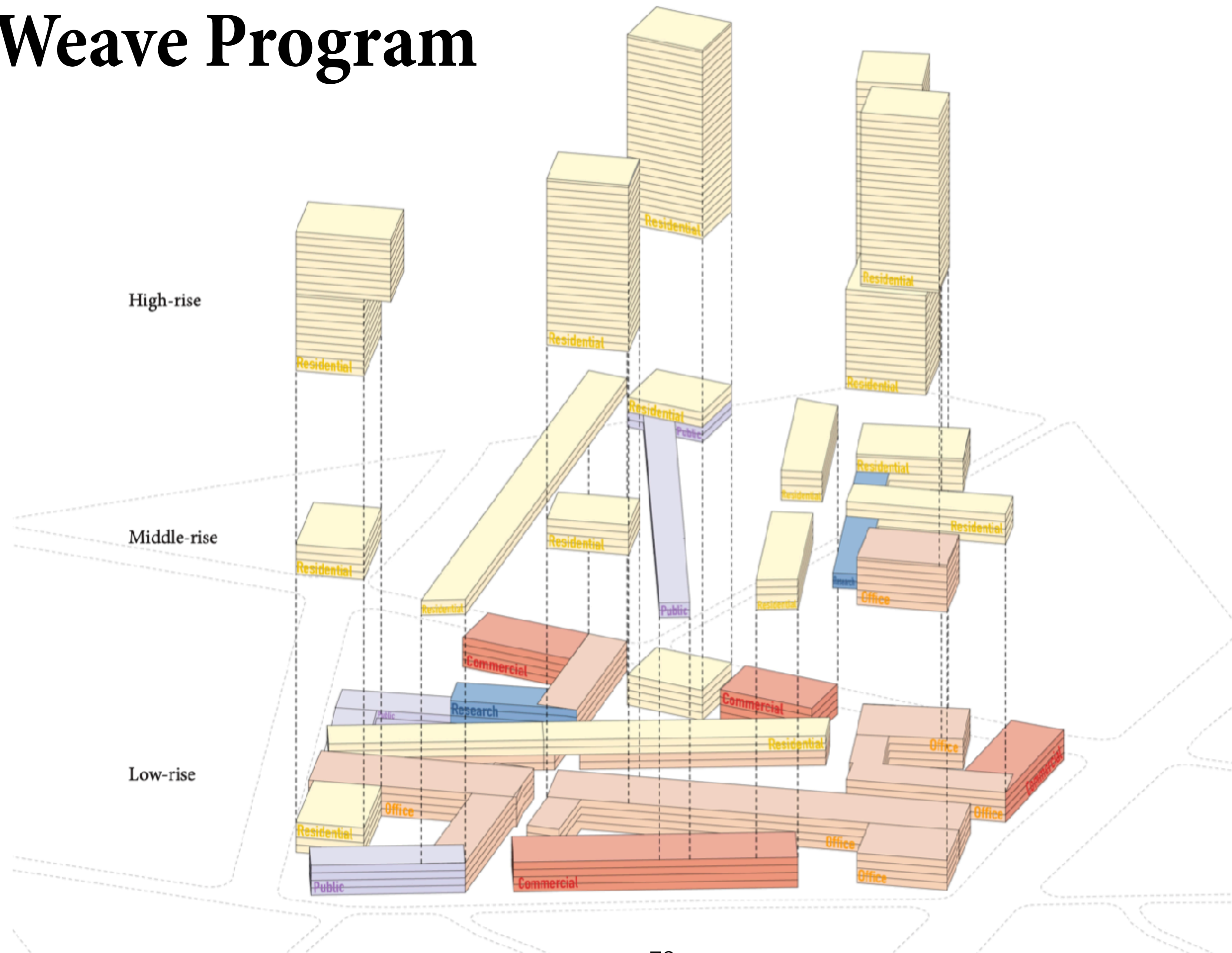


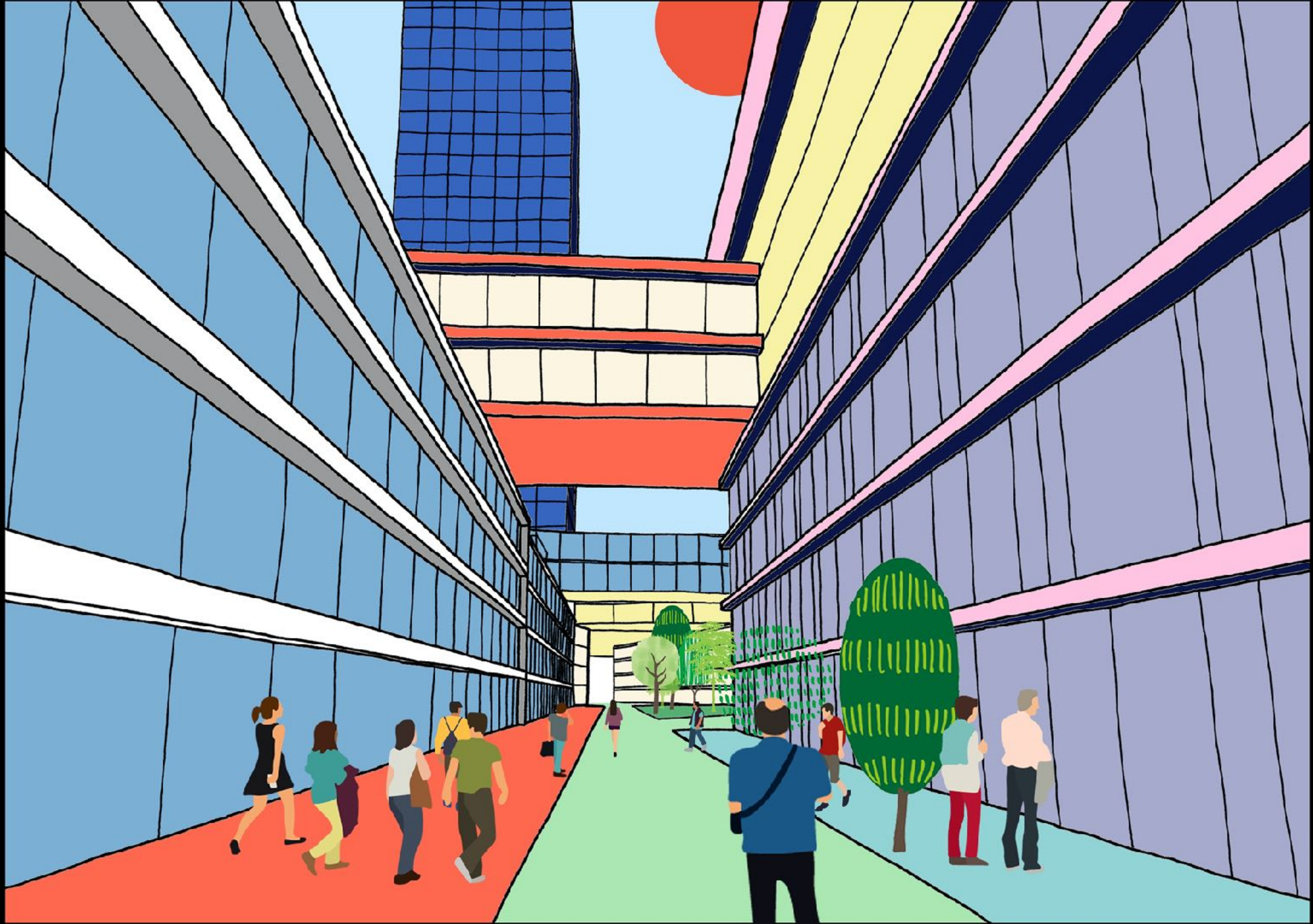
Design Evolution

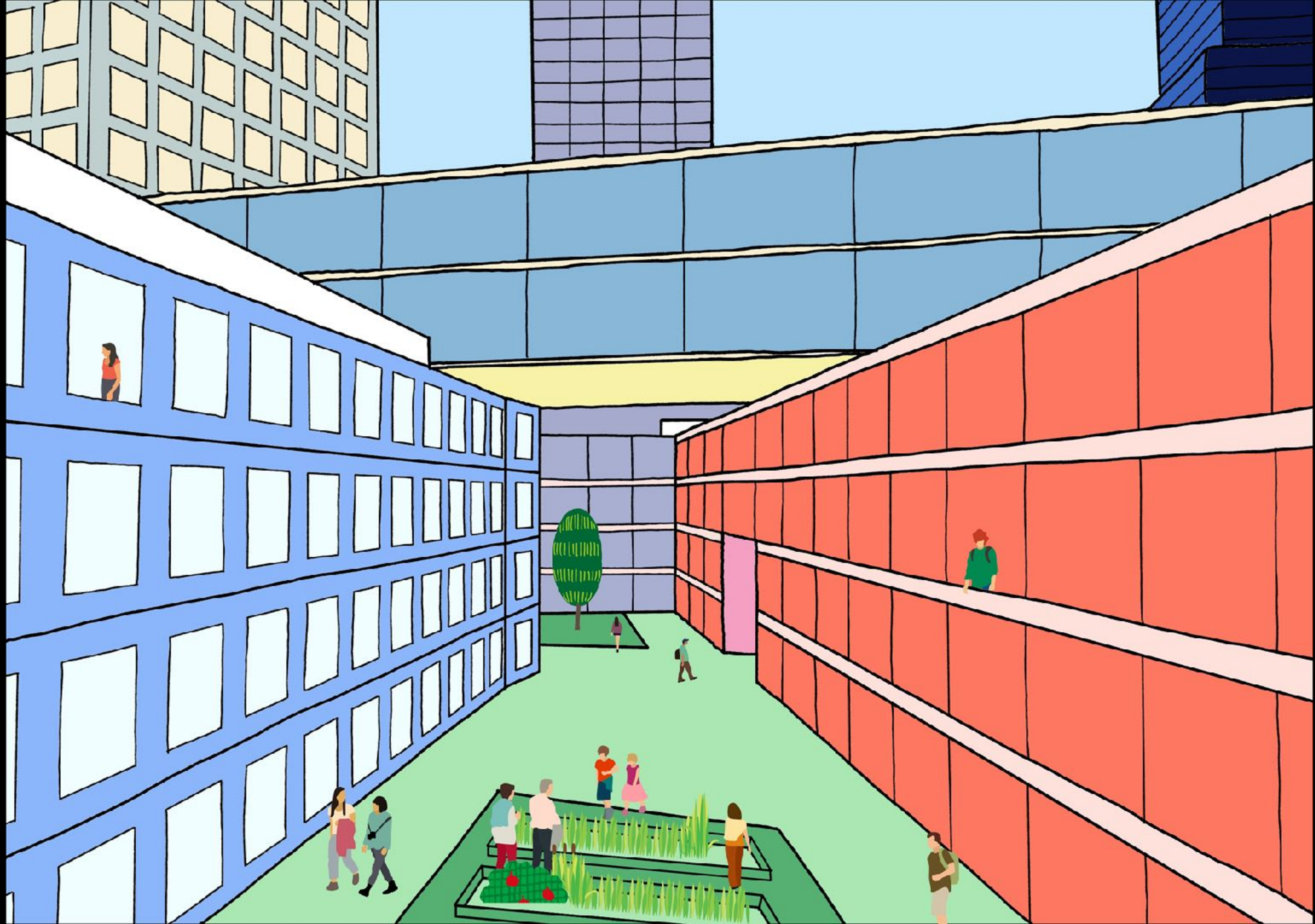


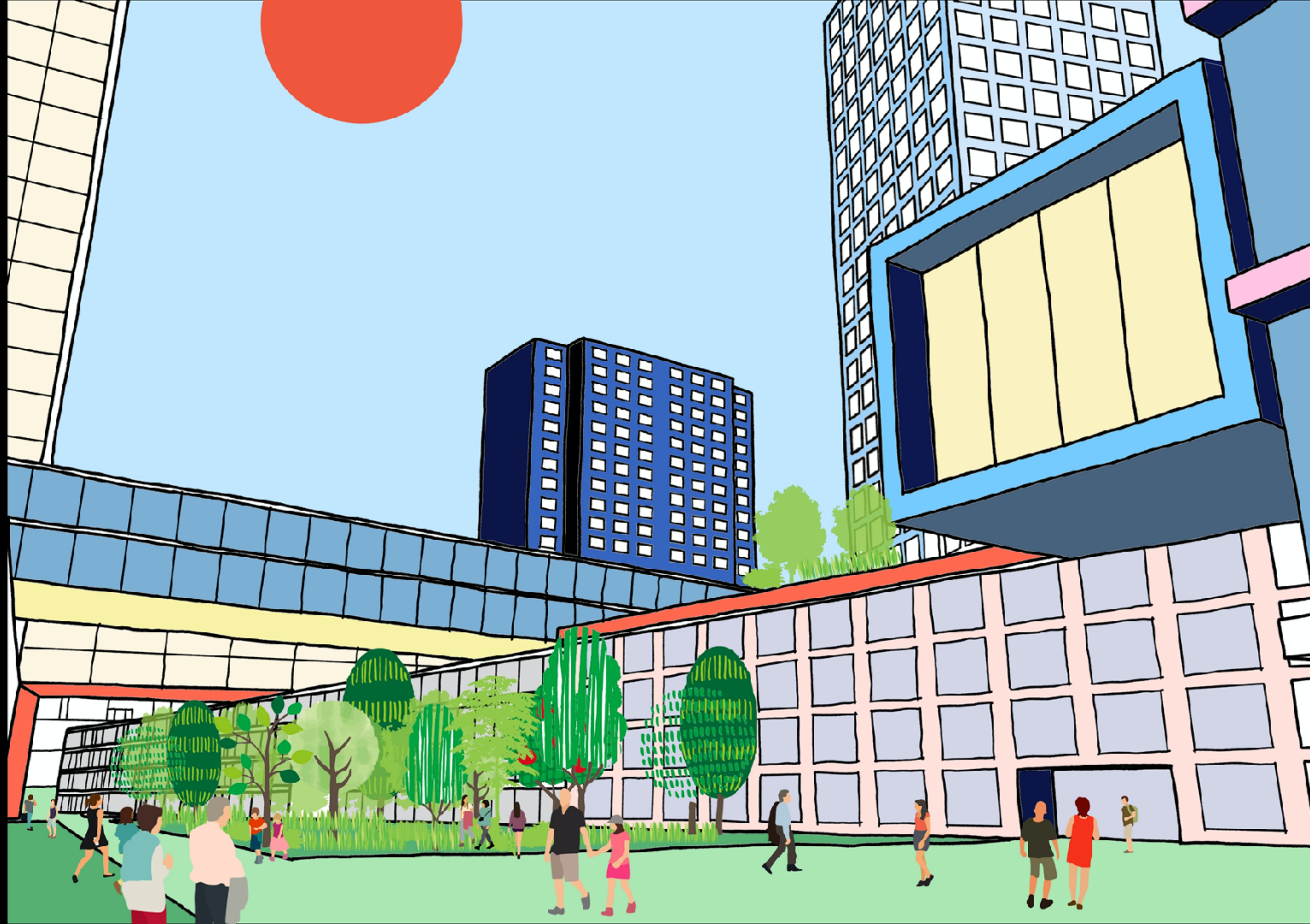


Weave Program







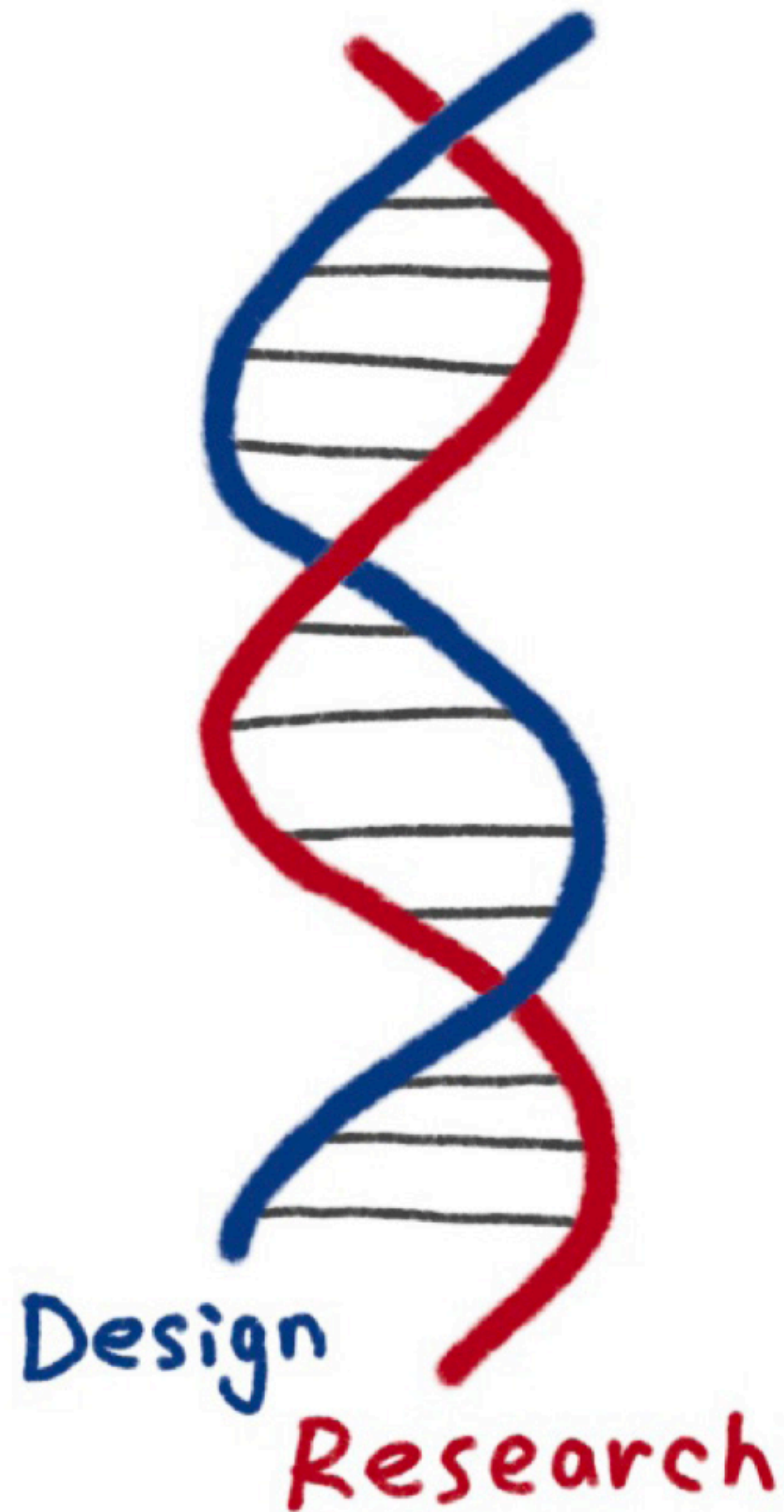


Design

Context

Analysis

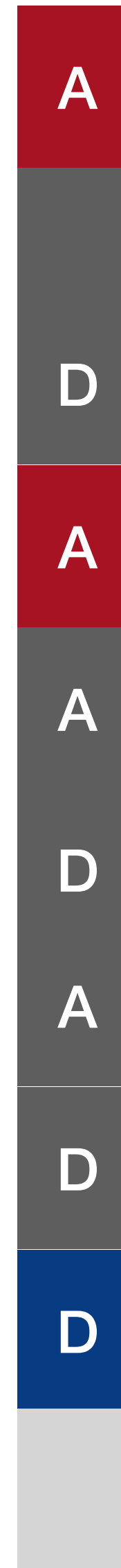
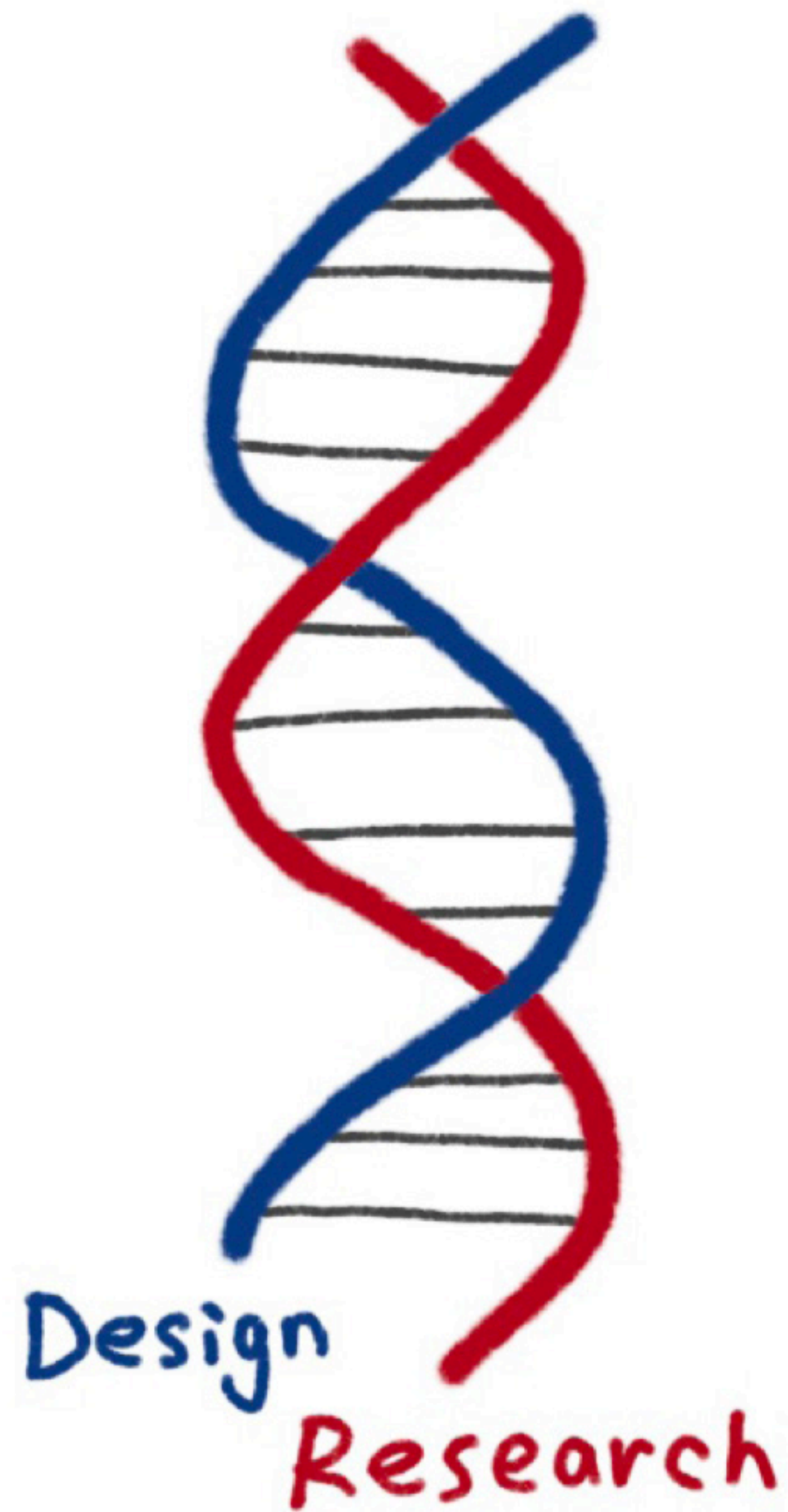
Design



Context

Analysis

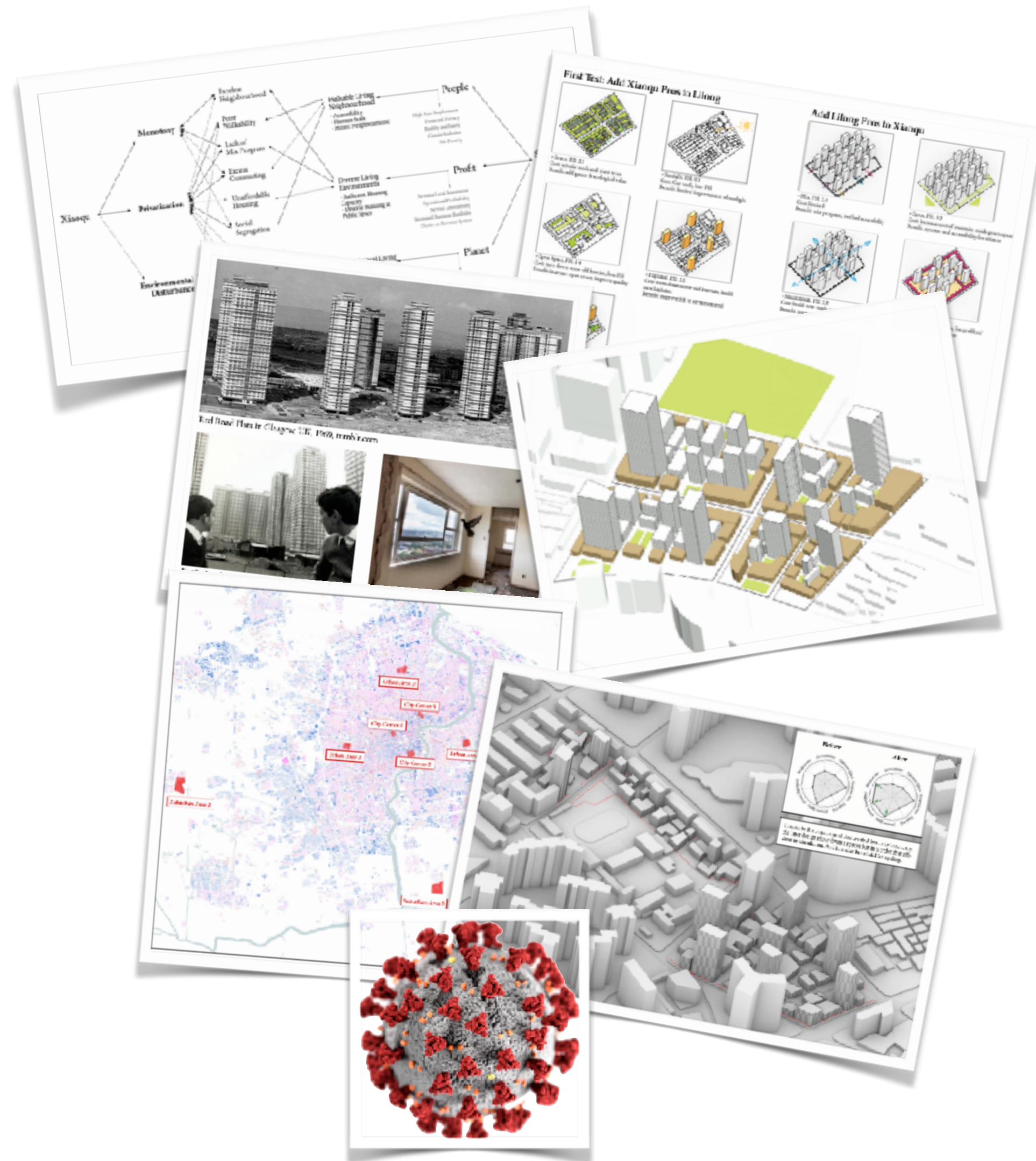
Design



1. Context


4. Analysis

9. Design Evolution



- | | |
|---|------------------------|
| | 1. Context |
| | 2. Theory Chapter |
| D | 3. 1st Design |
| | 4. Analysis Of Quality |
| A | 5. “Xiaoqu” Study |
| D | 6. 2nd Design Test |
| A | 7. Site Analysis |
| D | 8. 3rd Design Test |
| | 9. Design Evolution |
| | 10. Reflection |

Design in Many Rounds

- 
1. Context
 2. Theory Chapter
 3. **1st Design**
 4. Analysis Of Quality
 5. **“Xiaoqu” Study**
 6. **2nd Design Test**
 7. **Site Analysis**
 8. **3rd Design Test**
 9. Design Evolution
 10. Reflection

Design in Many Rounds

Full Content In P5 Report

A	1. Context
	2. Theory Chapter
D	3. 1st Design
A	4. Analysis Of Quality
A	5. “Xiaoqu” Study
D	6. 2nd Design Test
A	7. Site Analysis
D	8. 3rd Design Test
D	9. Design Evolution
	10. Reflection

Project

Reflection

Reflection
On
Project

Reflection

On

What I have learned in past two years



THE DUTCH APPROACH

Study Notes From Jian Yuan

(2018–2020)

jianyuan.kk@outlook.com



Structure

Design

Research

Presentation

Structure

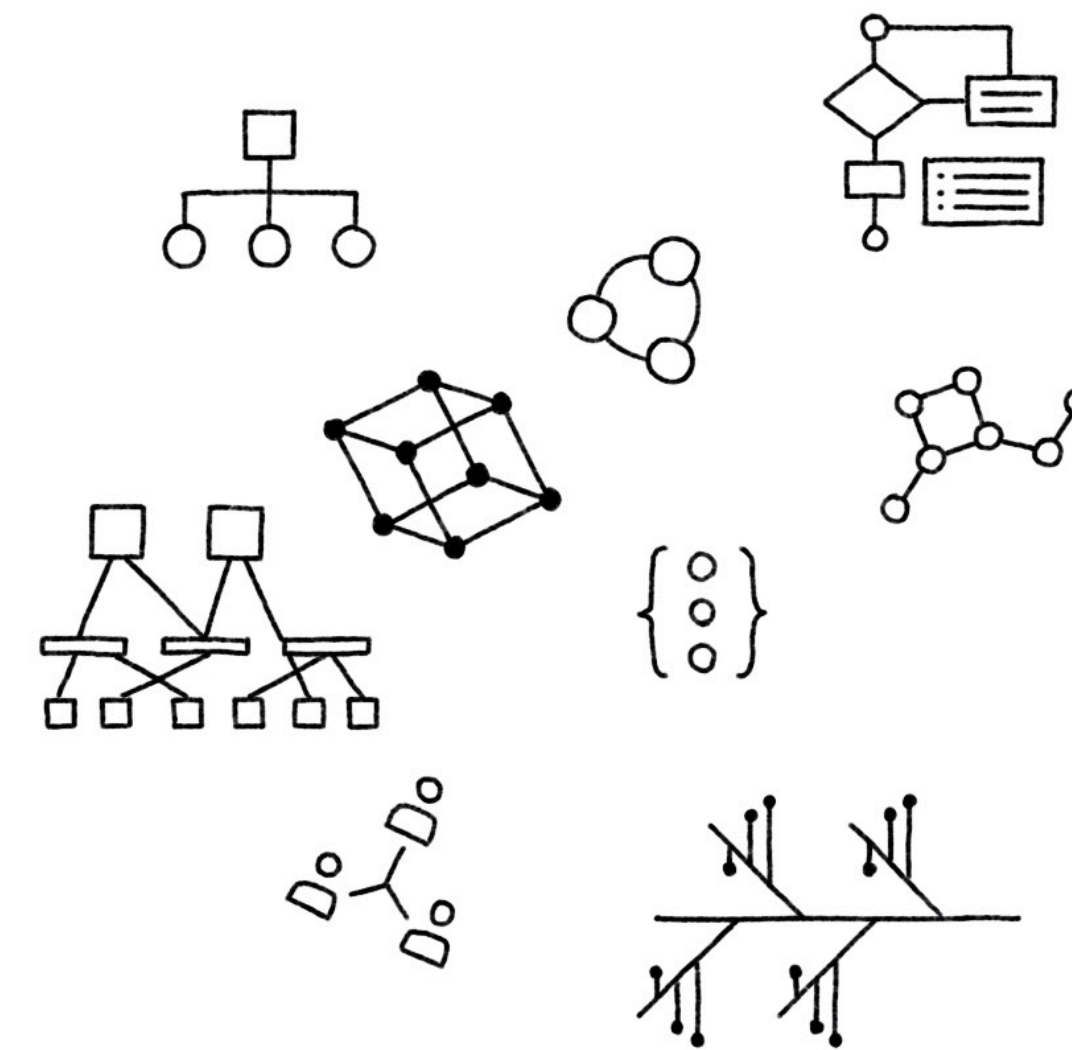
01

Structure First

The most effective way of doing complicated things is to build its structure first.

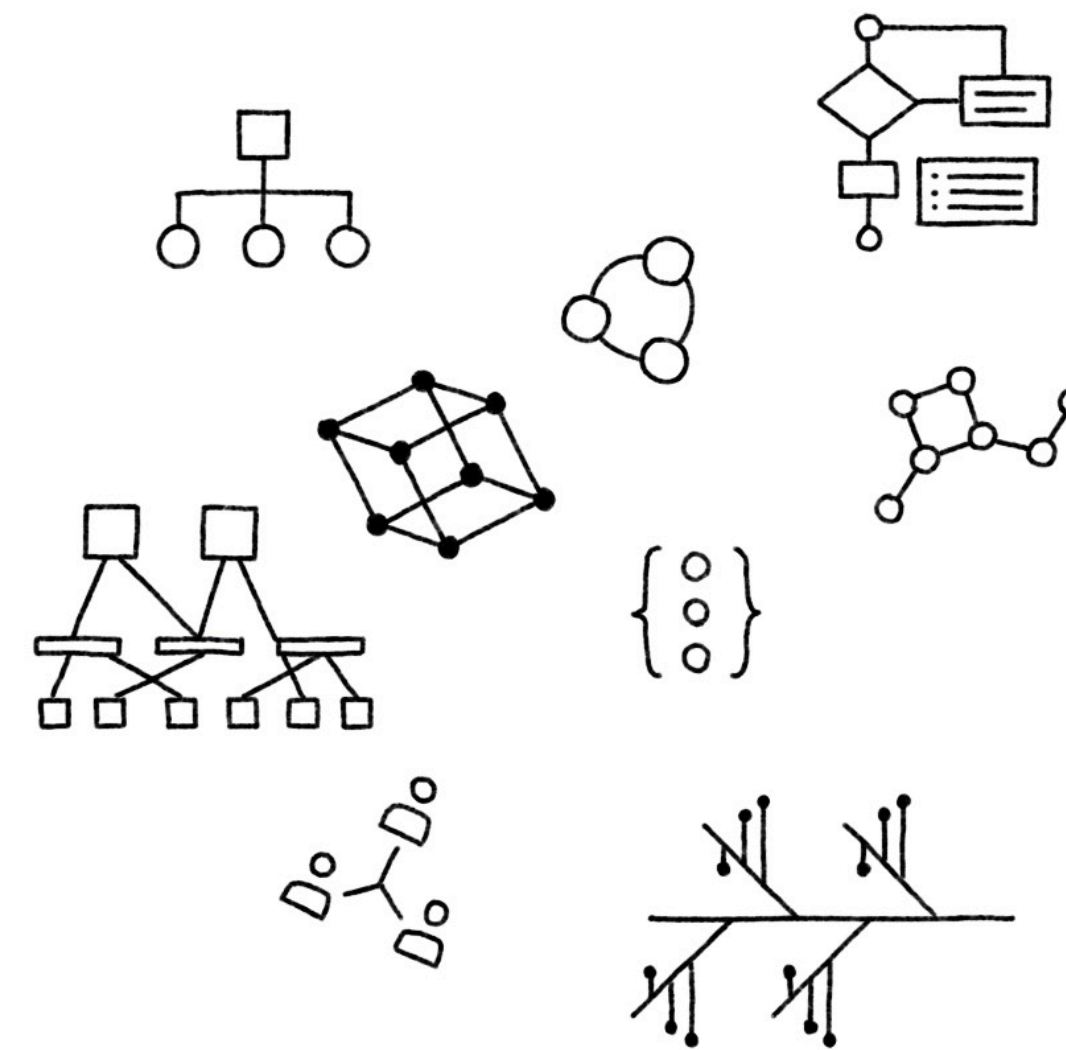
Sketch an outline before writing long articles, scratch a draft before serious drawing, arrange tasks in Calendar before doing them...

There is various form of structure to different things. Be creative in building free forms of structure that is adaptive to its context.



01

Structure First



02

A-D-P Loop

*Design Mantra:
"The Dutch Approach"*

Analysis 

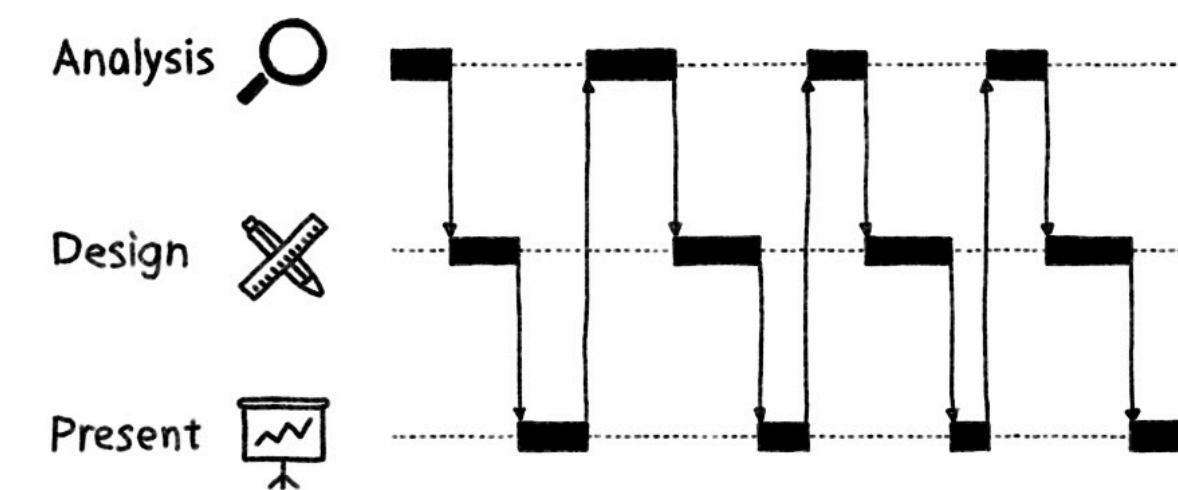
Design 

Present 

02

A-D-P Loop

*Design Mantra:
"The Dutch Approach"*



A-D-P-A-D-P-A-D-P

03

Evolutionary Idea Tree



20
Sketch
First Idea



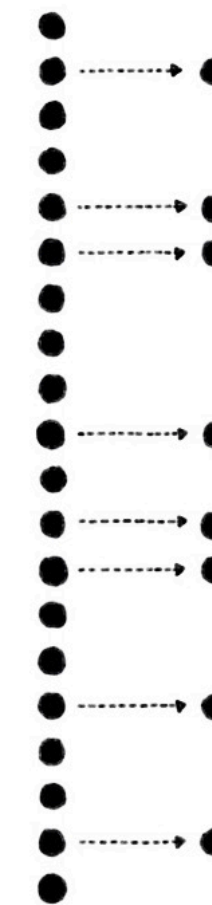
03

Evolutionary Idea Tree



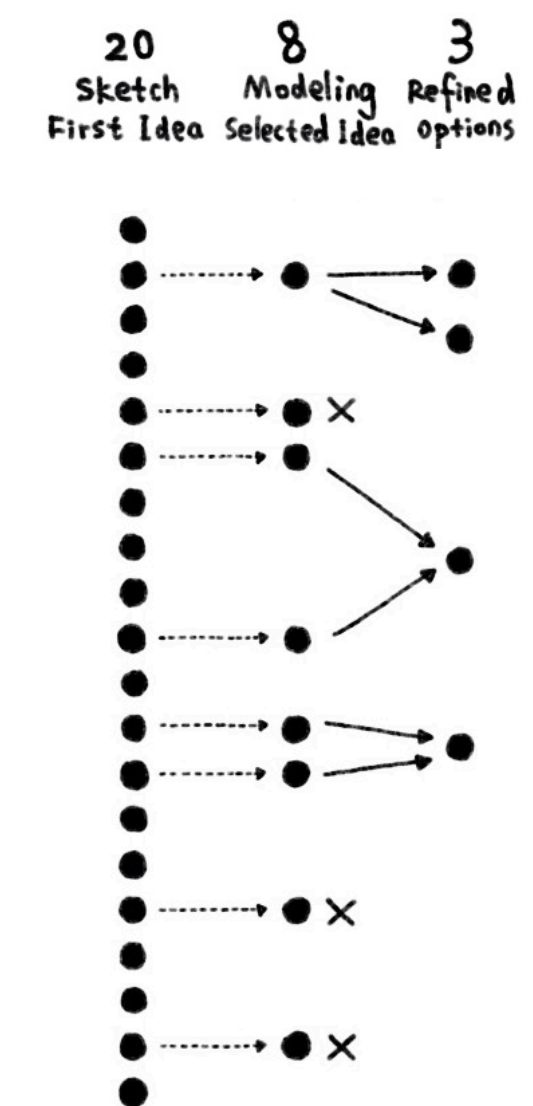
20
Sketch
First Idea

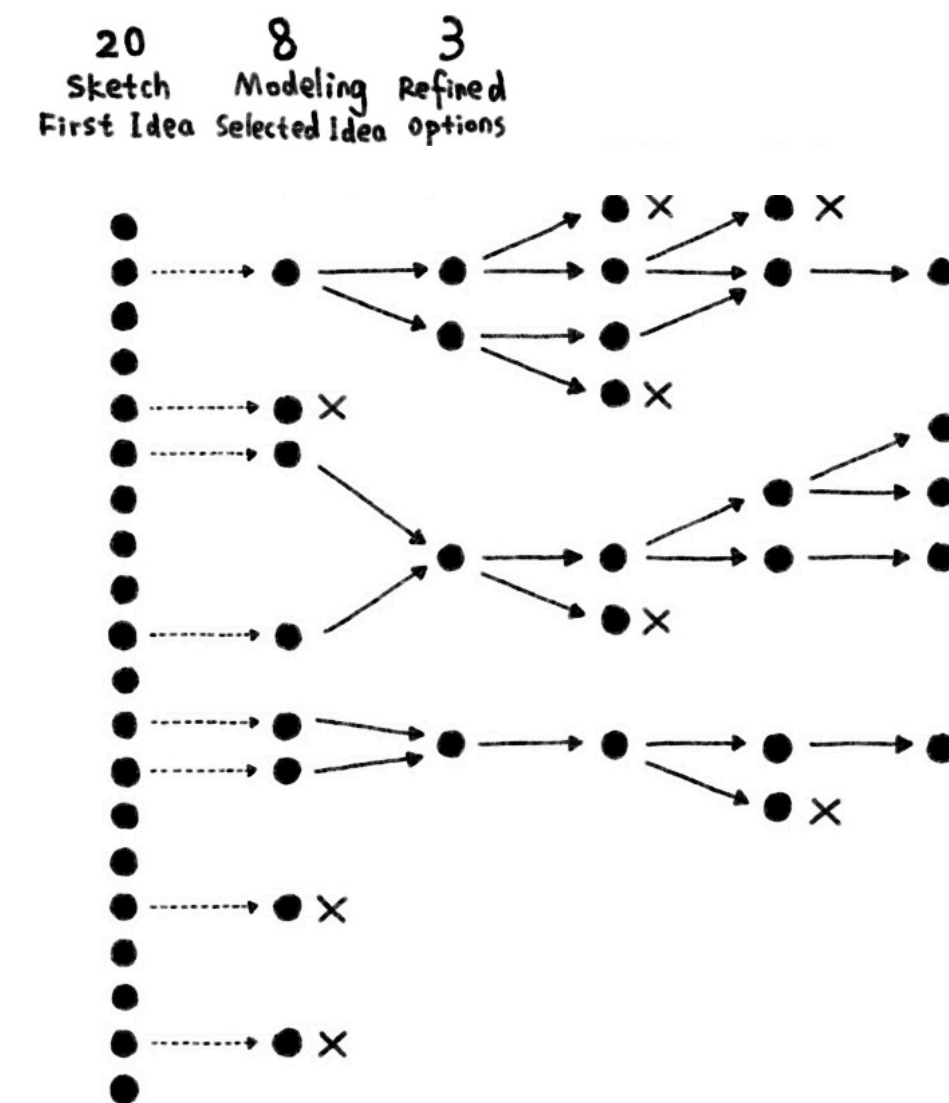
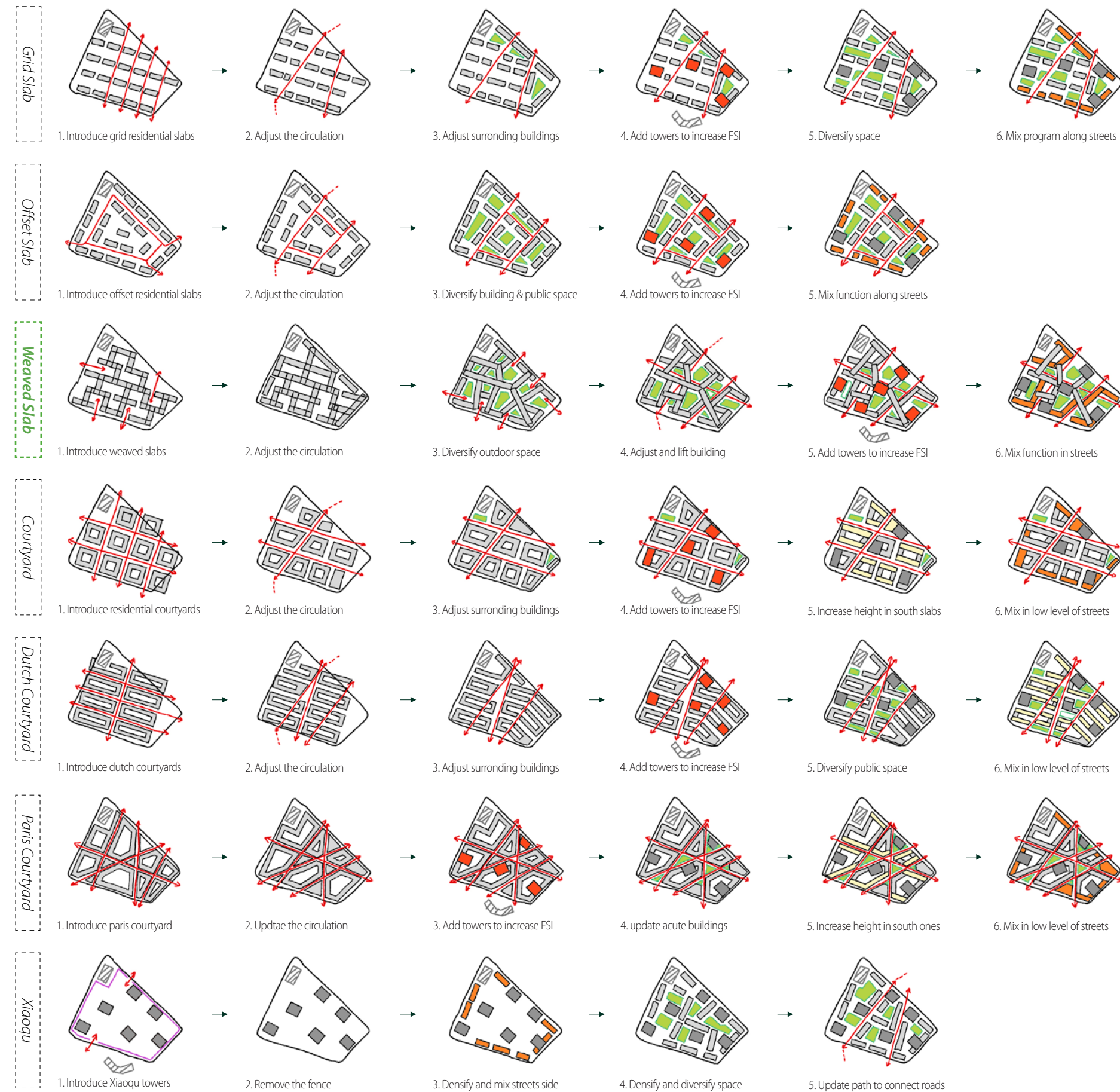
8
Modeling
Selected Idea



03

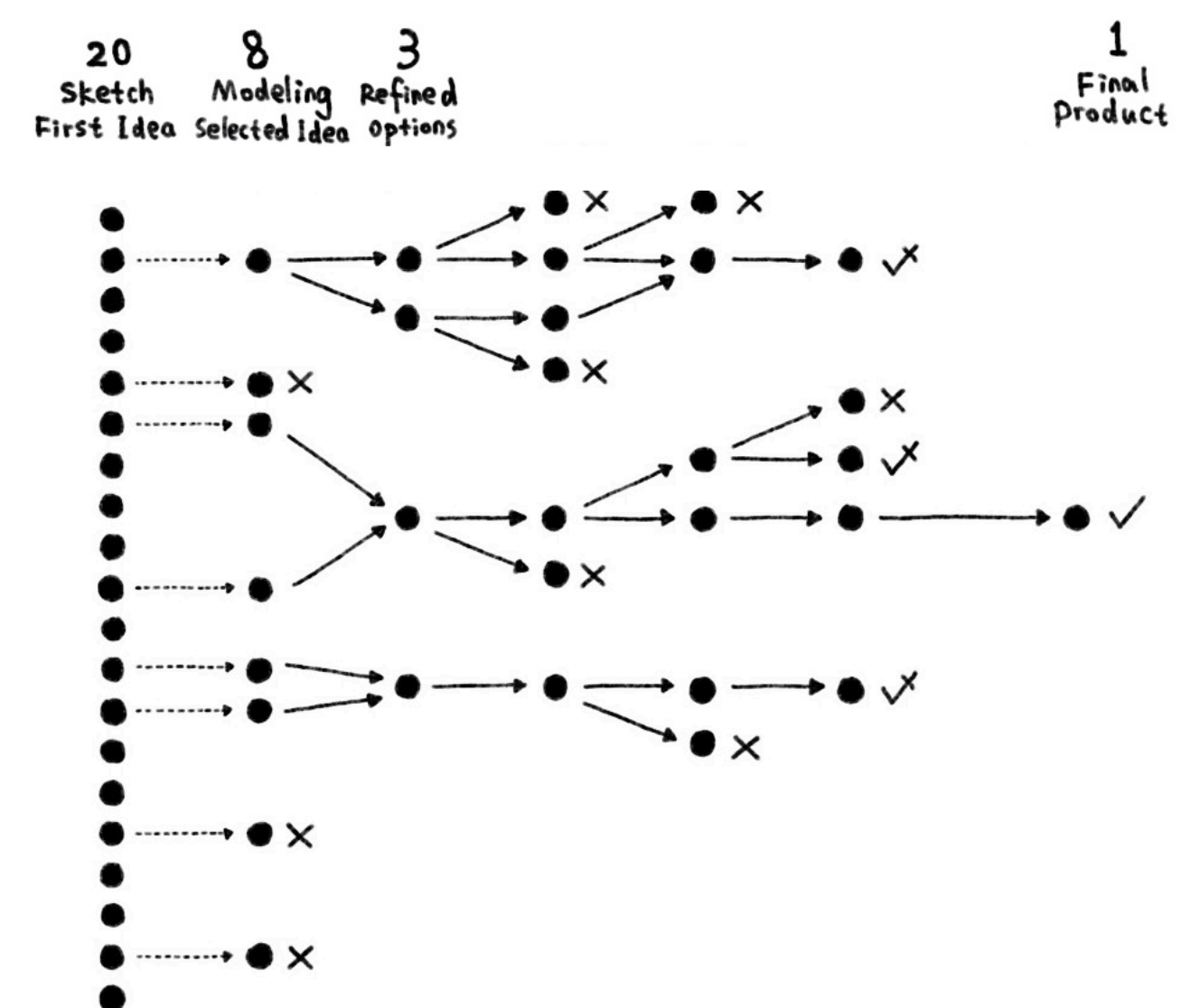
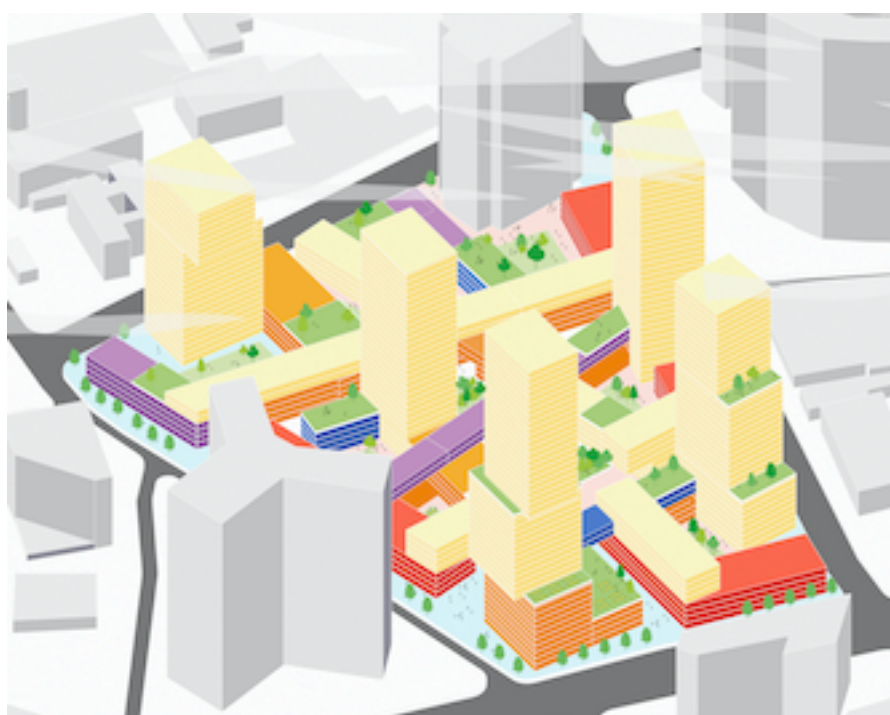
Evolutionary Idea Tree





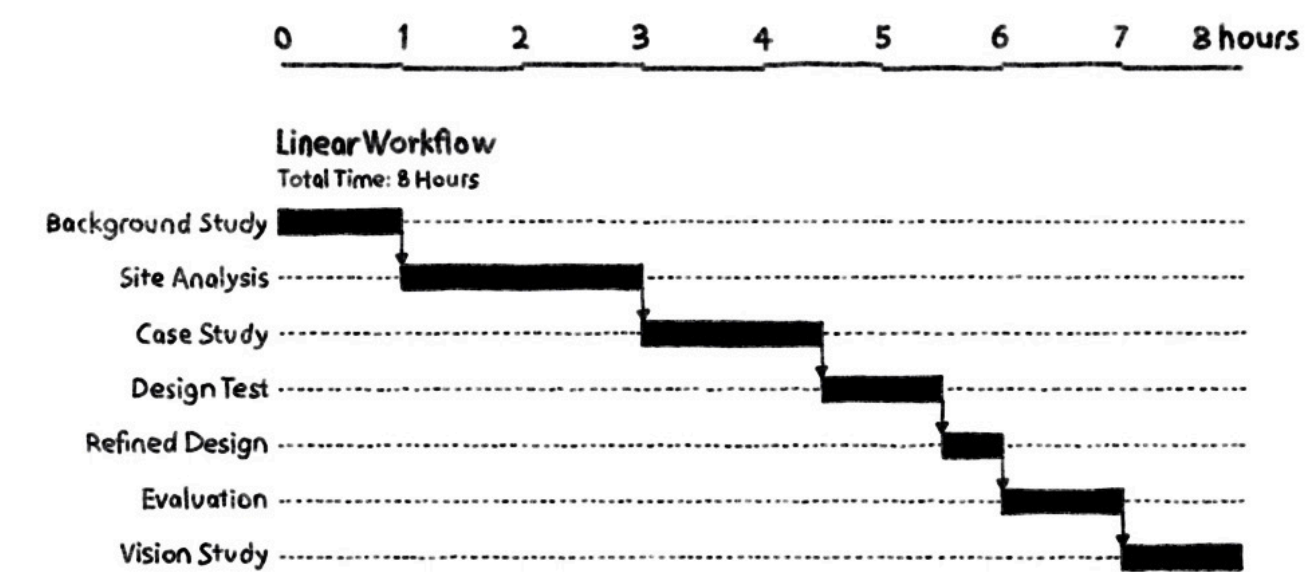
03

Evolutionary Idea Tree



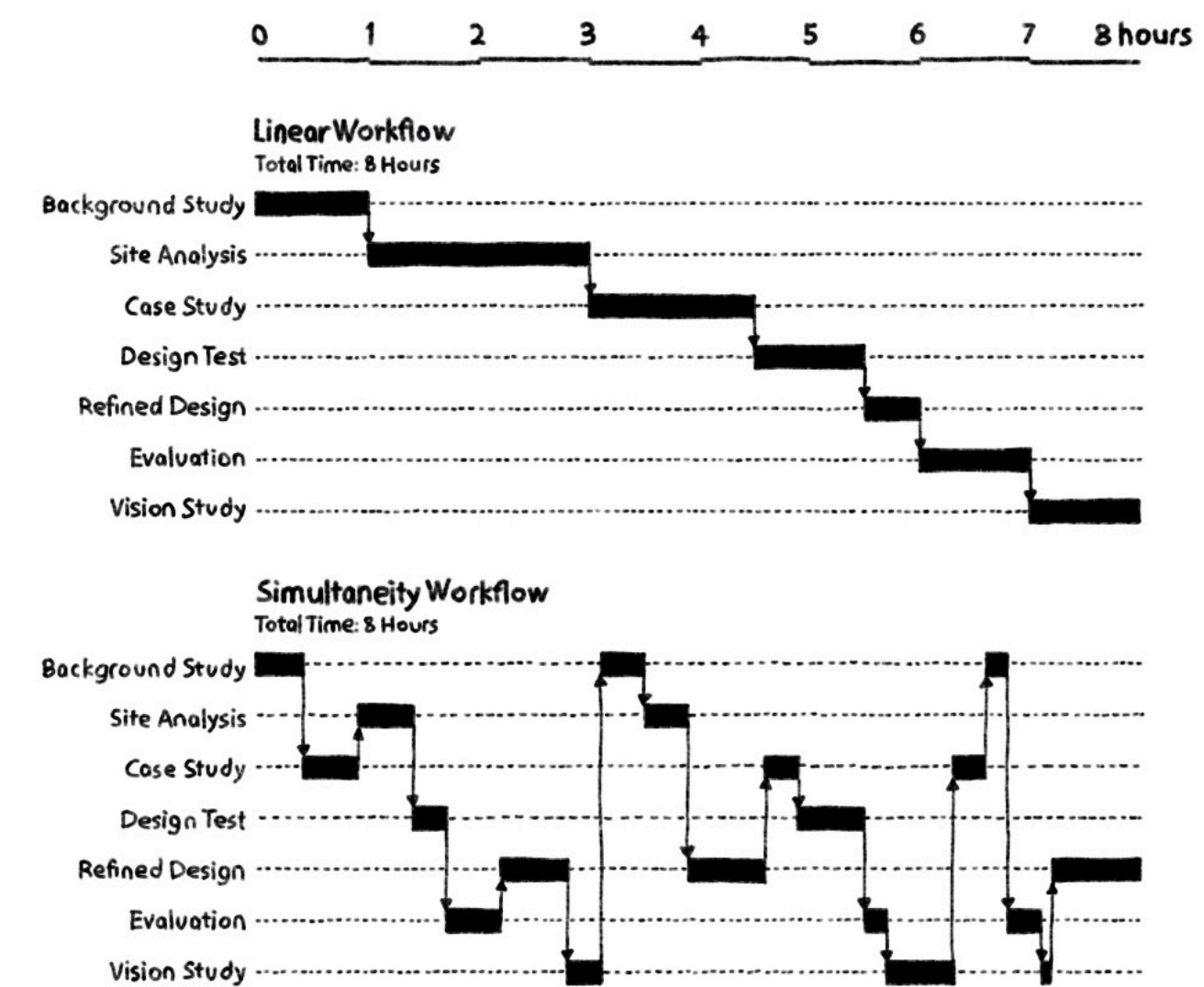
04

Simultaneity Workflow



04

Simultaneity Workflow



05

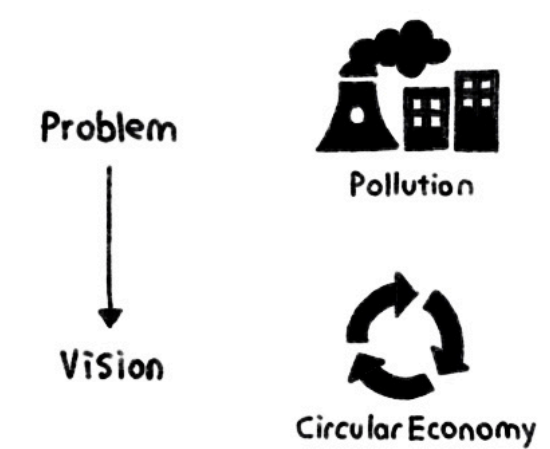
Project Structure

Problem



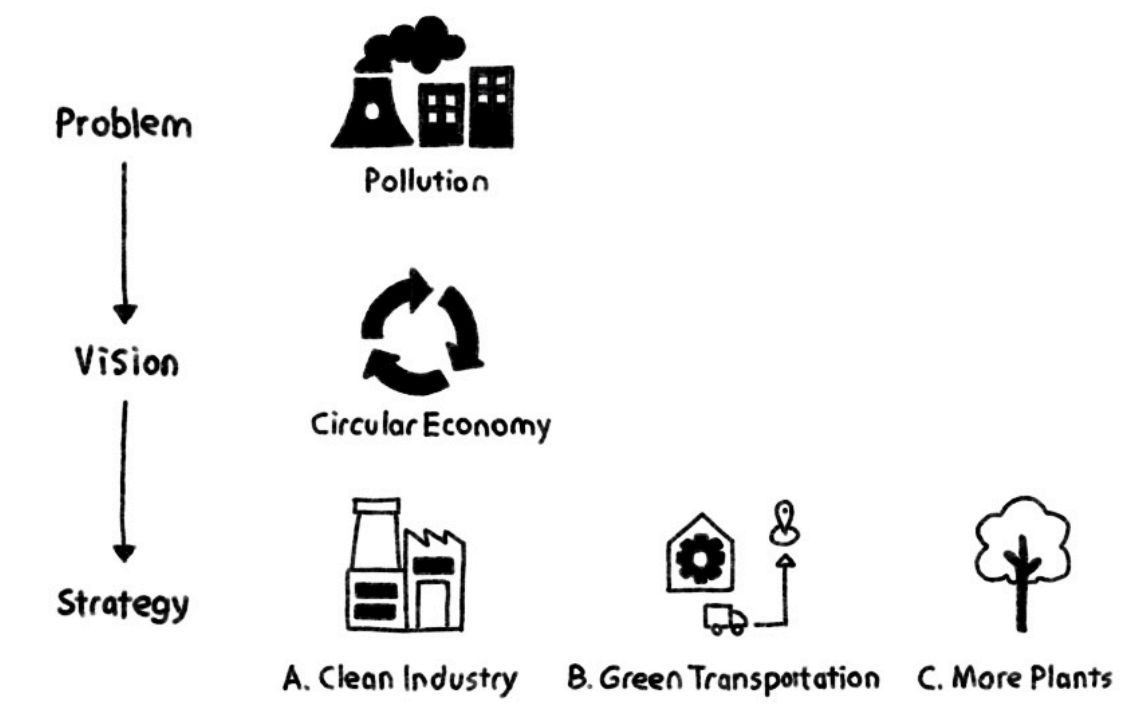
05

Project Structure



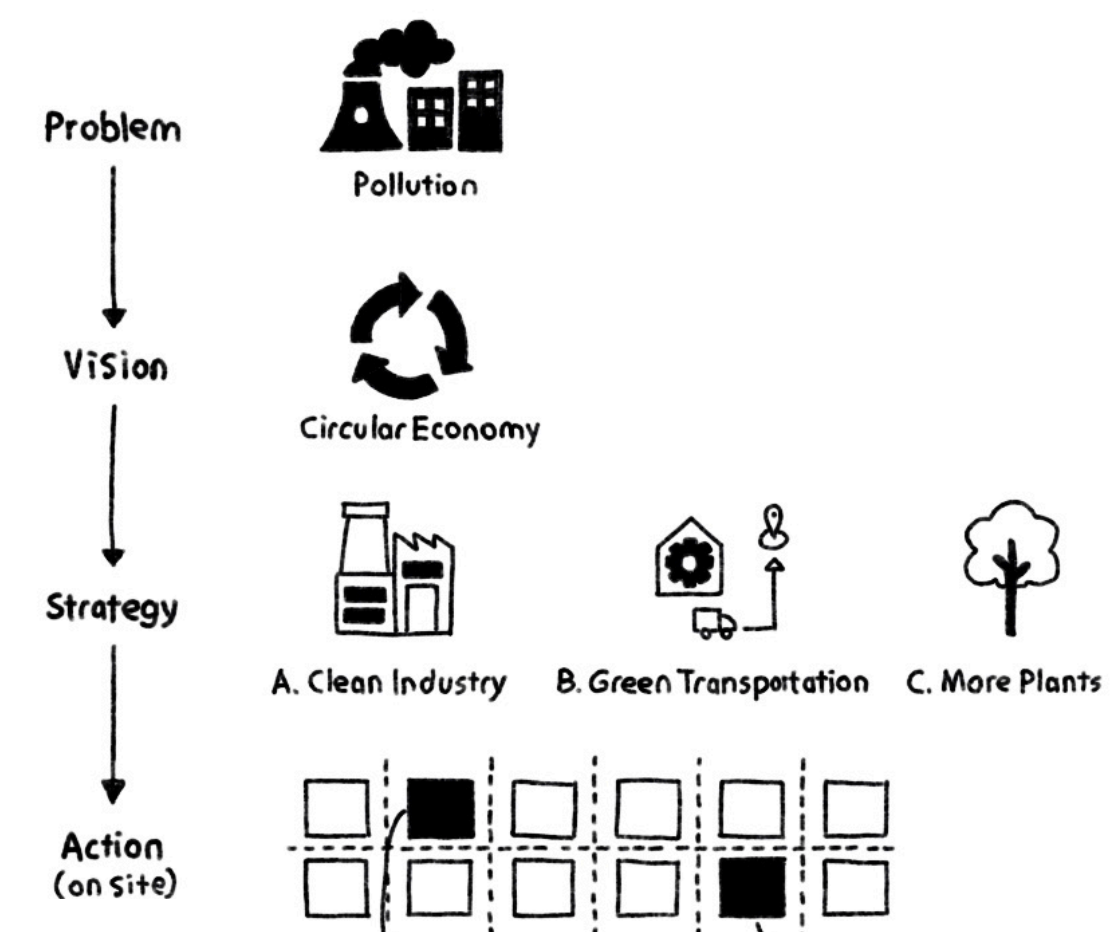
05

Project Structure



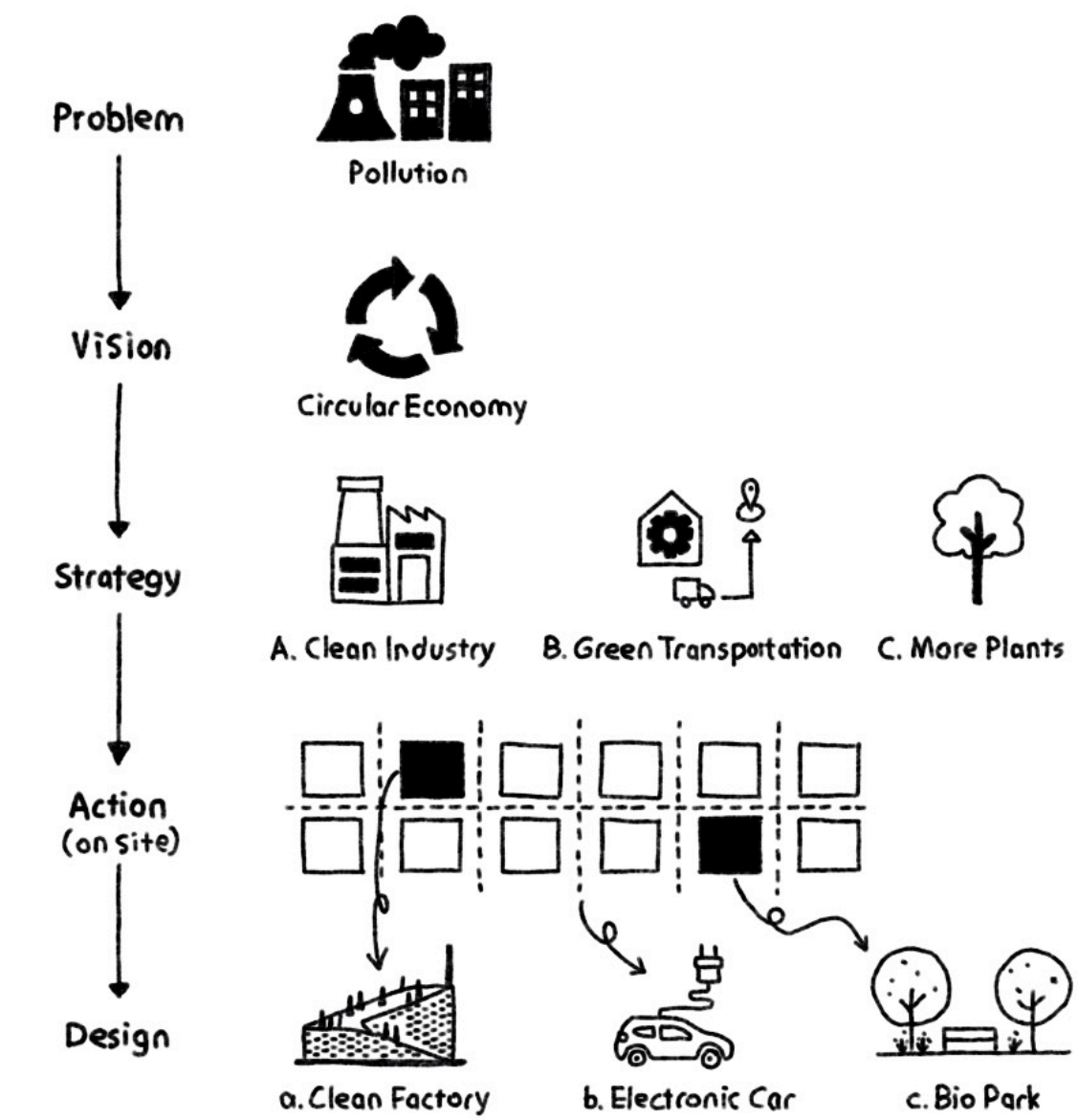
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Project Structure



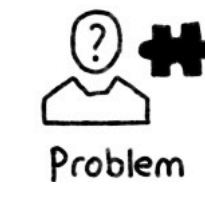
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Project Structure



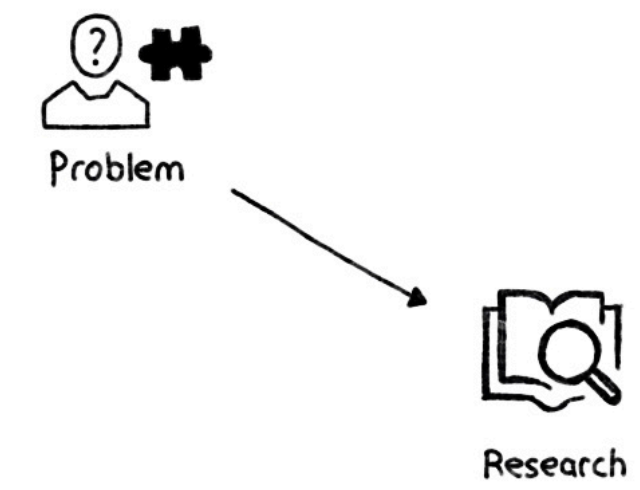
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Design Workflow



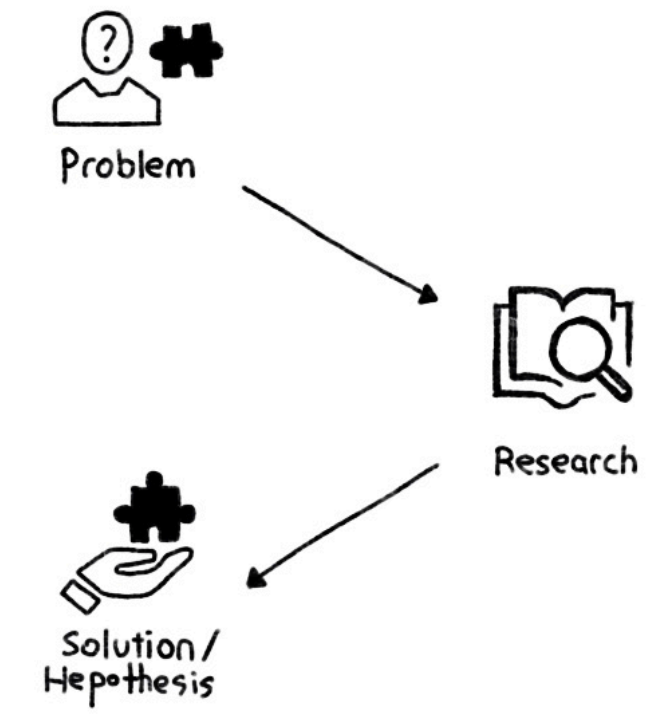
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Design Workflow



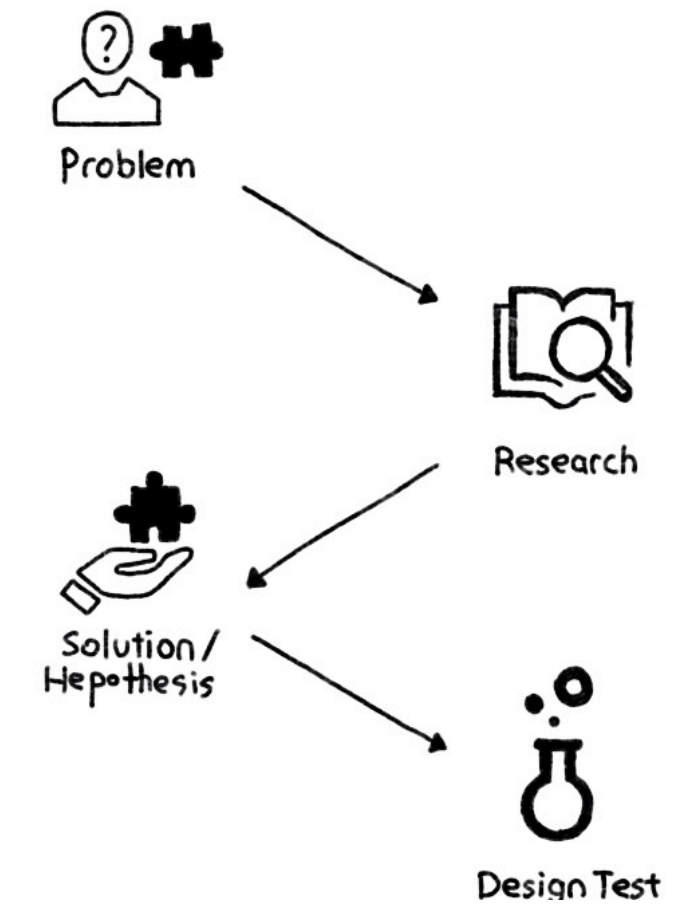
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Design Workflow



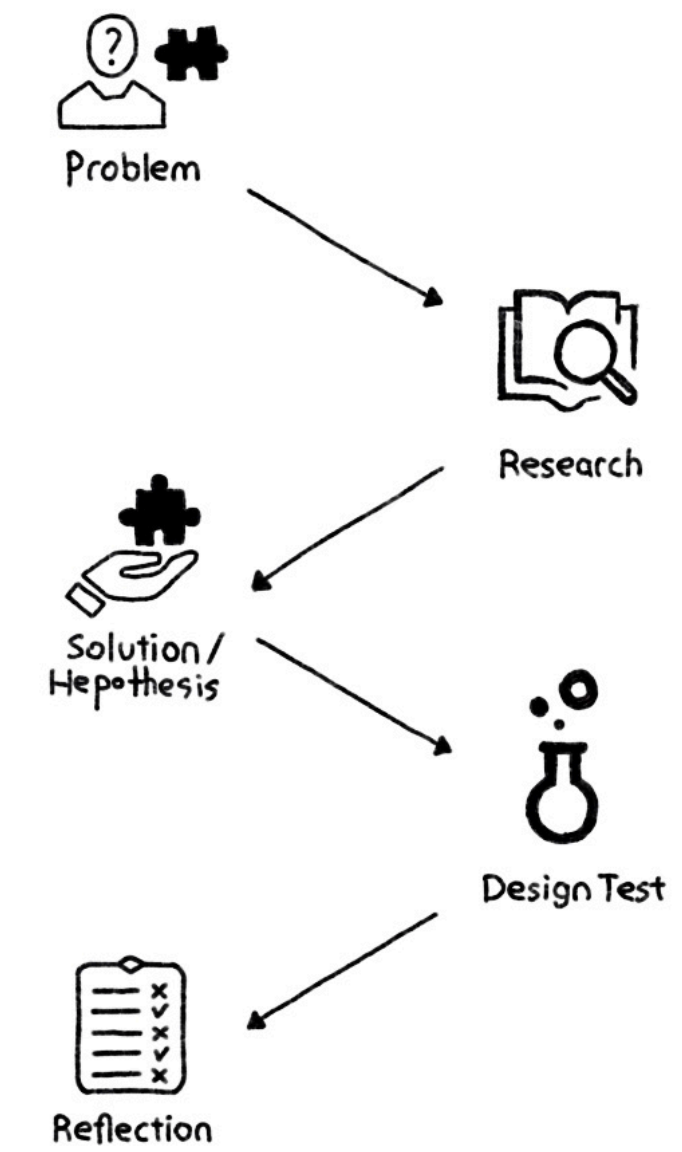
06

Design Workflow



06

Design Workflow



07

*Research
by Design*

Housing in China: FAR vs. Sunlight
Design: Sketch for Solutions

07

Research by Design

Housing in China: FAR vs. Sunlight
Design: Sketch for Solutions

I. Building with Slope



07

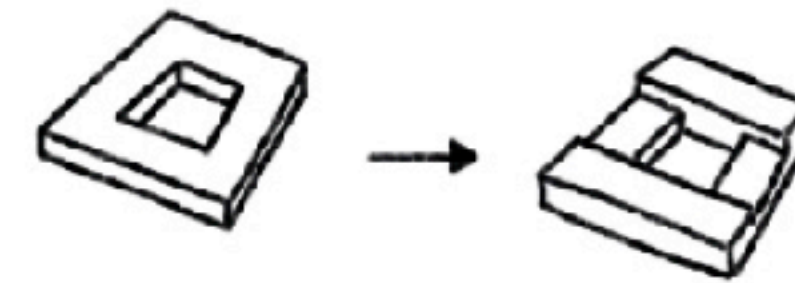
Research by Design

Housing in China: FAR vs. Sunlight
Design: Sketch for Solutions

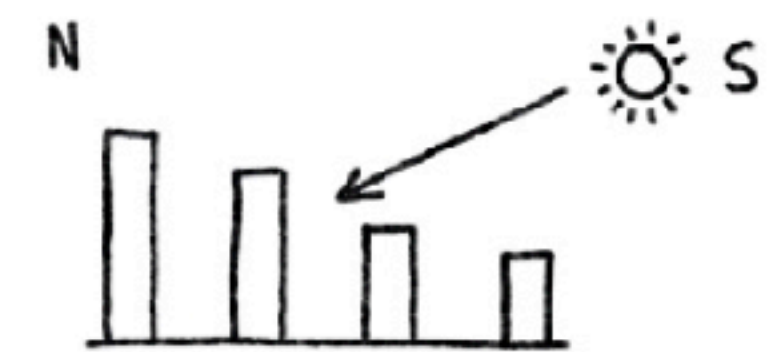
1. Building with Slope



2. Higher layer in North-South



3. Higherise Building in North



07

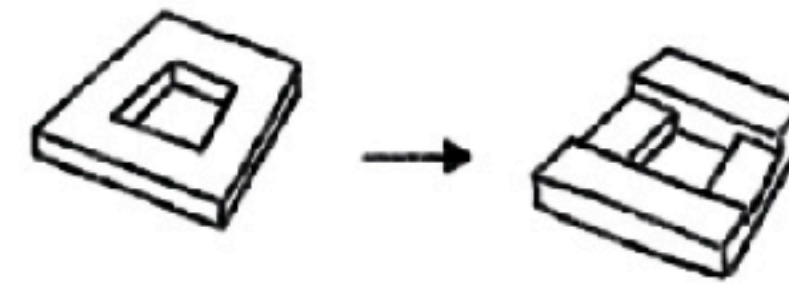
Research by Design

Housing in China: FAR vs. Sunlight Design: Sketch for Solutions

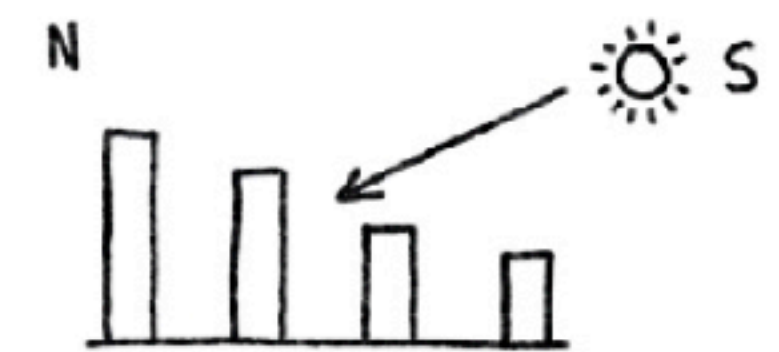
1. Building with Slope



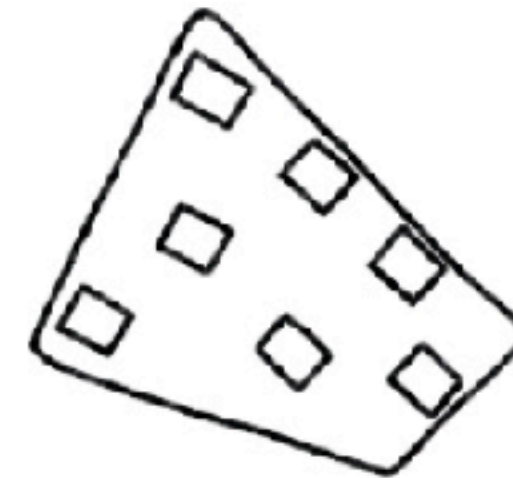
2. Higher layer in North-South



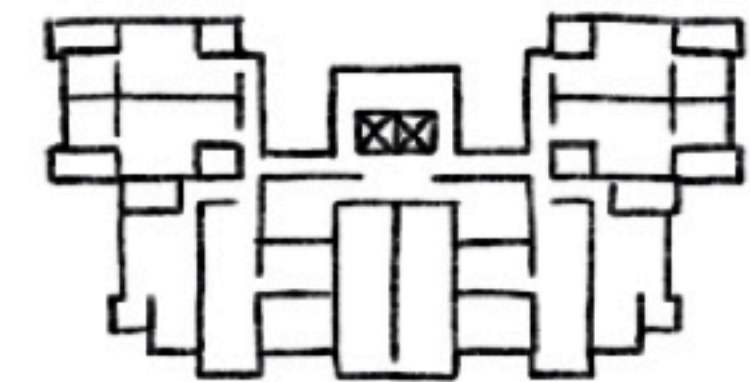
3. Higherise Building in North



4. Gapped Layout



5. Efficient Layout (indoor)



08

*Design by
Research*

Housing in China: FAR vs. Sunlight
Research on:

08

Design by Research

Housing in China: FAR vs. Sunlight

Research on:

I. Specific Policy



- How long sun light required a day?
- Various in cities?
- Special situation? Rewards?

08

Design by Research

Housing in China: FAR vs. Sunlight

Research on:

1. Specific Policy



- How long sun light required a day?
- Various in cities?
- Special situation? Rewards?

2. How Do Others Do?



- Hongkong? (two system in one country)
- Singapore? (Chinese Culture, like sunlight)
- Netherlands? (high population density)

08

Design by Research

Housing in China: FAR vs. Sunlight

Research on:

1. Specific Policy



- How long sun light required a day?
- Various in cities?
- Special situation? Rewards?

2. How Do Others Do?



- Hongkong? (two system in one country)
- Singapore? (Chinese Culture, like sunlight)
- Netherlands? (high population density)

3. Other Solutions?

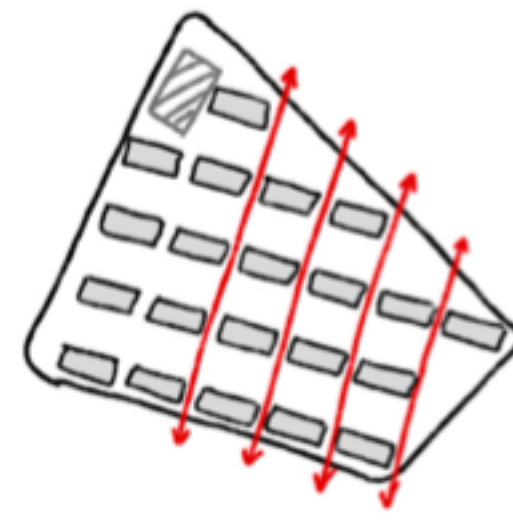


- Mix in low level?
- Distinguish "house" and "apartment"?
- Special indoor layout?

Design

09

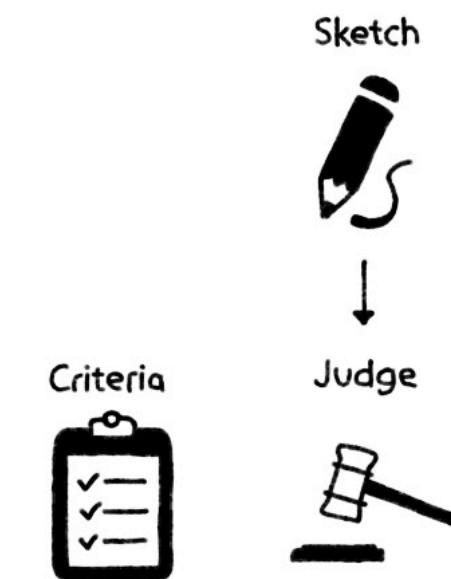
Evolutionary Design



09

Evolutionary Design

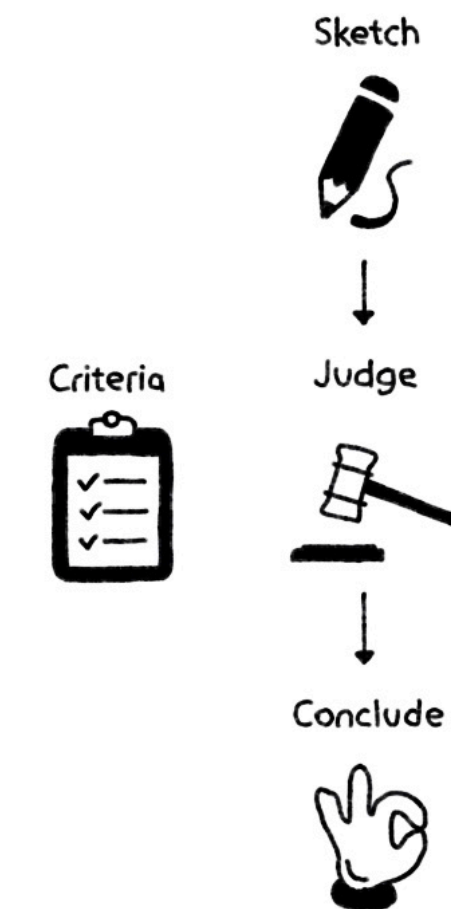
Criteria	Judgement
<i>Accessibility</i>	Quite good grid streets, need to connect surrounding roads.
<i>Human Scale</i>	Trangular space near streets can be nosiy.
<i>Mix</i>	Poor function mix, can mix function slong streets, like public service or commercial
<i>FSI</i>	Low FSI level, need to add tow-ers to increase total area. (GSI is already quite high)
+ <i>Others</i>	- Space is too homogenous - Sunlight condition is great



09

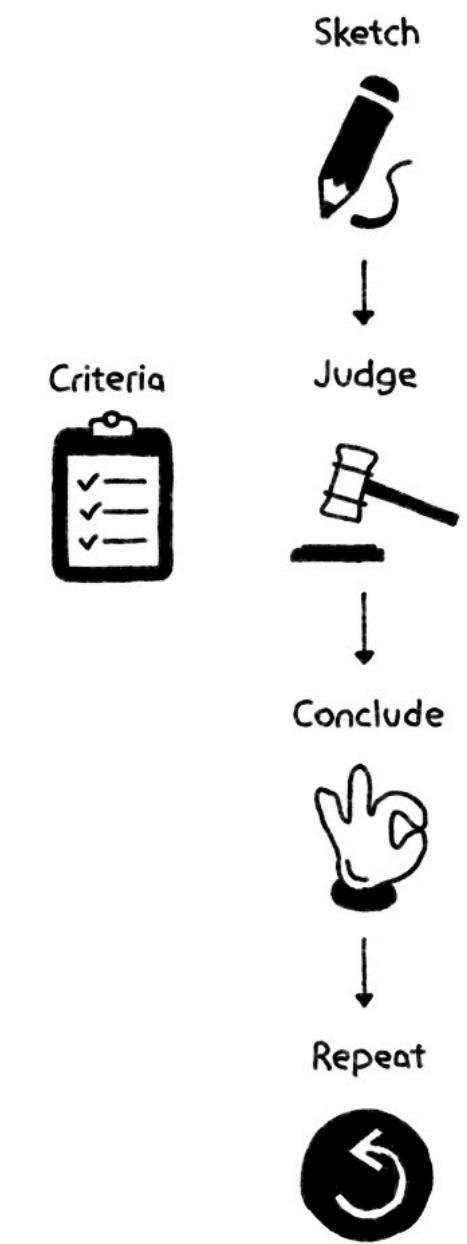
Evolutionary Design

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09

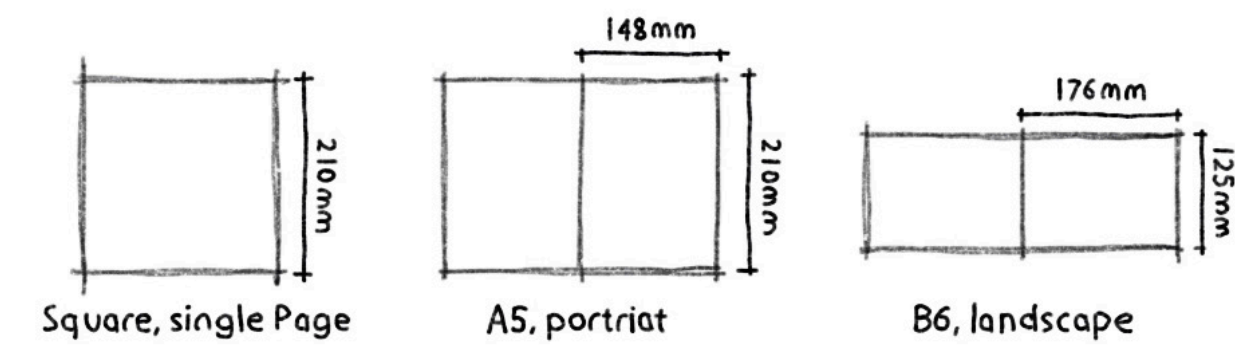
Evolutionary Design



10

Sketch First

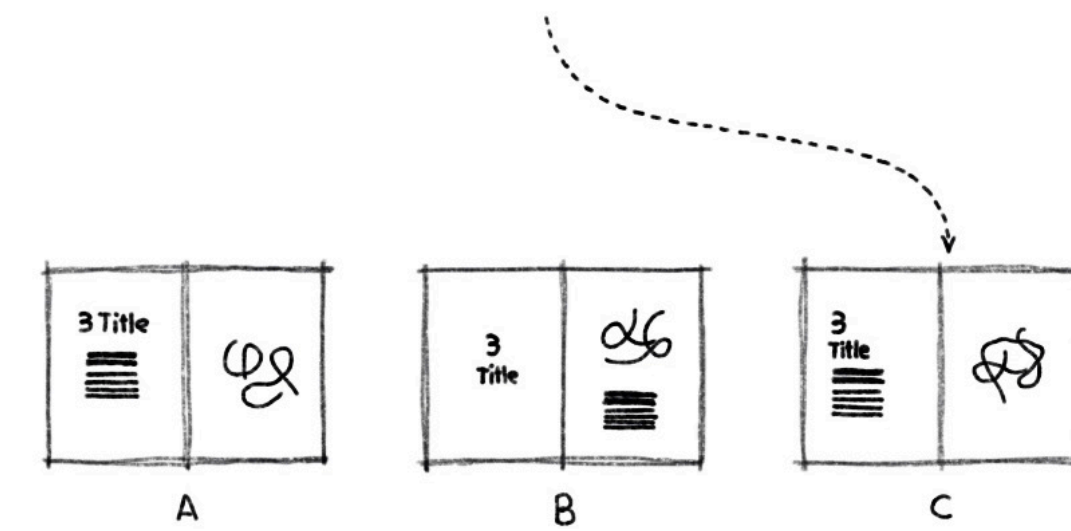
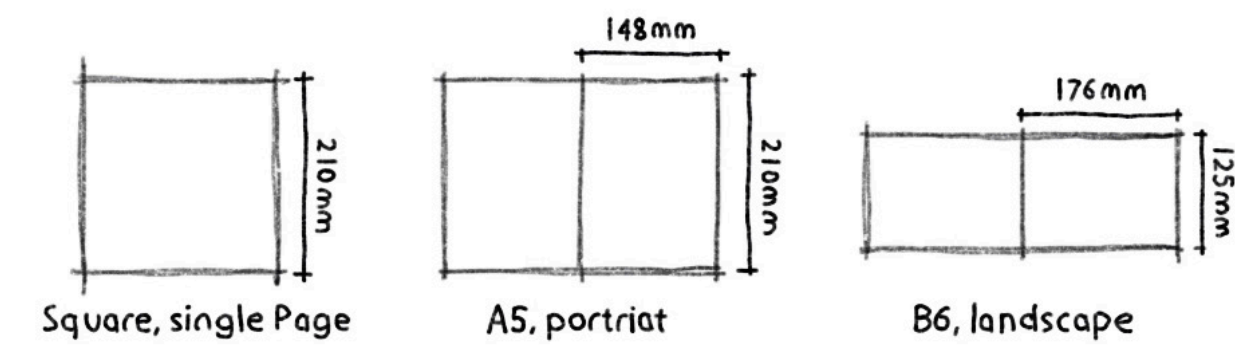
How to make a booklet about The Dutch Approach?



10

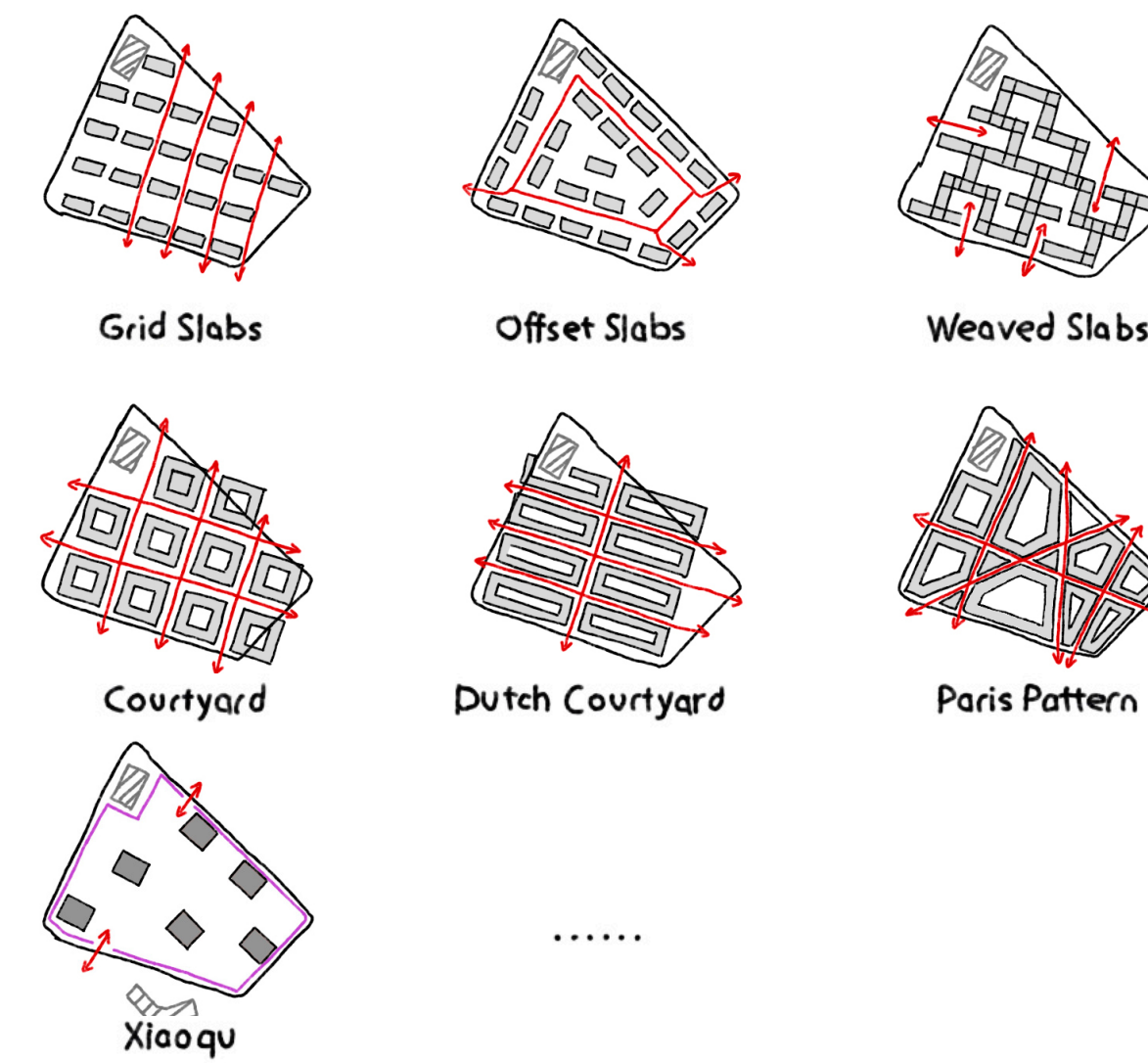
Sketch First

How to make a booklet about The Dutch Approach?



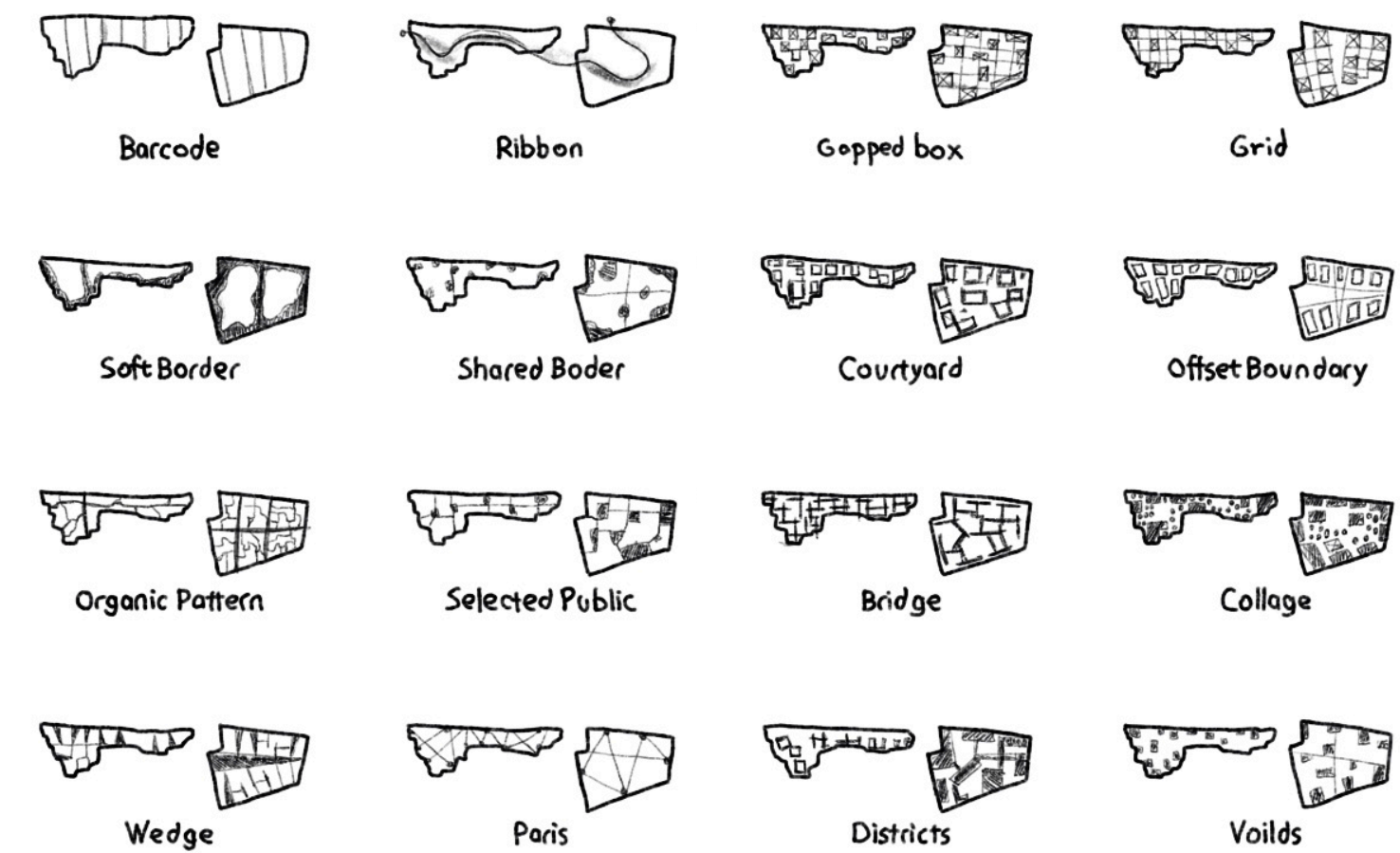
11

Design Option Tests



12

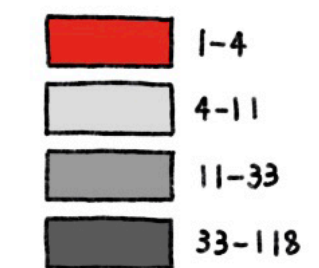
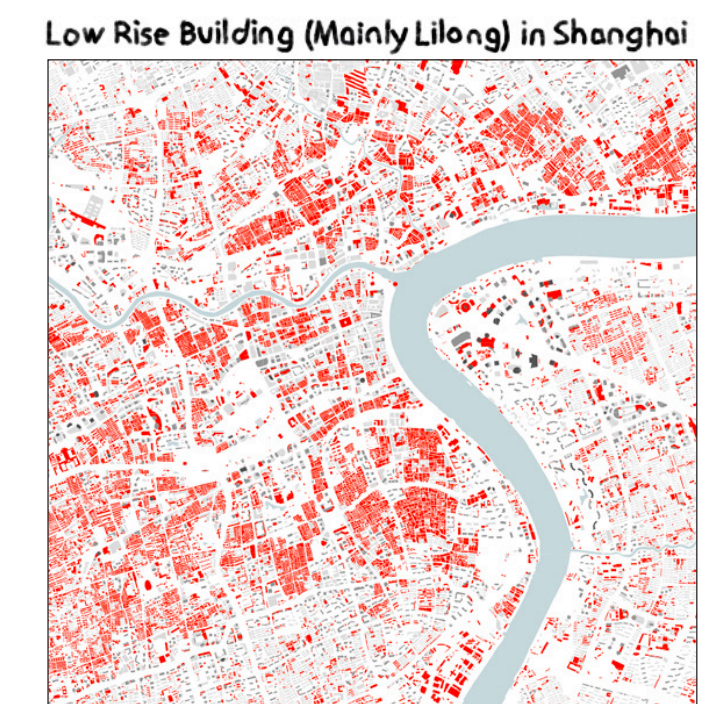
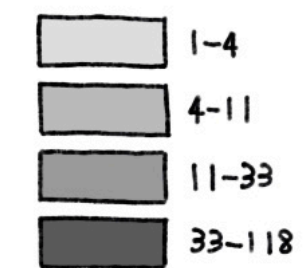
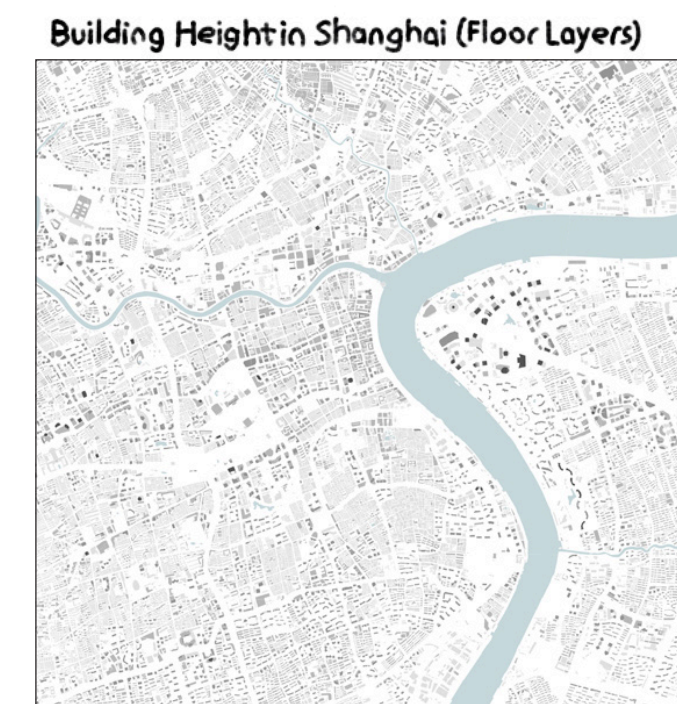
*Be Clear,
Be Distinctive,
Be Sharp*



13

**"Draw conclusion,
not information."**

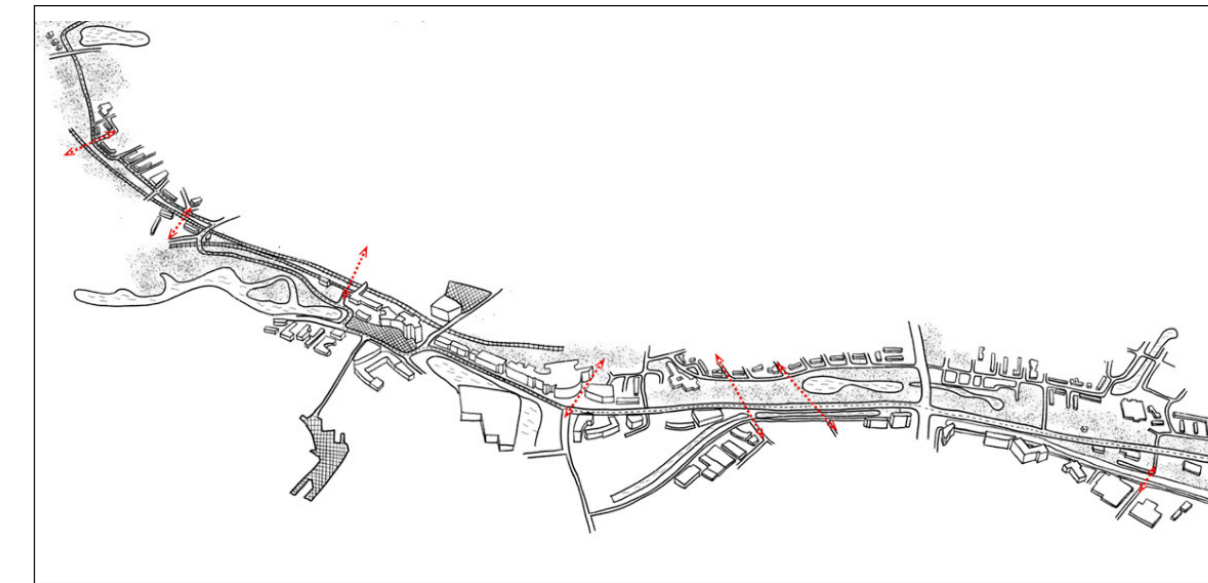
— *Teake Bouma*



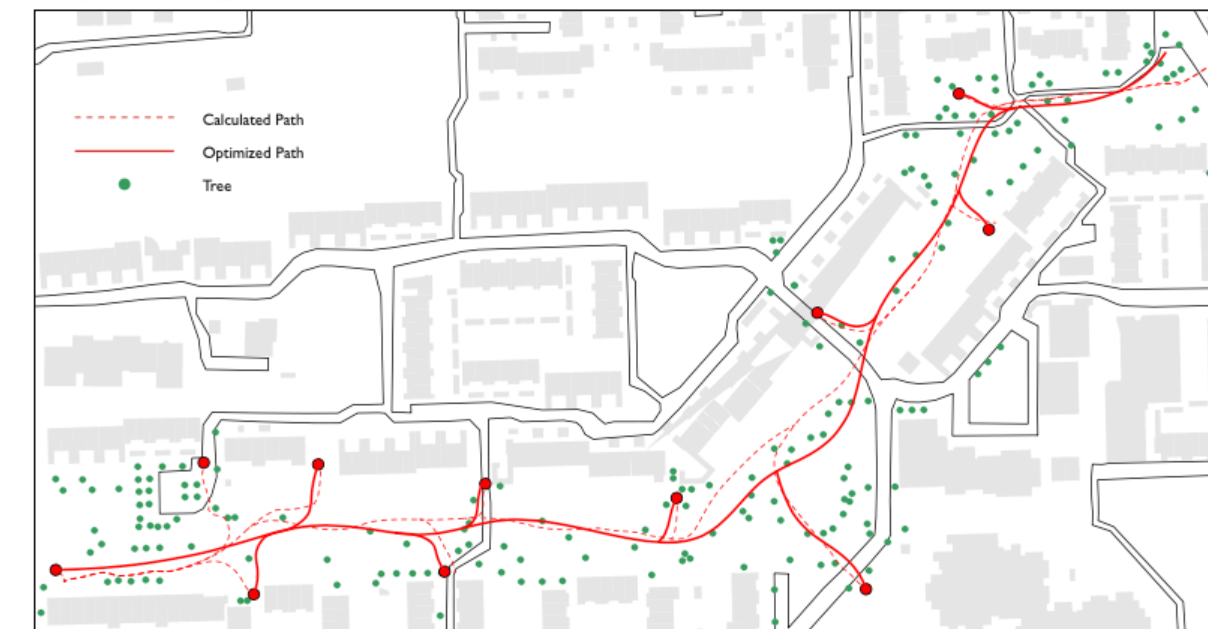
14

Do Experimental Drawings

Low Tech Hand Drawing: Possible Linkage in Rail Area



High Tech Algorithm: Possible Routes for New Path



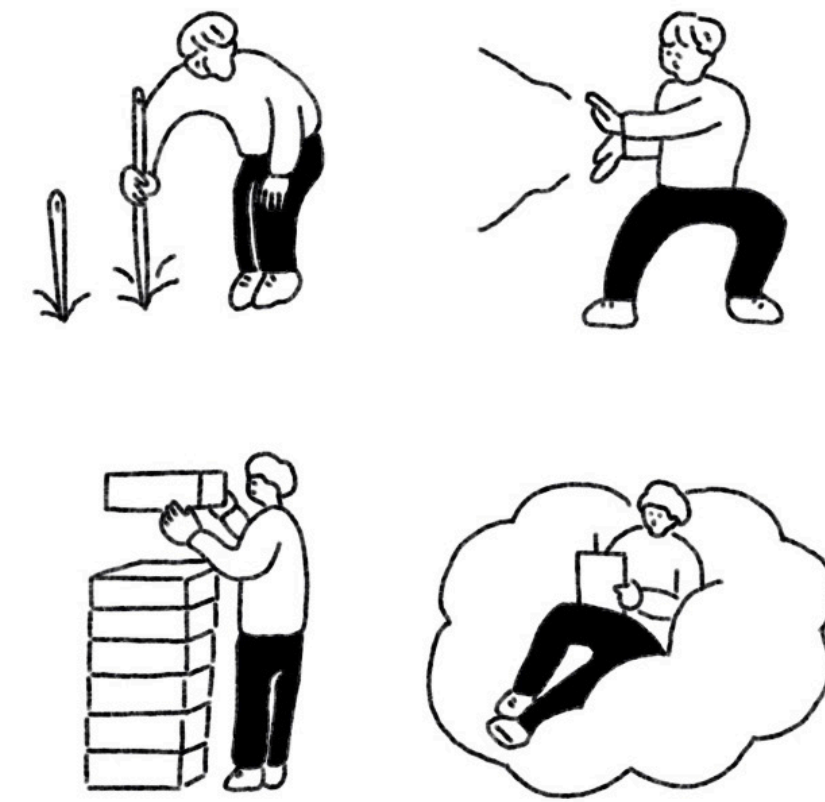
15

*Think Out
of Box*



16

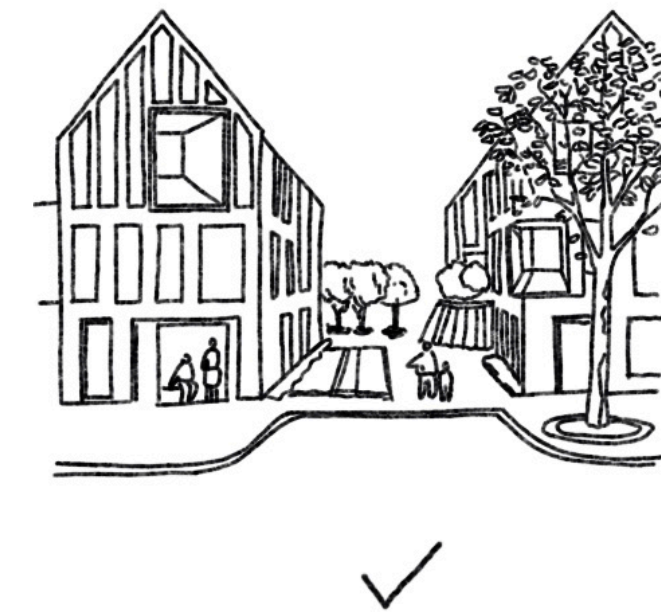
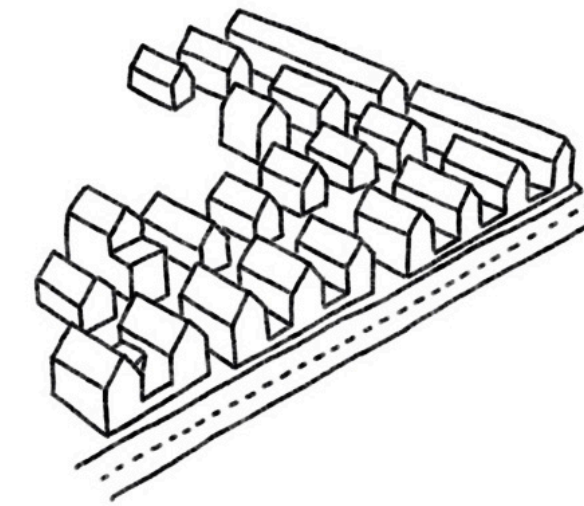
Interact with Environment



17

Design from The Eye Level

*"Think how people look from their
streets and windows"*
— Ulf Hackauf



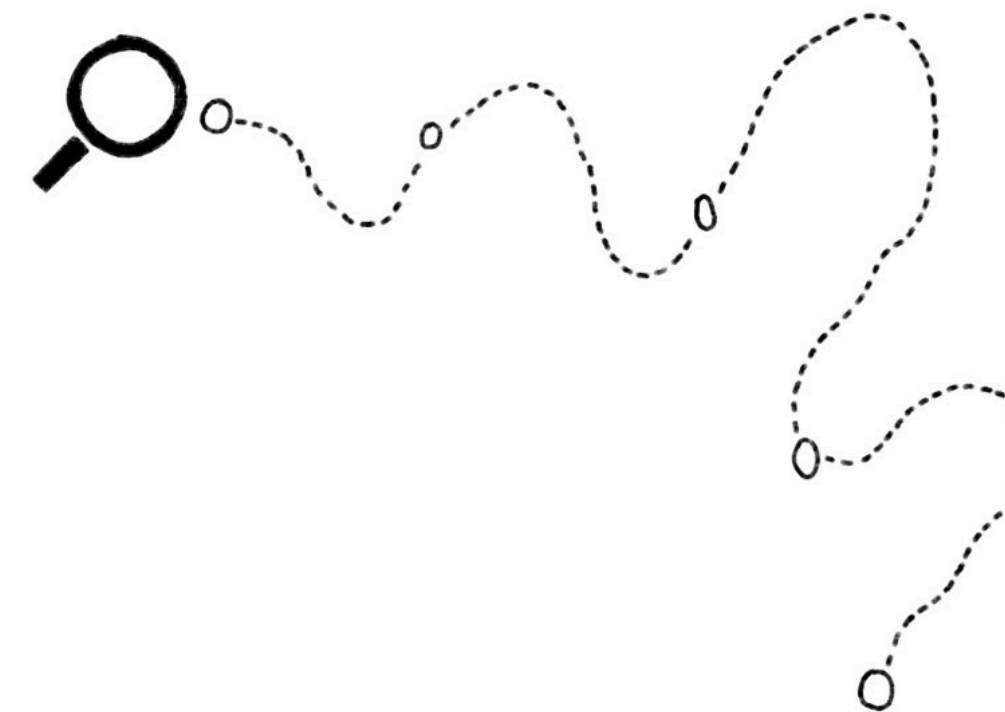
Research

18

Investigative Research

*"Mine most information before
intervene, define the greatest
potential or biggest problem to
inform design decisions."*

— Bjarke Ingels



19

Post Research Questions



20

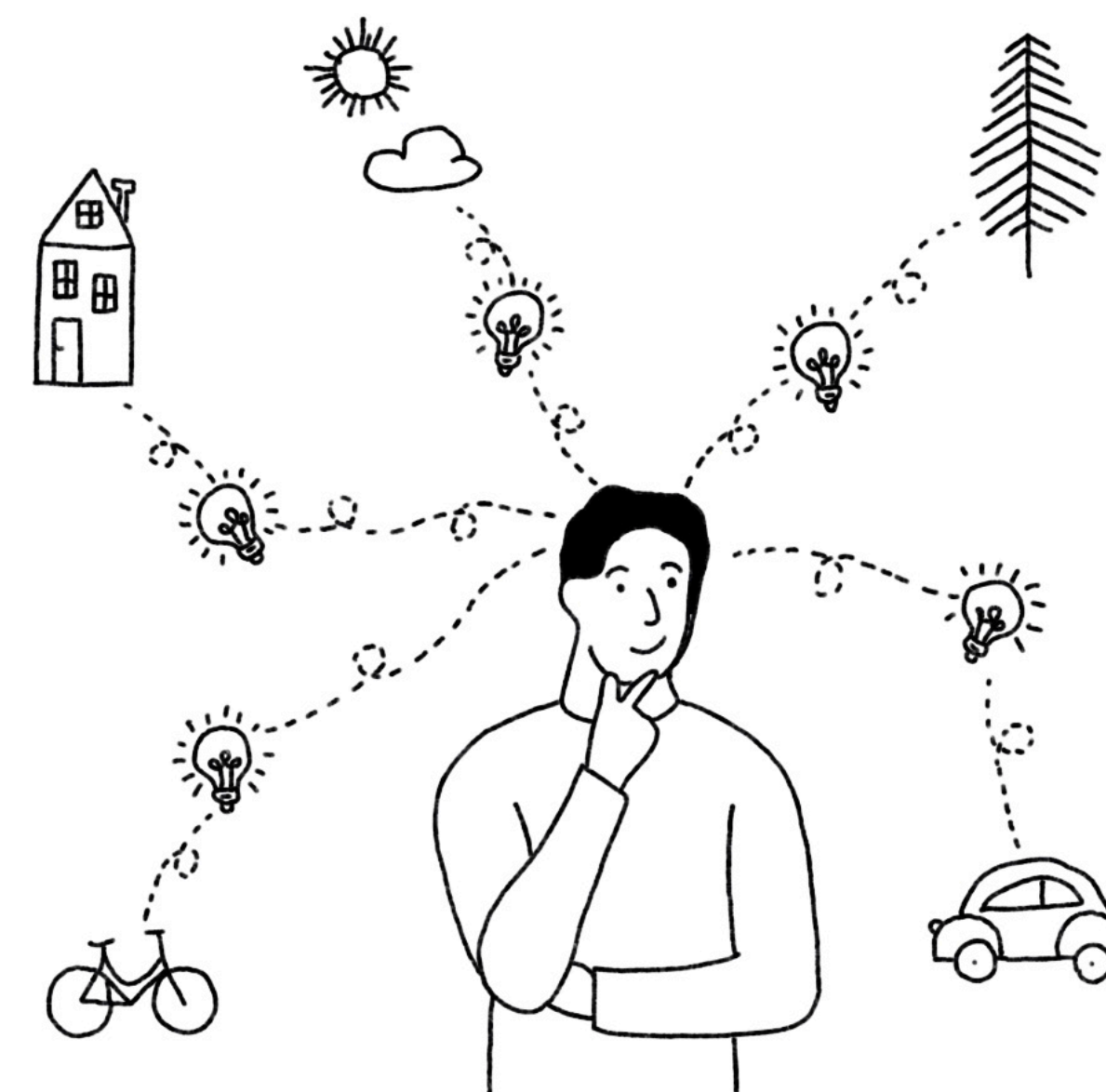
"What If?"

Think of scenarios.



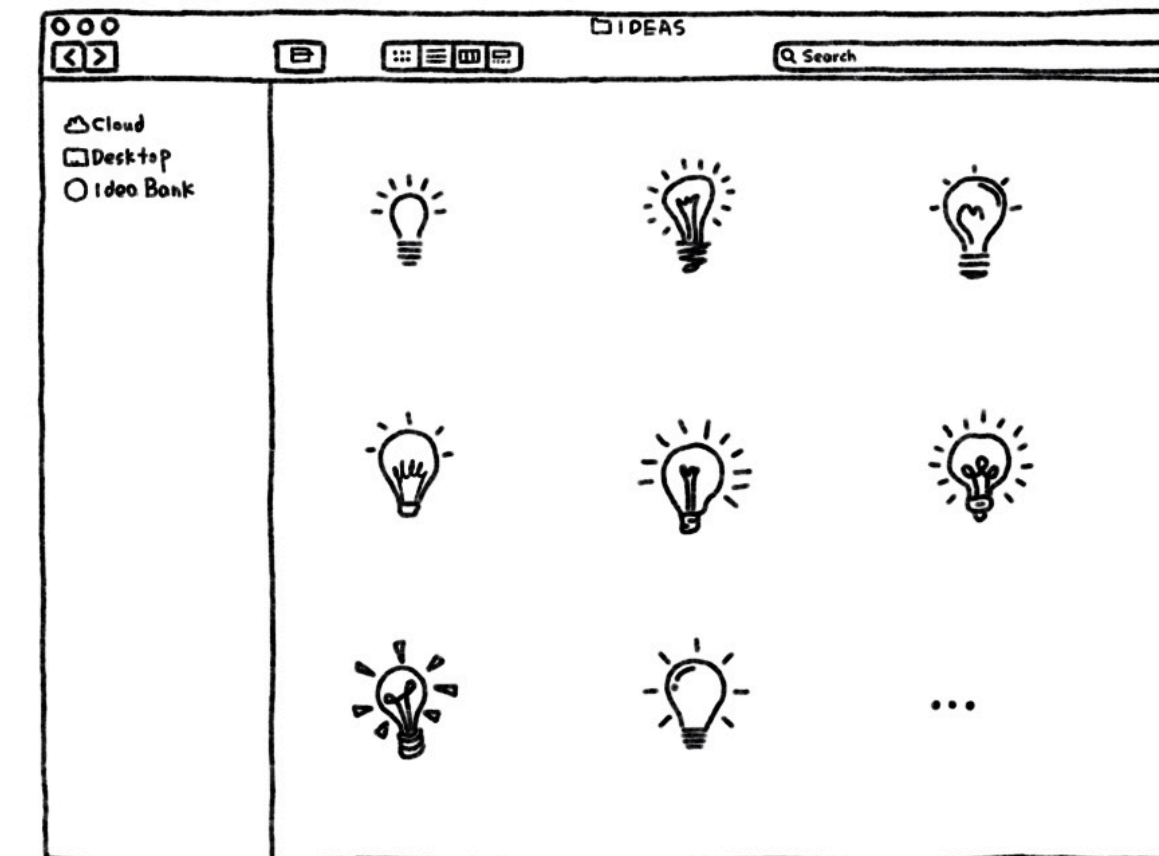
21

Find Ideas



22

Build Idea Bank as Toolbox



23

Evaluation & Assessment

"The quality we want to achieve should be regarded as evaluation tool for later design."

— Ulf Hackauf

Hand-drawn sketch of an "Evaluation Table" form. The form is titled "Evaluation Table" and includes a small table with four rows and two columns. The first column contains smiley faces, and the second column contains empty lines. To the right of this table is a pencil icon. Below the title, there is a section labeled "Notes" with a large empty box for writing. To the right of the "Notes" box is a table with eight rows and four columns. Each row contains four smiley faces (two happy, two sad).

23

Evaluation & Assessment

"The quality we want to achieve should be regarded as evaluation tool for later design."

— Ulf Hackauf

The sketch shows a hand-drawn 'Evaluation Table' and a vertical scale. The table has a header 'Evaluation Table' and a small pencil icon. Below the header is a table with 4 rows and 4 columns. The first column is labeled 'Notes' and contains 4 rows of horizontal lines. The other three columns contain smiley face icons (happy, neutral, sad). To the right of the table is a vertical scale with numbers 2 through 17. A small circle is drawn at the top of the scale, and a line is drawn from the circle down to the number 17.

Evaluation Table			

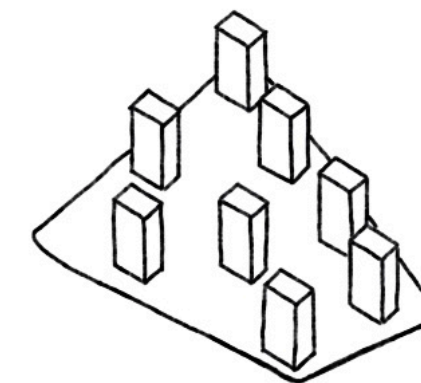
Notes:

2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

24

Volume Study

Site Area: 48,000m²
Required FAR: 2.5

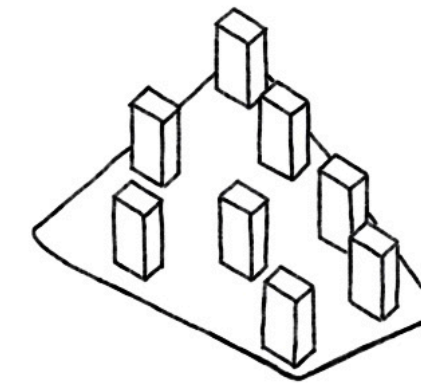


25 Layers Tower

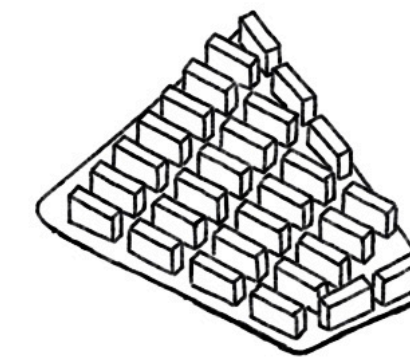
24

Volume Study

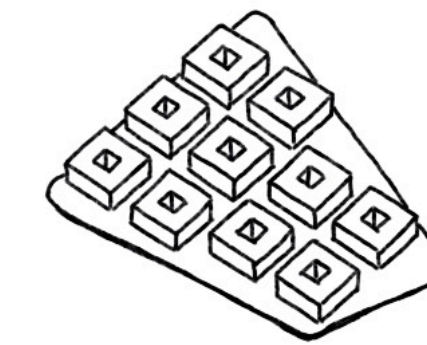
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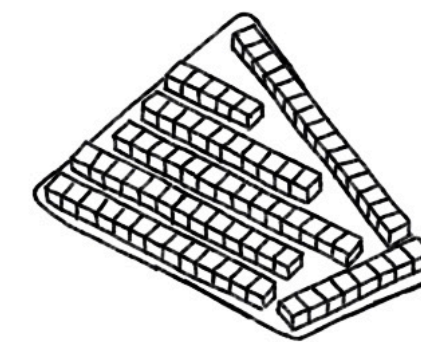
25 Layers Tower



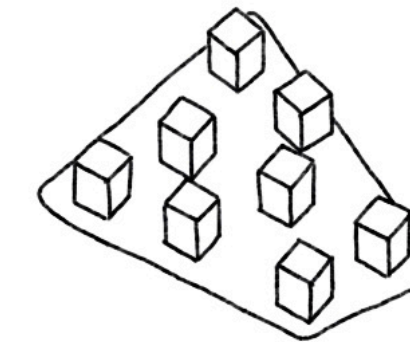
11 Layers Slab



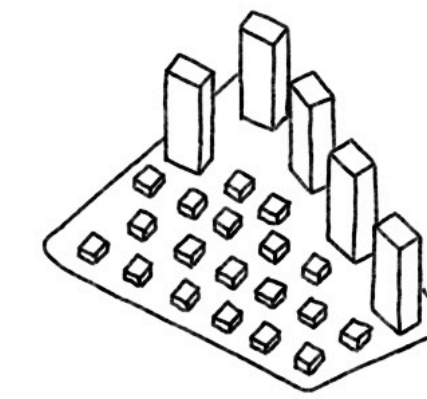
7 Layers Courtyard



5 Layers Row House



15 Layers Fat Tower



Big Highrise + Villa

25

Scale Comparison



Shanghai

25

Scale Comparison



Shanghai



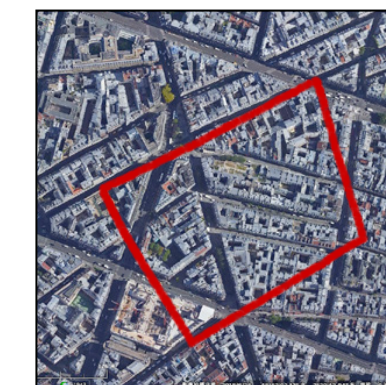
Shanghai Bund



Beijing



NYC



Paris



Tokyo



Barcelona



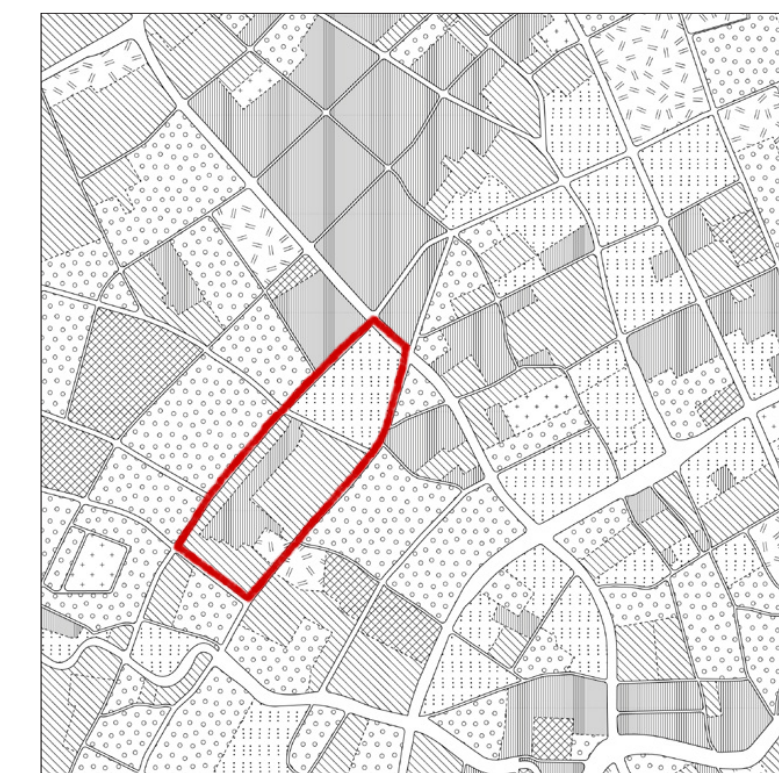
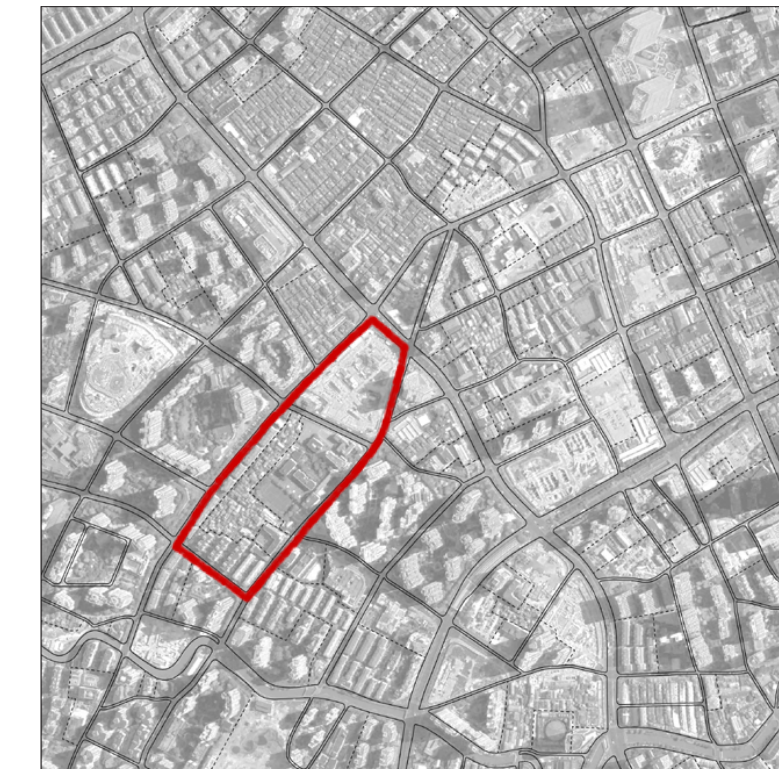
Amsterdam



Delft

26

Typology Study



- Plot Typology
-  Litong
 -  High Residential
 -  High Office
 -  Slab
 -  Big Building
 -  Low Density

27

"4 Types of Drawings"

Water in Shanghai



Communication

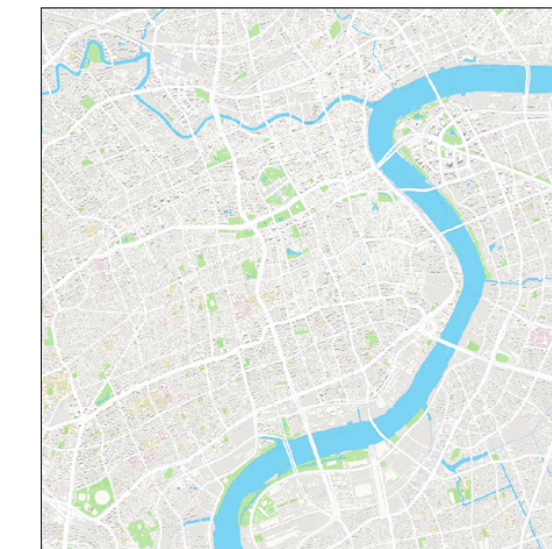
27

"4 Types of Drawings"

Water in Shanghai



Communication



Interpretation

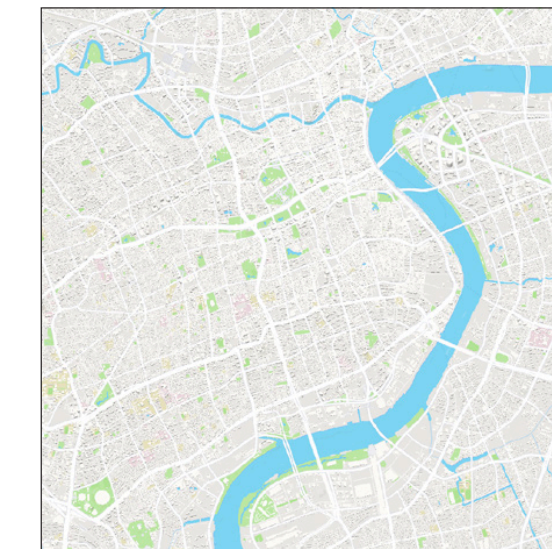
27

"4 Types of Drawings"

Water in Shanghai



Communication



Interpretation



Reduction

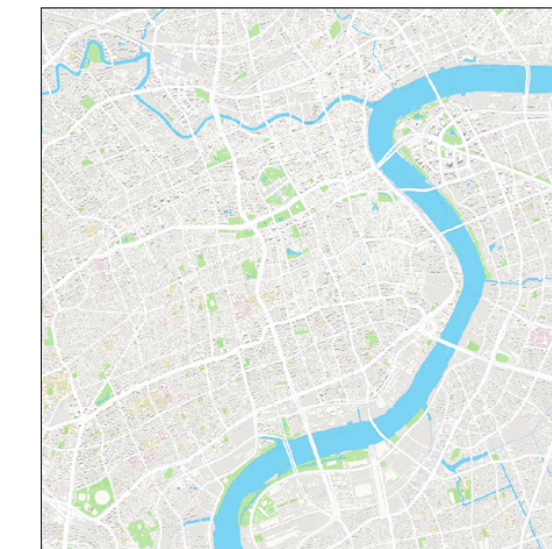
27

"4 Types of Drawings"

Water in Shanghai



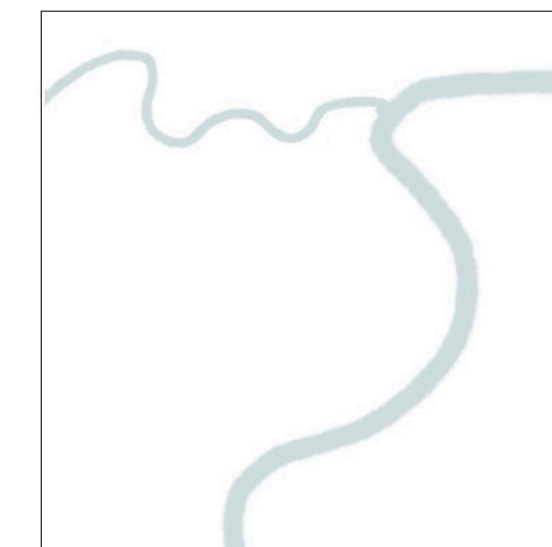
Communication



Interpretation



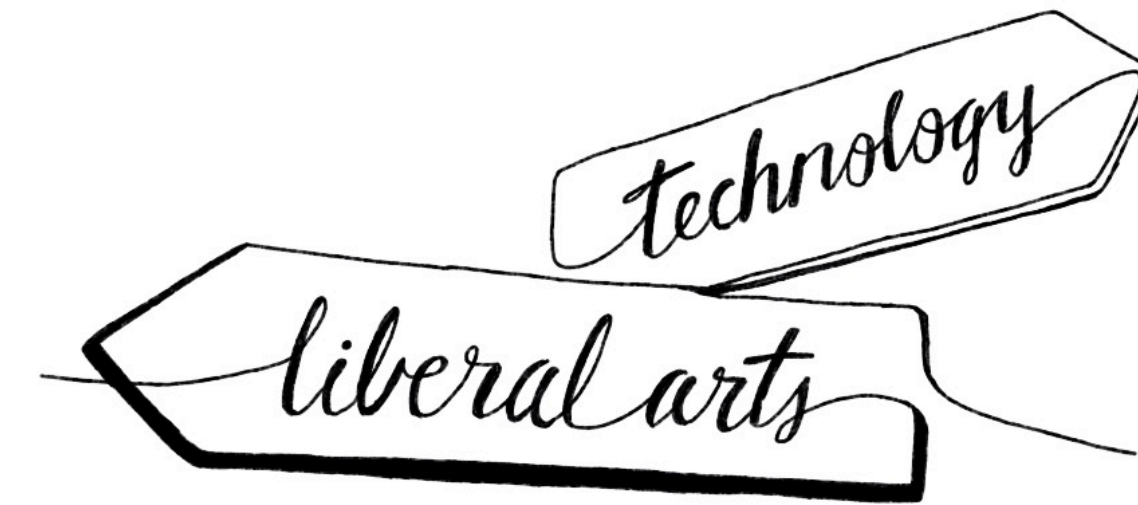
Reduction



Abstraction

28

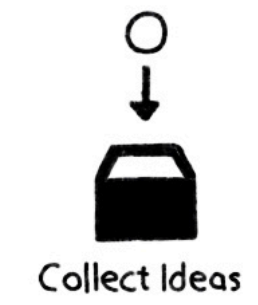
Technology
Serve Humanity



Presentation

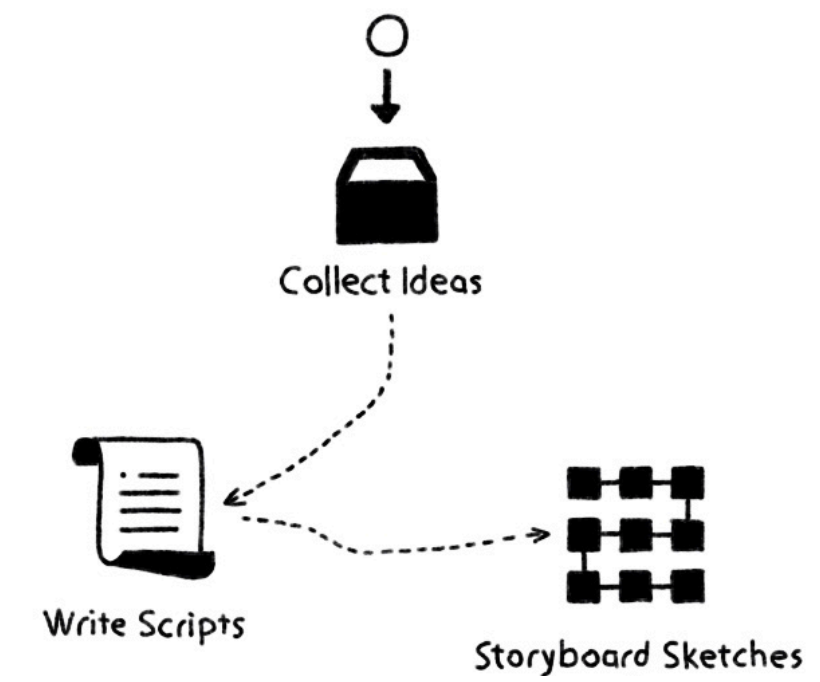
29

Presentation Preparation



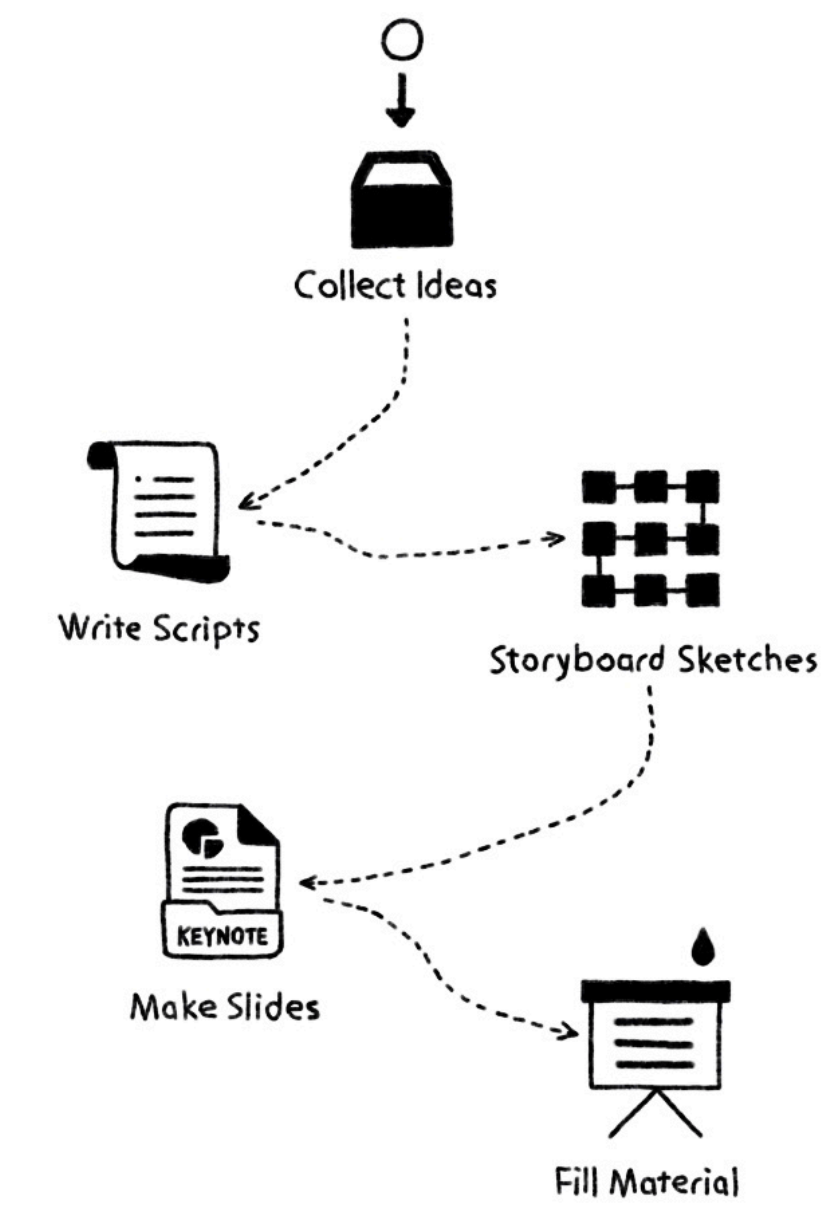
29

Presentation Preparation



29

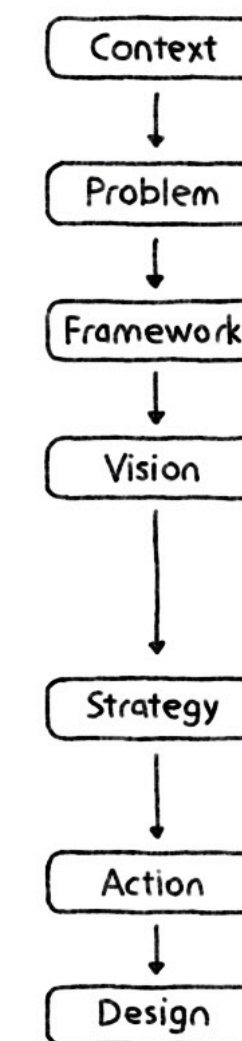
Presentation Preparation



30

"Build a story"

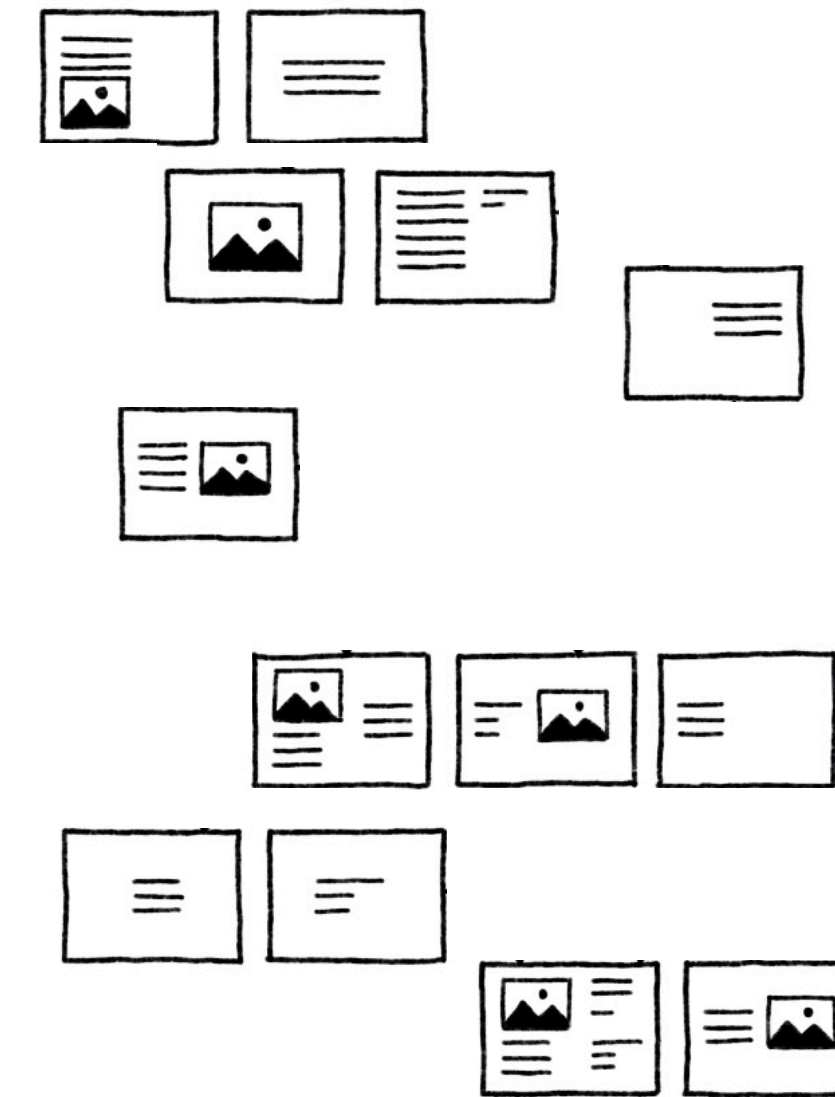
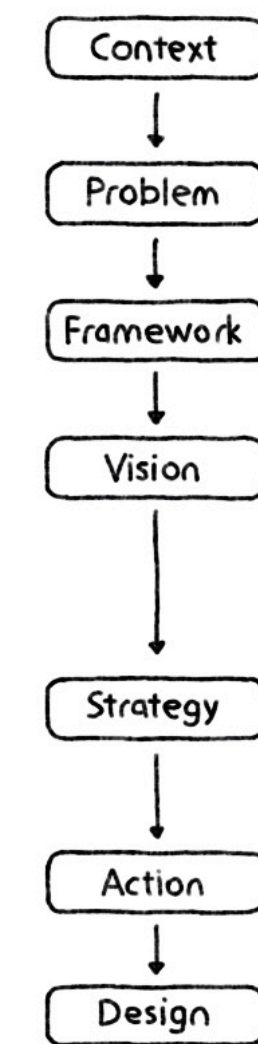
*"There is no objective truth in
design, only good or bad stories."
— Rients Dijkstra*



30

"Build a story"

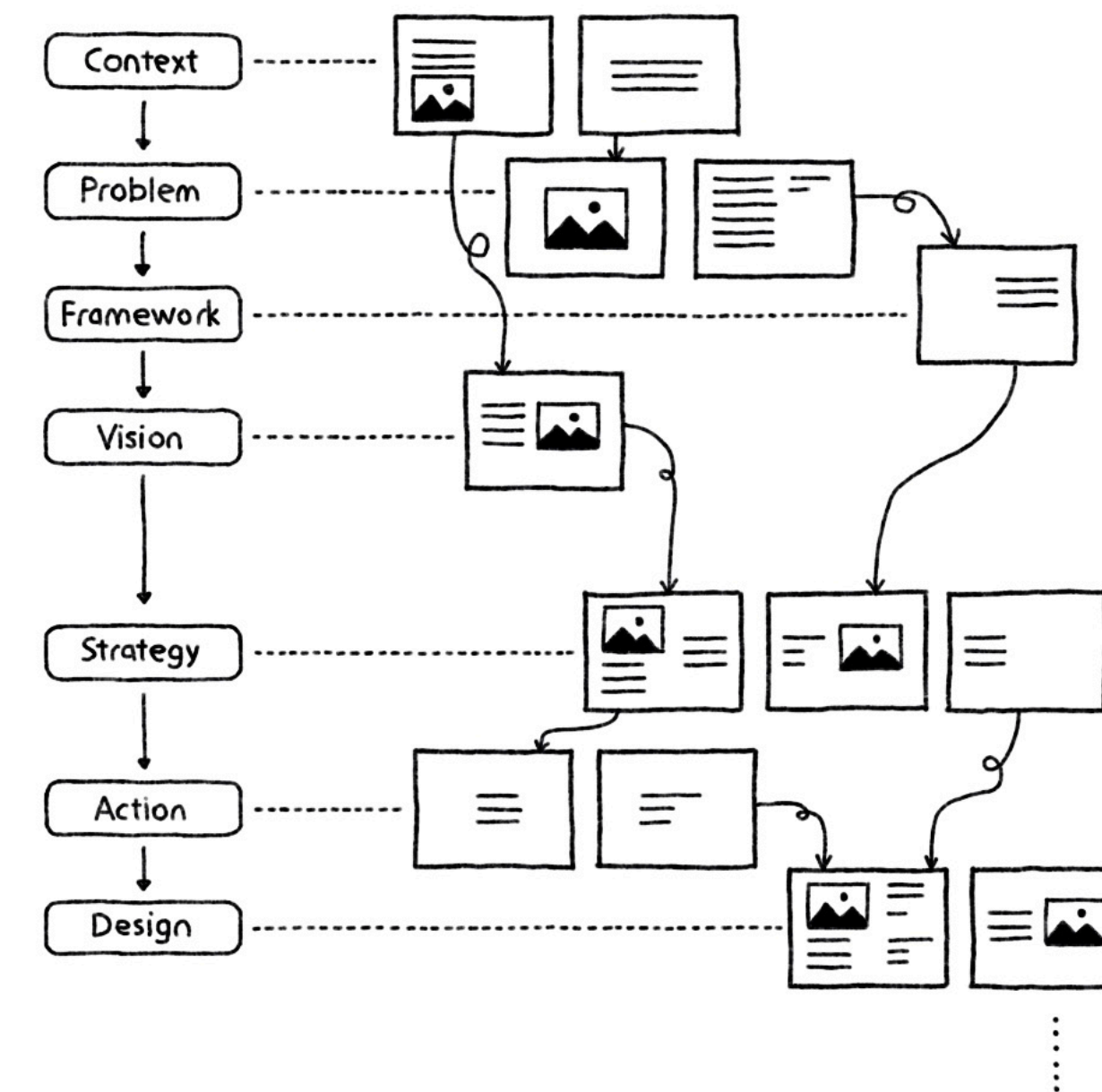
"There is no objective truth in design, only good or bad stories."
— Riens Dijkstra



30

"Build a story"

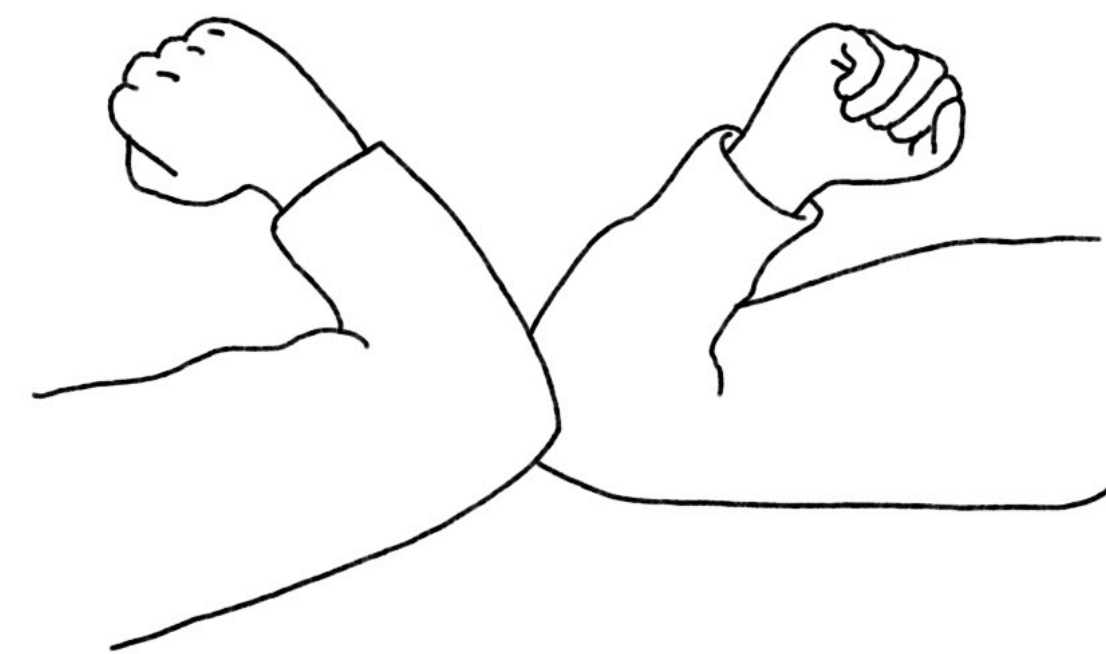
*"There is no objective truth in
design, only good or bad stories."
— Rients Dijkstra*



31

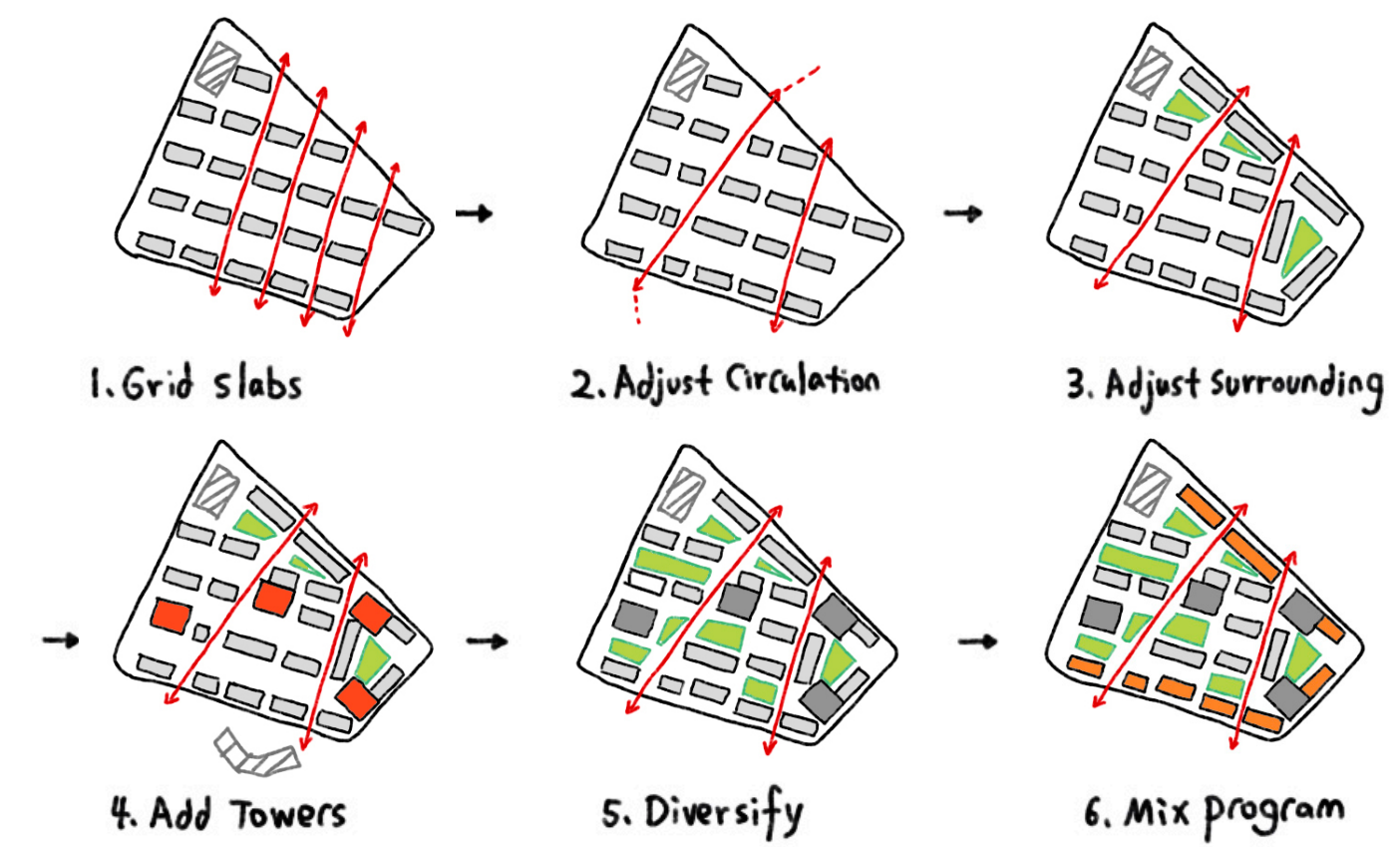
"Build Trust"

— Rients Dijkstra



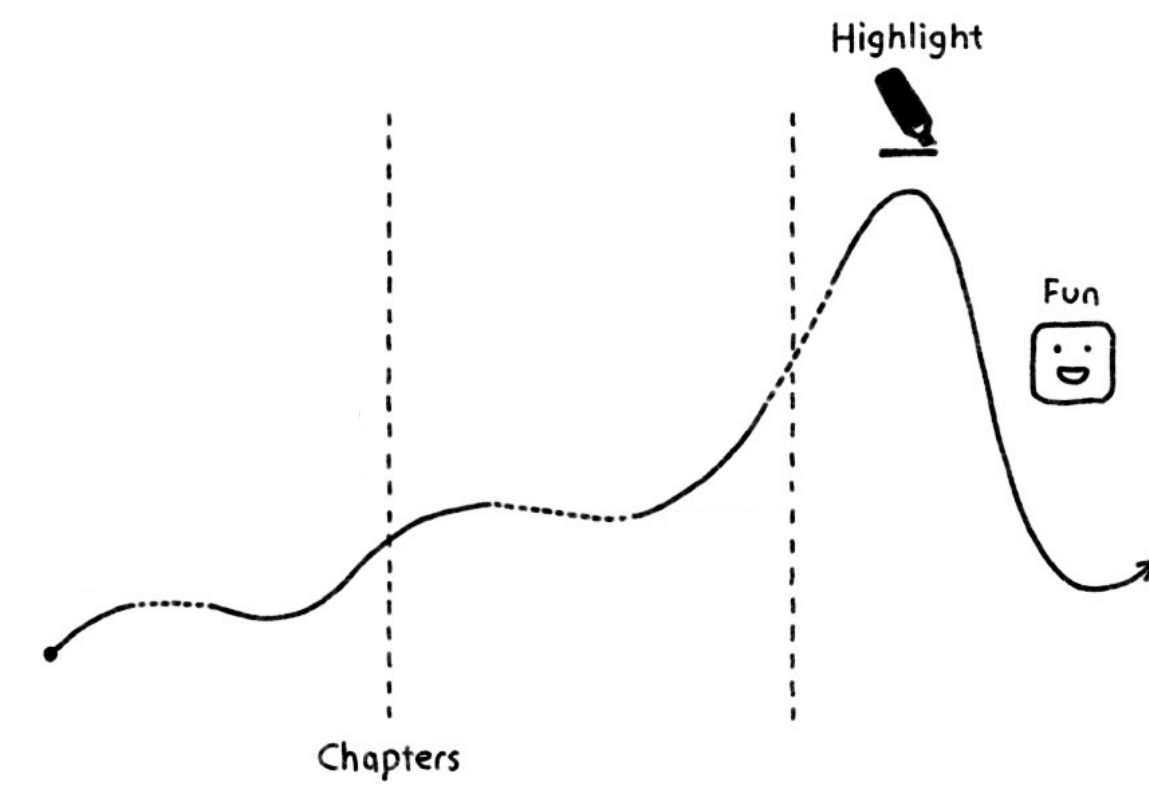
32

Step Story



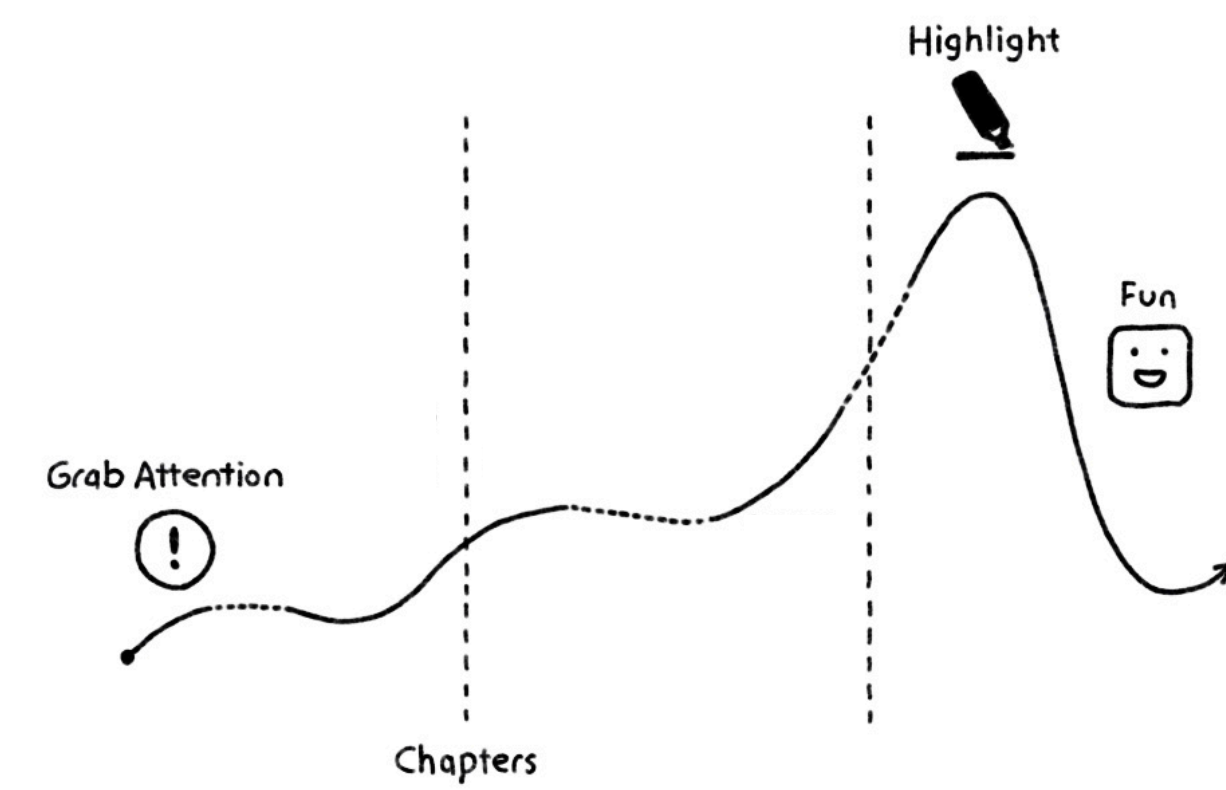
33

Fluent Presentation



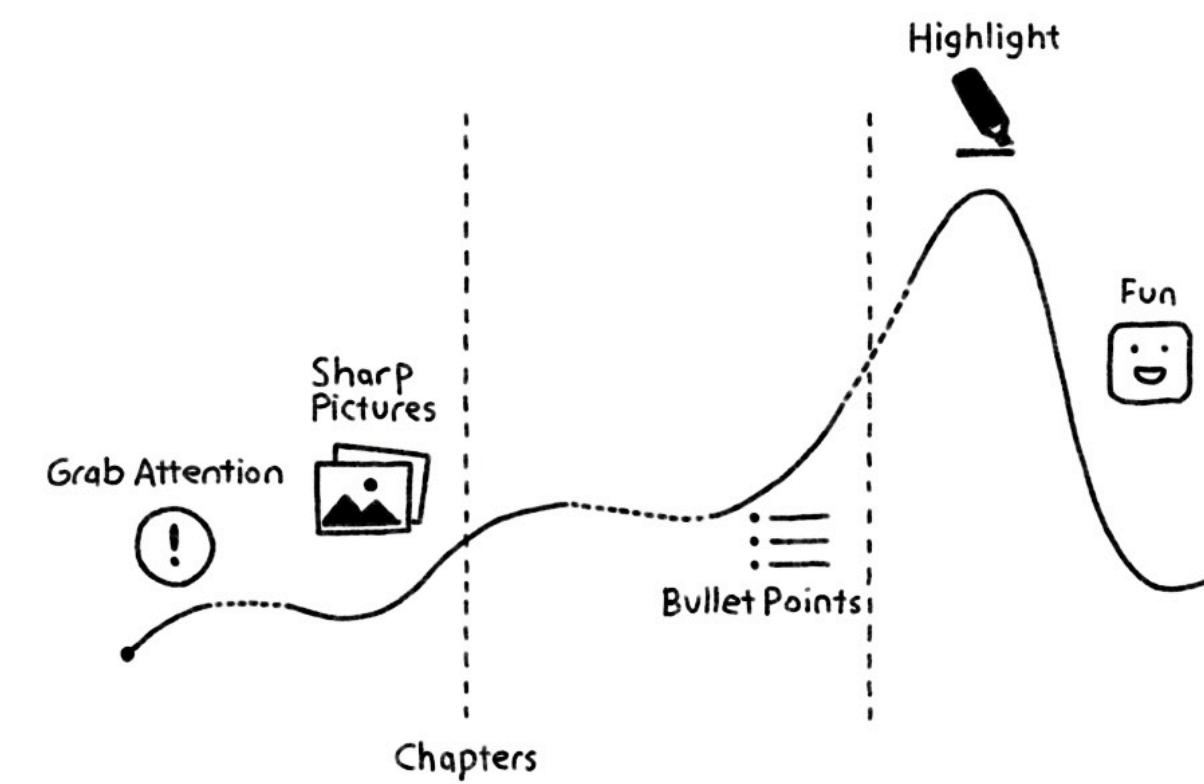
33

Fluent Presentation



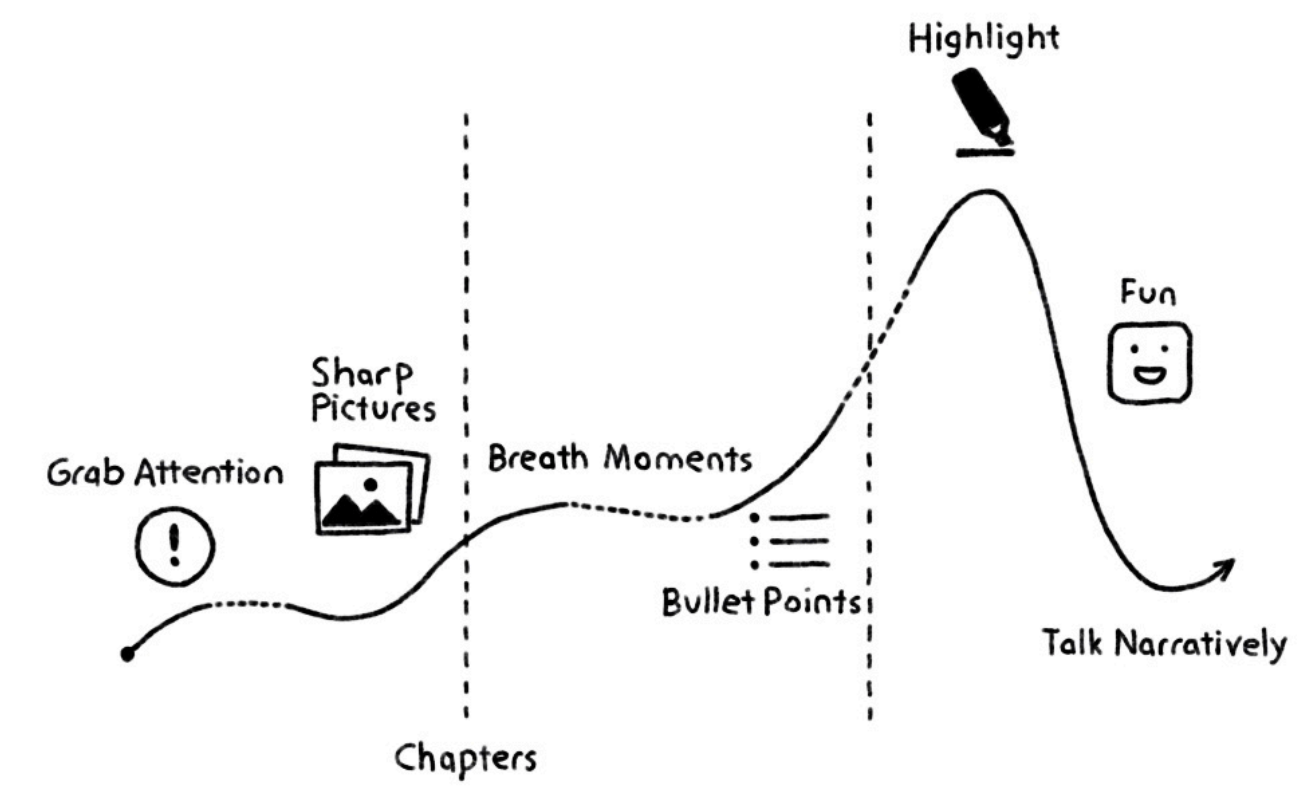
33

Fluent Presentation



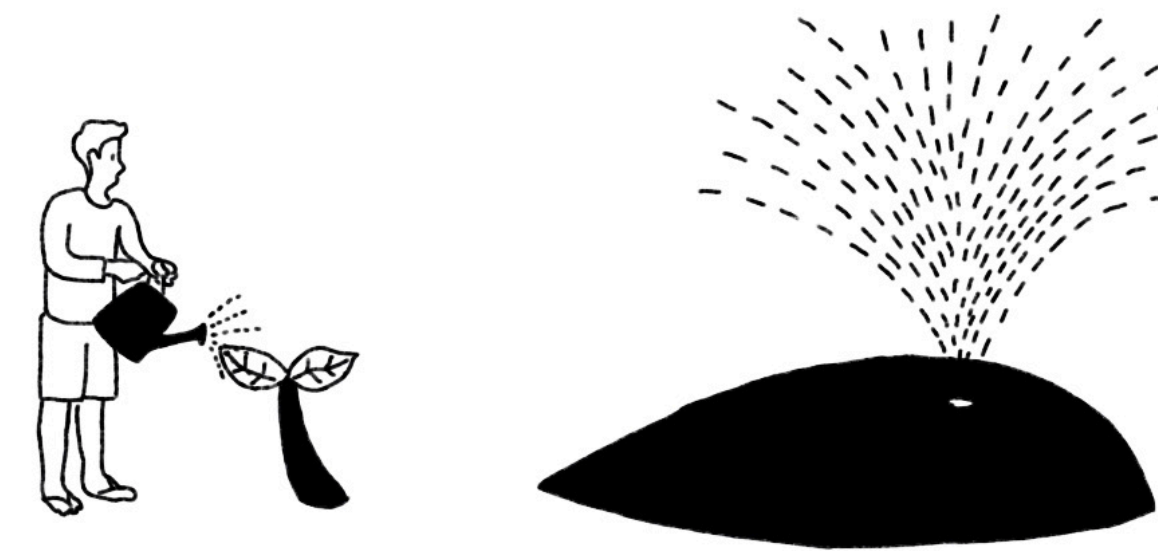
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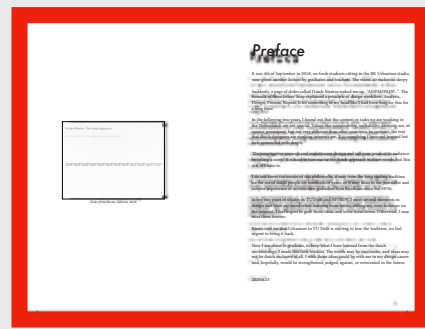
Fluent Presentation



34

*"Play with The
Expectation"*





1



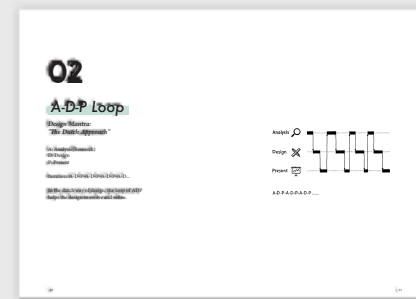
2



3



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5



6



7



8



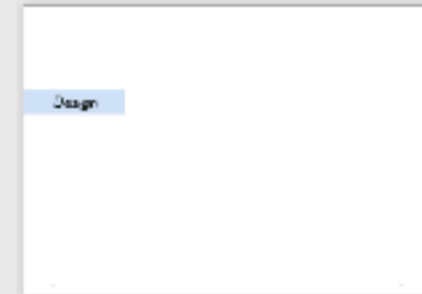
9



10



11



12



13



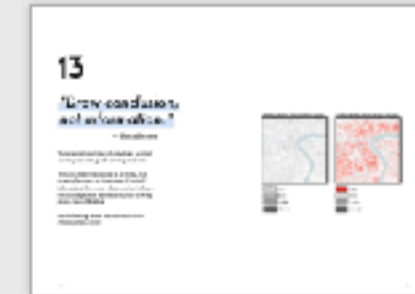
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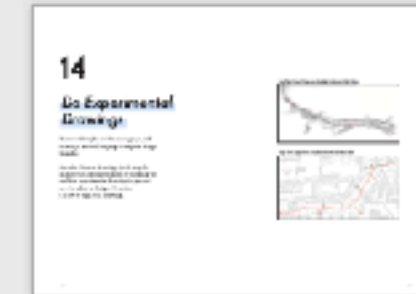
15



16



17



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27



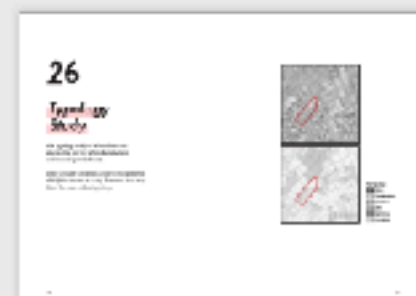
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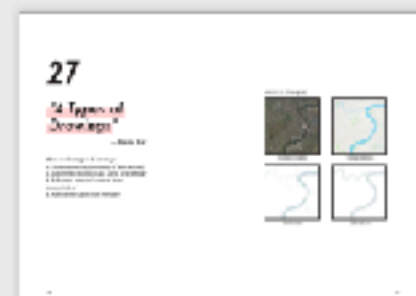
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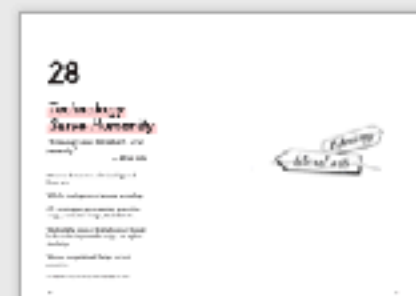
30



31



32



33



34



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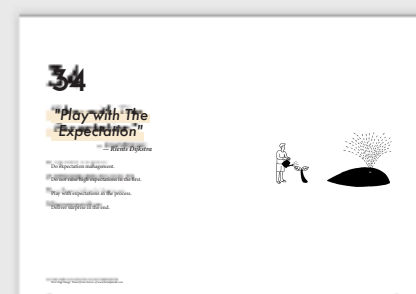
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Preface

Design Mantra : The Dutch Approach

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Slides from Rients Dijkstra, 2018

MixCity

Investigative Research & Evolutionary Design on Mixed Densification in Shanghai's Living Neighbourhood

Thank you!

Graduation P5 Presentation

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Design for Urban Fabrics

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