

해석 된 지문

LANDSCRIPTS INTERPRETED

CONTEXTUAL REGENERATION OF A COMMUNITY
IN THE OUTSKIRTS OF SEOUL



CAMILLA VÄSSMAR FRICK

Master Thesis | Spring 2018
Examiner | Daniel Norell
Supervisors | Kengo Skorick & Jonas Lundberg
Department | Architecture and Civil Engineering
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THANK YOU

H-Sang, for your endless generosity, all the great opportunities and every wise word.

Mladen, for pushing me harder than anyone as well as making me laugh - a lot.

Kengo, for being so supportive and inspiring - and funny.

Jonas, for being so positive and calming.

Aknur and Nico for making the first part of this journey so much fun and creative. I could not have asked for a better team.

Everyone in the studio, you made the stale air and the lack of sunlight bearable.

My family and friends, for always being there and believing in me.

and

Ossian, for supporting and loving me through all of this. It wouldn't have been possible without you by my side. As always.

ABSTRACT

The urbanization in the world is higher than ever and it becomes especially apparent in a city like Seoul, capital of South Korea. In 1955 the inner city was home to about 1.6 million people and just 40 years later, it housed over 10 million residents (Kim, S.-H., 2016). In order to accommodate this many people in synchronization with escalating land prices, traditional low-rise neighborhoods following the mountainous landscape have been demolished and replaced with mid- to high-rise typologies with little or no regard for the topographical situation. Due to this continuing and fast paced strive for hyper-density, Seoul has lost parts of its cultural and architectural heritage which has left many inhabitants without the opportunity of experiencing an intimate and connected community.

Nevertheless, in 2014 when Korean architect Seung H-Sang was appointed the first city architect of Seoul, he initiated a paradigm shift in which to re-establish the city's architectural identity. With the word *Landscape*, Seung inspires regeneration rather than replacement by extracting key characteristics from the existing context when densifying (Seung, H-S., 2016). In line with this methodology, this thesis aims to research ways of learning from the contextual, cultural and communal identity of a low-rise neighborhood in order to utilize the found qualities in a new, denser design.

Hope Village, a village in the northern outskirts of Seoul has been neglected by the municipality for many years, hindering both renovation and development, which has resulted in many residents leaving their homes. However, the people that still live there take pride in their community and the unique atmosphere that remains. They find privacy in their small dwellings, yet meet and socialize in the narrow roads separating the buildings. Though these informal gathering spaces average 1.5-2 meters in width, the residents use them as communal spaces to socialize, for markets where they grow, prepare and sell food as well as performing everyday chores.

By mapping the identity of the village, which by extension is its community, through contextuality, usability and intimacy, the objective is to implement the findings in a new design which suits the village's current and future residents. By keeping the narrow roads where the communal life currently takes place while adding four to five story buildings following proportions of the existing buildings footprints, using the steep topography to connect them horizontally and opening up the ground floors to blur the border between private and public, a new, denser design will allow a community to prosper. The key is to not forget what once was there but to enhance the possibilities of the old as well as allowing the new to define its own identity.

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STUDENT BACKGROUND

1.1

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EDUCATION

Master of Architecture
Chalmers University of Technology, Gothenburg, 2017-2018
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Bachelor of Architecture
Chalmers University of Technology, Gothenburg, 2011-2013, 2014-2015

EXHIBITIONS

Seoul Biennale of Architecture and Urbanism, Seoul, 2017
Landscapes for new communities: Seoul via Vienna, Seoul, 2018

WORK

what! arkitektur, Gothenburg, 2013-2014, 2015-2016

CREDIBILITY

I believe that my previous work in this context (see Appendix), having spend considerable amount on the site and met with residents of the village has given me an excellent opportunity to work further on the subject. I am however aware that me being an "outsider" naturally comes with many challenges, though I believe that my objective outlook allows me to design something unique and exciting for the future of Hope Village.



INTRODUCTION

1.2

In the 1960's, when Seoul started to expand at an enormous speed, most of the single family houses in downtown were replaced by expensive high-rise apartment buildings and the residents were pushed out of the city center. They were relocated to areas in the periphery where land was much cheaper. The site of focus in this thesis is a village which was created under these circumstances.

Hope Village, in the northeastern outskirts of Seoul, about 30 minutes by subway from the downtown, is a village that was built in the early 1960's by the residents themselves. As they were pushed out of the city center, each family was allotted a plot about 5x5 m in size on which they could build their new house by their own bare hands. On a low budget, they used local, sometimes reclaimed materials in order to build their home of about 20-25 square meters in size. These small dwellings have really stood the test of time. Today the village is almost completely discarded and only a few residents remain. However, the expansion of the city has caught up with its periphery and the government is now looking to redevelop the area into a Class 2-residential area (Seoul Solution, 2012). This means that they are looking for a density of FAR 250% and a BCR of 60% (KIM, S.-H., 2016). The city plan to develop the village in the same way as many other similar villages in the same situation - replacing the low-rise buildings with about 40 story apartment buildings without any consideration for neither cultural, historical, communal or topographical context.

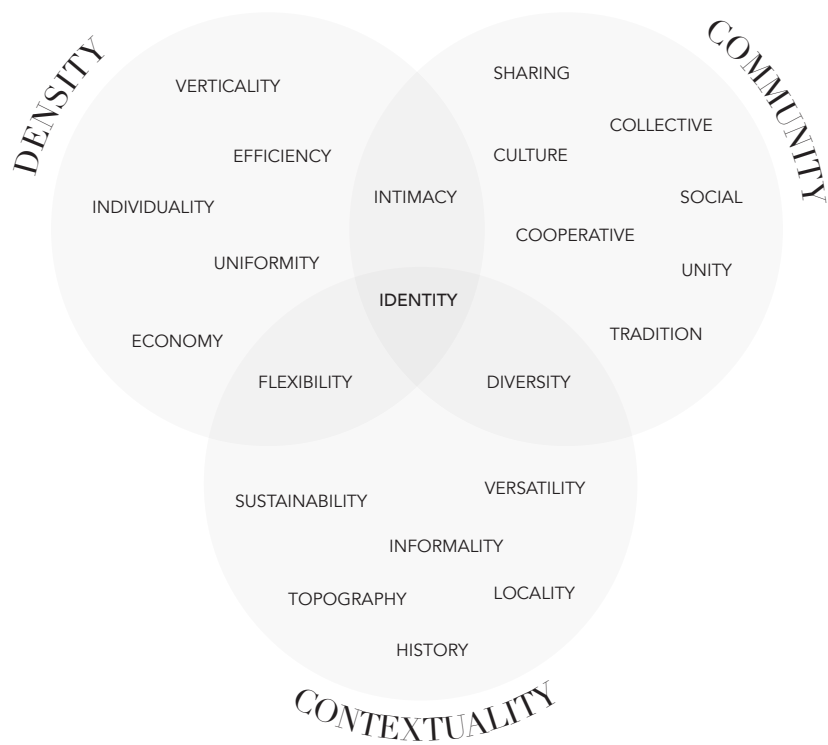
When discussing the topic of densification, it is easy to end up in an urban scale since one is facing many challenges at this level. However, this thesis does not focus on the large scale of numbers and simple white building volumes. The aim is to zoom into the spaces between the buildings by mapping out and keeping the identity of the village and figuring out how it affect people's way of living. By designing the in-between spaces and letting the buildings become a consequence of these, the focus is to create unique and varying spaces for the typical korean way of living, work out the best way for optimizing sunlight through facade adjustments as well as finding horizontal connections for movement through public and private space. By looking for building elements, techniques and materials that speak for themselves as well as their cultural and contextual values, the aim is to find ways to stay closely connected to the topographical context as well as the immediate surroundings and the essence of the village that is being replaced.

Keywords: *Community, Informality, Privacy, Topography, Road, Orientation, Daylight, Materials and Proportions.*

◁ *Hope village facing high-risers in the south, August 2017.*

DISCOURSE

1.3



PURPOSE

1.4

If the city of Seoul were to develop the village in the same fashion it has been doing for decades, by replacing every single low-rise building with medium-to high-riser apartment buildings, the result would most likely be that the existing topography, atmosphere and community would be erased. The surrounding areas are living proof of this. High-rise buildings stand far apart, like lonely islands in a sea of wide, high-speed roads and hardly no place for people to interact with one another. And even though there are traces of some playgrounds, shops and restaurants, they are too spread out to accumulate any sense of community.

This thesis aims to prove why this way of extreme densification with no regard for communal life is not the right direction to go in and to show an alternative solution where a density of 250% FAR (as requested by the government) can be achieved while keeping and preferably even enhancing the communal life and cultural context.

THESIS QUESTIONS

1.5

What is the identity of the village and why is it important to keep it?

How can the existing contextual, cultural and communal qualities of an informal village be implemented in order to keep the identity of the village while densifying?

How can a village be redesigned from the outside-in, focusing on the communal, in-between spaces and let the private buildings be formed as a result of them?

“Density has nothing to do with the volumetric exploitation of the city. It is not a question of fitting in as many homes as possible. It is not a question of reducing voids. If you do that with buildings, it won’t be for the sake of density, it will be for the sake of speculation and the result will be slums, as history has proven already.”

- Fernández Per, et al., 2015



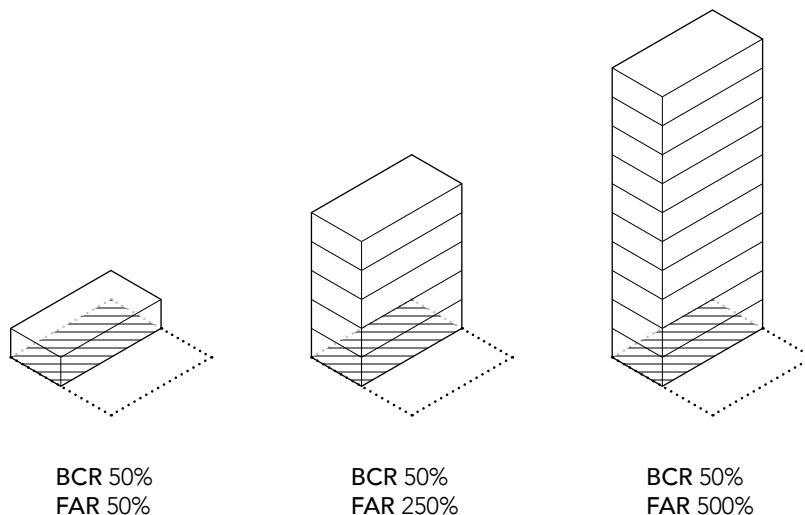
BACKGROUND

1.6

Seoul is a hyper-dense city with about 10 million inhabitants. It is a city that has expanded at an enormous speed and has had a hard time to keep up with being able to house all of its residents. Since 1962 the GDP per capita has risen from \$100 to more than \$30,000 and land prices has multiplied more than 680 times, although real transaction prices are higher than the official prices, sometimes as much as the double. In 2015 a prime location plot in downtown Seoul cost \$80,000 per sqm. This means that on average land prices consist of more than half of the total construction costs and ultimately the built floor area is the land verticalized¹. (KIM, S.-H. et al, 2016).

This trend has led to the city expanding not only horizontally around the edges, but also vertically where most of the low-rise buildings making up the inner city, has been replaced by apartment buildings. The very first apartment complex in South Korea, containing only 642 units was built in 1962-64. By 2006, 45% of South Korea's entire population at the time, about 20 million people, lived in apartments (Thun-hoheinstein, C. et al, 2014). This shift in living standard has had a large impact on how most Koreans live their lives.

The name of the densification "game" is called FAR, which stands for Floor Area Ratio (built space in relation to the plot it is built upon) and is by far (no pun intended) the deciding factor when it comes to new development in South Korea. It essentially means that it is not only the two dimensional space (BCR - Building coverage ratio, which stands for built area of plot, also known as COV) that is regulated but also the three dimensional space, i.e the volume one can build. See Figure 1.



△ Example of how a higher FAR can be achieved by building more floors while keeping the same BCR.

◁ Sanggye-dong, Seoul. Neighboring context of Hope Village, August 2017.

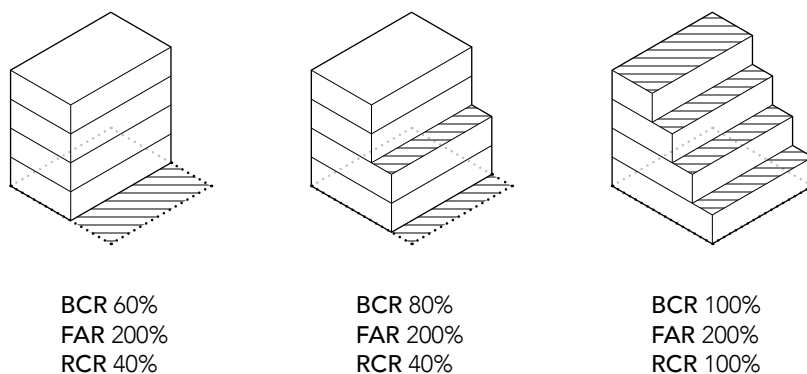


BACKGROUND

The FAR game means that while most land owners seek to maximize the built space in relation to the site, there are regulations according to the Zoning Designation which limits how much one can build in each particular zone. For example, one may not build more than than 60% BCR and 250% FAR in a Class 2-residential zone while one may build up to 60% BCR and 600-1000% FAR in a Commercial zone. This is regulated by the government in order to see to the qualities of the urban fabric.

In theory, this way of regulating built mass should be a good thing, but in combination with hyper-densification and rising land prices, the desire to maximize FAR is predominating above all other considerations. However, after the global crisis in 2008 a new trend has started where the "FAR game" is being played in a different way. The new economic reality in combination with a shift in demographics (less children are born and young people seek single households) is pushing new and innovative ideas of typologies and smart solutions that may not only benefit the urban fabric but the residents living situations as well (KIM, K.-M., 2016). At the same time, apartments has become harder to sell, prices have dropped and sellers have started to emphasize "lifestyles" such as eco-friendliness and community life to attract remaining buyers. While other ways of living, such as compact urban dwellings and suburban single-family houses has become more popular, architects have also started to take an interest in public housing and thanks to high-quality design, the negative perception of affordable buildings has been improved (KIM, S.-H., 2016).

Challenging the FAR game by prioritizing social and sustainable factors instead of merely economic profit, other, perhaps more suitable solutions can be found. Since most communal life in Korea take place in the spaces between the buildings, one idea is to maximize these spaces while still keeping the desired FAR. As mentioned before, BCR somewhat controls this indirectly, however not considering three dimensions. Introducing another term for this shifts the focus from just estimating the "left over space" by calculating built ground floor space. RCR, Road Coverage Ratio, is used throughout this thesis to assess the amount of publicly accessible spaces on several levels. See Figure 2.



△ Example of how to maximize RCR while keeping similar FAR.

◁ Thesis proposal of Hope Village where semi-public communal spaces can be accessed from all levels.

METHOD & THEORY

1.7

RESEARCH

Densification process in Seoul over the past century and regulations that has shaped the city of today.

Use of spaces in korean living, public and private.

ANALYSIS

Analyzing site through previous investigations and design proposals, site visits and interviewing current residents.

Mapping identity of the village through building typologies, plans, proportions, road network, topography, building materials, zoning of private and public spaces, daylight conditions, program and use of spaces.

EXPERIMENTATION

Sketches and models in various scale to investigate different ways to implement qualities found in the mapping of existing structures.

Simulating situations of daily life in order to stay close to how spaces are used by the residents.

Producing sections of road spaces to investigate varying situations and the qualities of them

APPLICATION

Combining findings of experimentation with locked parameters of density and certain design rules in order to come up with a proposed design suited for a regeneration of the village

DELIMITATIONS

1.8

The main focus of this master thesis is the identity of the village and how it relates to its immediate context in a relatively small and detailed scale. It will be dealing with the spatial qualities of the spaces in-between, such as the roads, courtyards and rooftops. It will not stay at an urban scale and look at the broad perspective of the entire city, nor will it go into such detail as to solving technical aspects of each building or its systems.

READING INSTRUCTIONS

1.9

This thesis aims to answer questions listed in subchapter 1.5 and through the design proposal in chapter 3 which is showing the implementation of experimentation in chapter 4 based on the analysis in chapter 2 influenced by references in chapter 5.

Following terms are used throughout the thesis:

FAR Floor Area Ratio = gross floor area / plot area x 100

BCR Building Coverage Ratio = built area of a building / plot area x 100

RCR Road Coverage Ratio = unbuilt area on all levels / plot area x 100

GFA Gross Floor Area = Built area on all levels (m²)

F Footprint = Built area on a plot (m²)

“Indeed, like our fingerprints and the lines in our palms, the memory of the past remain imprinted on all lands. As every fingerprint is unique, every piece of land has its unique pattern. Sometimes it is a pattern created from natural history, sometimes it is a pattern imprinted through the continuity of human life. This is the record and story of our lives written on the land. The land is thus a grand and noble book of history, and thus is precious as precious may be. Let us call this the landscript.”

- Seung H-Sang, 2009



LANDSCRIPT

2

DESIGN METHOD

WHAT?

Landscape is the word of which Korean architect Seung H-Sang defines his architecture. He uses it to describe the act of learning from the context in order to keep existing qualities of a site when building something new - the result being a regeneration rather than a replacement.

Examples of *Landscape* in Seung H-Sang's architecture:

- Commune by the Great Wall - Beijing, China, 2002
- Reviving the traditional Korean way of living - *Sujoldang, Seoul, 1992*
- Land and building become one - *DMZ Peace and Life Valley, Inje, 2006*
- Marking the footprint of destroyed buildings on the ground - *Qianmendajie Historical Area Preservation and Regeneration Plan, Beijing, 2008*
- Land and building become one - *DMZ Peace and Life Valley, Inje, 2006*
- Letting the surroundings define voids between new buildings - *Welcomm City, Seoul, 2009*
- Adjusting to the views and flow of the landscape - *Lotte Art Villas, Jeju-do, 2011*

WHY?

Since Korea, and Seoul in particular, has been heavily influenced by the Western way of building during the past century, many buildings do not reflect the fact that Seoul is a city within mountains. They have been built without considering the unique topography, as if they were placed on flat ground and thus become almost detached from the landscape and their surroundings (Seung, 2016). Furthermore, the influences of this foreign way of building has likewise affected the way Koreans live their lives. Since the city of Seoul used to be predominantly covered with tightly packed, low-rise buildings shaped around courtyards, the community was the most prominent core of most people's way of living. Though, since the city has undergone an intense period of densification with high-risers and other apartment buildings replacing old villages, the traditional communal life is today merely a shadow of its former self. Therefore, the idea of *Landscape* seems like an excellent strategy for bringing back the contextual and communal identity of Korean way of living into the city fabric.

HOW?

By mapping the existing site and its immediate surroundings, the aim is to define the identity of the village and to extract qualities and key characteristics. These will later be explored through design studies and further applied along with certain parameters of density in a new, regenerative design of the village.



Figure 1. Commune by the Great Wall. (IROJE Architects & Planners, 2001)



Figure 2. Commune by the Great Wall. (IROJE Architects & Planners, 2001)

DESIGN REFERENCE

2.1

COMMUNE BY THE GREAT WALL

Beijing 2001, IROJE Architects & Planners

Selected by Seung H-Sang as one of his works that best represent the idea of Landscipt. The 3,300 m² clubhouse facility is divided in smaller units to follow the mountainous terrain where the volumes project out from the mountain, creating a terraced landscape. The intention was to keep every single tree and thus the volumes are arranged around them. Decks and water ponds are designed to float out into the existing topography, "manifesting the original shape of the land". He describes the architecture not as an object but as a "landscape, a place where people gather within nature... a 'culturescape'". (Seung, H-S., 2016).

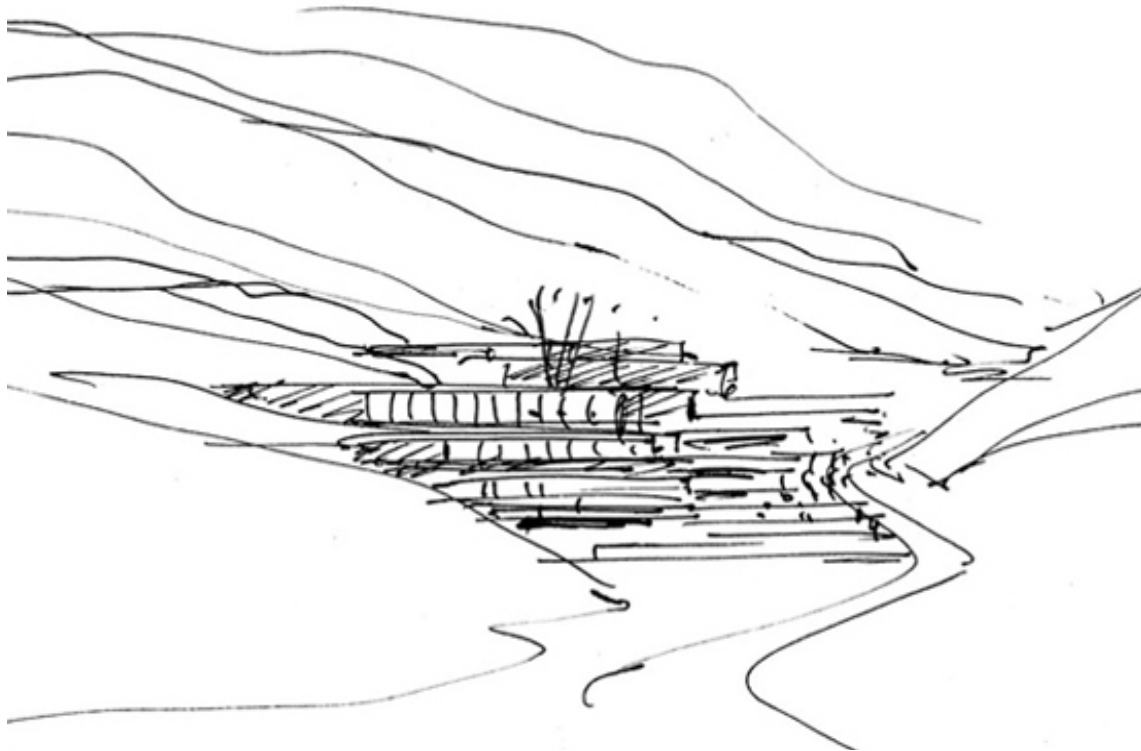


Figure 3. Commune by the Great Wall. (IROJE Architects & Planners, 2001)

METHOD SKETCHES

2.2



no hierarchy of roads

- + same function everywhere
- no variation to allow various functions
- same privacy level



irregular road space

- + interesting
- more costly



varying materiality

- + individuality
- + way to orientate



one story buildings

- + all accessible without stairs
- + all access to outdoors
- no privacy
- not very dense



protection

- + avoid sun or weather
- takes up road space



courtyards

- + multifunctional
- small
- not used the intended way



sloping terrain

- + outlooks
- + light
- + potential horizontal access through village
- not accessible from all sides



narrow roads

- + intimate
- + outlooks
- + light
- limited space for social interaction



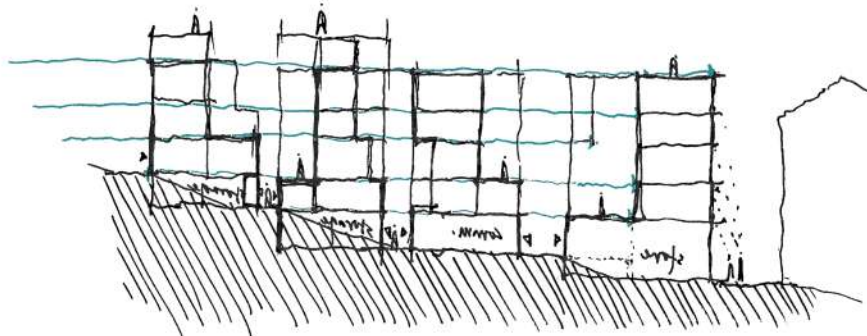
small windows

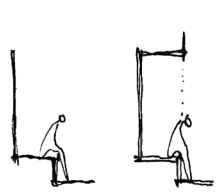
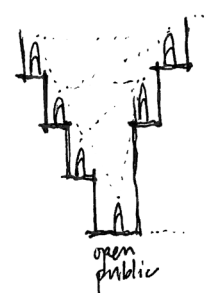
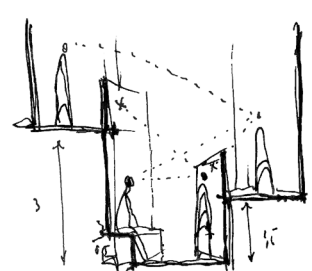
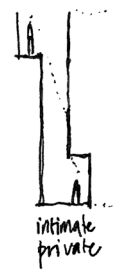
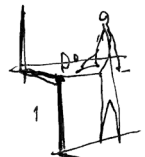
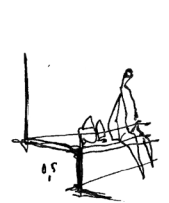
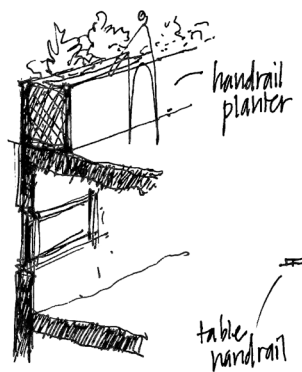
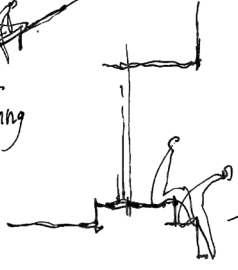
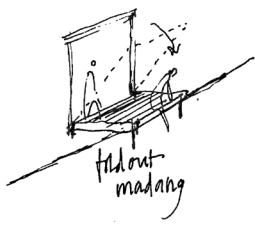
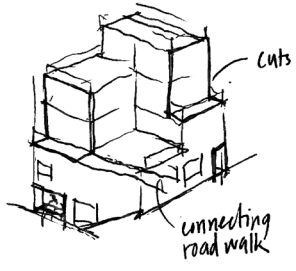
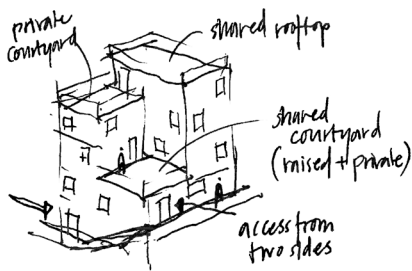
- + private
- no light



steps

- + used for seating
- takes up road space







SANGGYE-DONG

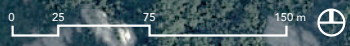
MEDIUM-RISE
TYPOLOGY
PROTOTYPE BUILDING

HOPE
VILLAGE

FOCUS
AREA

LOW-RISE
TYPOLOGY
PROTOTYPE BUILDING

HIGH-RISE
TYPOLOGY
PROTOTYPE BUILDING

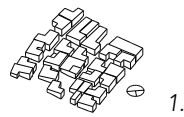


SANGGYE-DONG

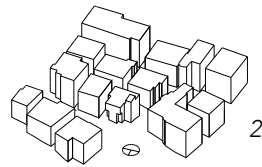
3

CONTEXT

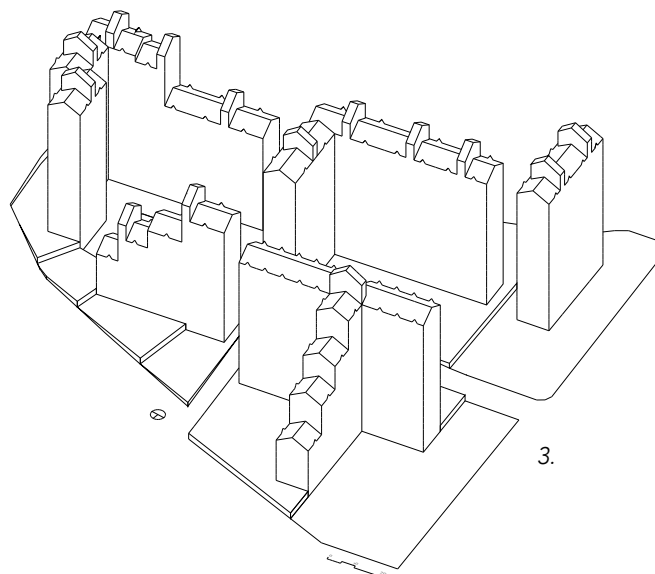
Hope Village is located in the northwestern perimeter of Seoul, in an area called Sanggye-dong. The district was built in the early 1970's by people that was pushed out of the city center when land prices became too expensive for them to stay. They built their homes as one story houses without following any proper master plan. Hope Village has kept this initial structure (1). Other areas have been redeveloped during the late 80's and 90's either with 3-5 story multi-family apartment buildings (2) or 20-25 story high-rise apartment buildings (3).



1.



2.



3.



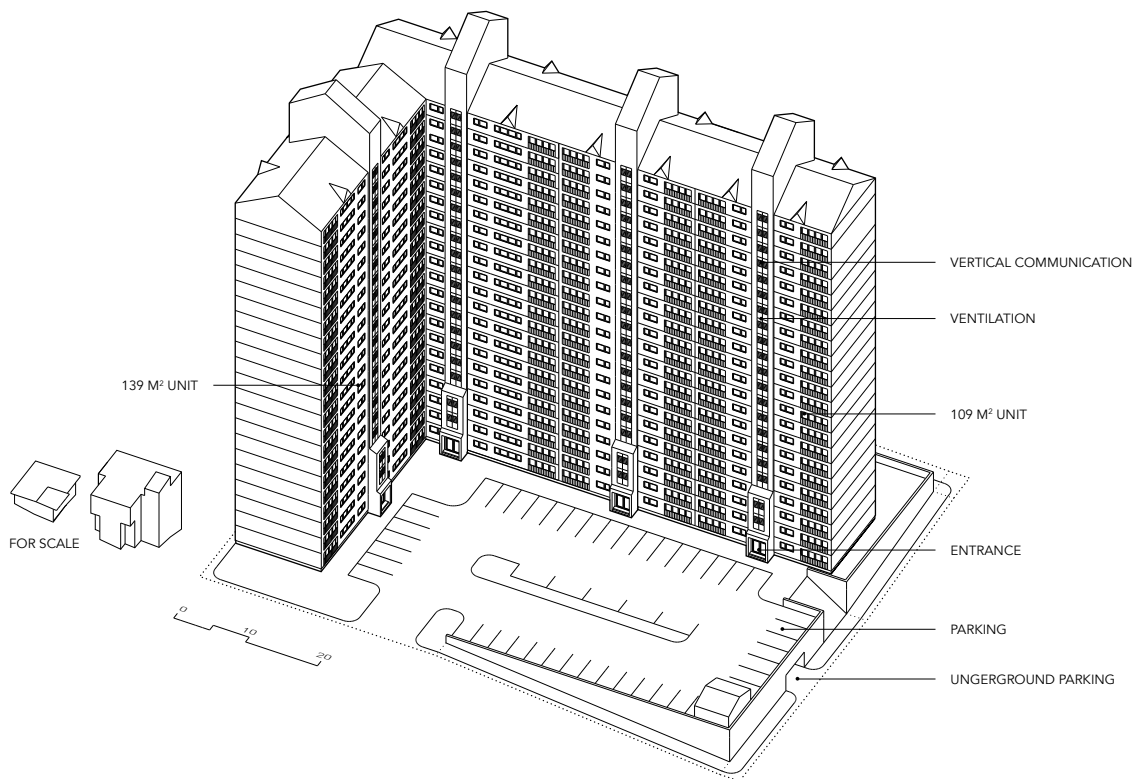
HIGH-RISE APARTMENT BUILDING

3.1

PROTOTYPE BUILDING OF HYUNDAI APARTMENTS

PLOT 4950 m²
 F 800 m²
 GFA 17.300 m²
 BCR 16 %
 FAR 350 %
 STOREYS 22
 UNITS 176
 UNIT SIZE 109/139 m²

In the late 1990's, other parts of Sanggye, in line with many other neighborhoods throughout Seoul, was demolished entirely to make room for a more extreme typology - the high-riser apartment building. Since the topography in the area is quite steep, large excavations had to be made in order to fit the large housing blocks, thus erasing any existing roads or plots. The buildings are 12 meters deep, about 60-70 meters long and average 22 floors in height. The result of the low coverage ratio (BCR) in combination with height of the buildings, the typology can be perceived as having a lack of "human scale" and no concentration of communal space.





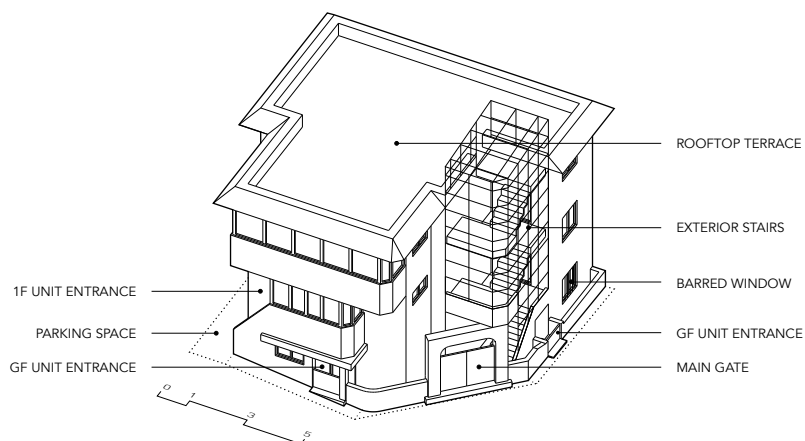
MEDIUM-RISE MULTI-FAMILY HOUSE

3.1.2

PROTOTYPE BUILDING OF WEST SANGGYE-DONG

PLOT 80 m²
F 60 m²
GFA 180 m²
BCR 75 %
FAR 225 %
STORIES 3
UNITS 6
UNIT SIZE 30-40 m²

Large portions of the Sanggye area has undergone some sort of renovation since the early 1970's when it was first constructed. In the late 80's and early 90's the standard solution was to demolish the one storey, single family houses and replace them with 3-5 story multi-family apartment buildings with 6-10 units each, although the existing network of roads and plots were usually kept intact. Typically the building cover most of the plot and contain no private yard, although sometimes there is room for a couple of parking spots. Often there is an external staircase leading to the various units, sometimes roofed or enclosed completely, leading up to a rooftop terrace. This typology is the most common form of housing in Seoul today (KIM, 2016).





LOW-RISE SINGLE FAMILY HOUSE

3.1.3

PROTOTYPE BUILDING OF HOPE VILLAGE

PLOT 40 m²
 F 35 m²
 GFA 35 m²
 BCR 87 %
 FAR 87 %
 STORYS 1
 UNITS 1

No part of Hope Village has undergone any major renovation since it was built in the early 70's. However, most buildings have changed from the original form of being a one storey, 20-25 m² L- or U-shaped house surrounding a small, enclosed courtyard functioning as the entrance point. Residents have covered the courtyards, though not necessarily with insulation, to expand their living space. The buildings follow the original grid of 1-2 meters wide roads which makes the atmosphere both intimate and private. Despite their narrowness, these in-between spaces are used as an extension of the private household for the residents and they actively use them for communal functions.

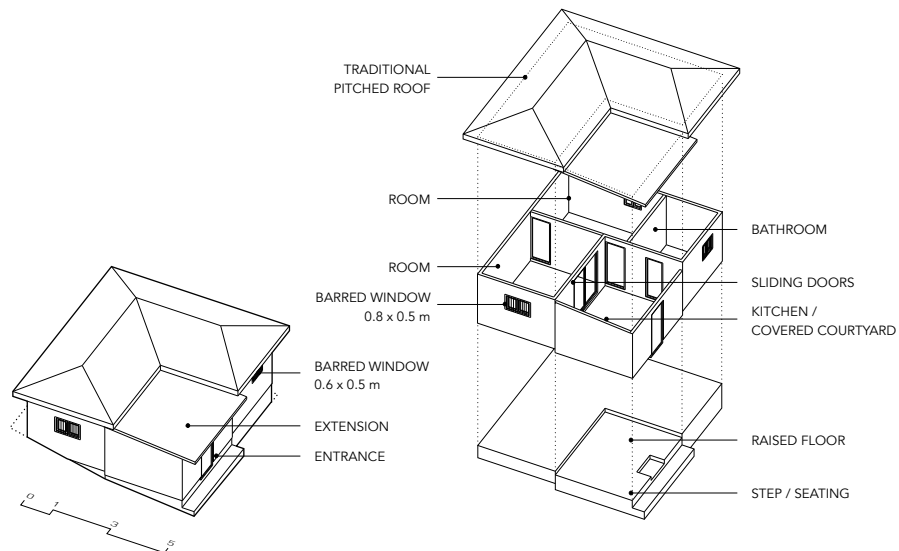




Figure 4. Sky House. (TRU Architects, 2015)

DESIGN REFERENCE

3.2

SKY HOUSE

Seoul 2015, TRU Architects

Sky house is a multigenerational family house for three families stacked on top of a commercial building. Functions such as lobby, elevator, parking are shared, though separate terraces, the rooftop and stairs are private. Since the family had lived on the site for a long time, the new building is designed to reflect the space and memories of the old house. While the commercial part of the building is box-shaped, white washed and has evenly distributed windows of similar size, the upper part is contrasting by being more insulated, brick clad and has a sloped roof to reflect the shape of the old house. The floor plan is designed to fit the lifestyle of the client with the intent of it being a "familiar new house" where existing furniture and living can be maintained and where size and layout is similar to the previous living conditions.

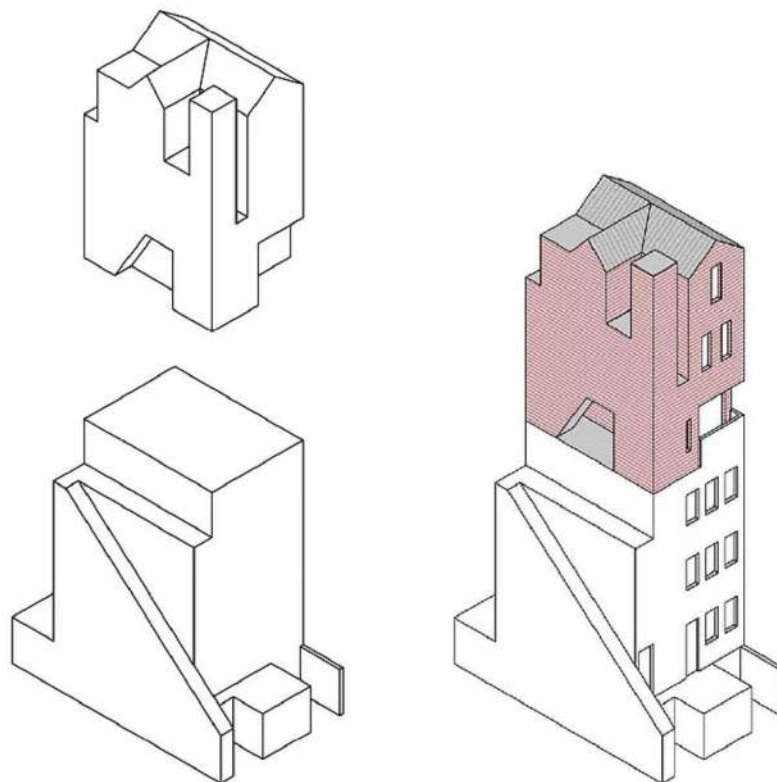


Figure 5. Sky House. (TRU Architects, 2015)



HOPE VILLAGE

4

SITE

There is no point in denying the fact that Hope Village is merely a shadow of its former glory. Most of its residents has moved out, empty and overgrown homes are found all over and the ones still inhabited look almost as if they were not. Yet, the village is somehow full of beauty and character, telling the story of what once has been and of the people still doing what they can to care for the little they have.

The following chapters are portraying the unique identity of Hope Village through five key categories; contextuality, materiality, usability, intimacy and privacy. All of them are equally important in explaining what the contextual, cultural, communal and historical aspects of the village are and why they are important to keep in a new design.



Sketch of Hope Village, February 2018.

PERCEPTION

4.1

The following chapter are portraying the unique identity of Hope Village through five key categories; contextuality, materiality, usability, intimacy and privacy. All of them are equally important in explaining what the contextual, cultural, communal and historical aspects of the village are and why they are important to keep in a new design. The conclusions will influence the new design so that the current conditions may be present even though they may be replaced.



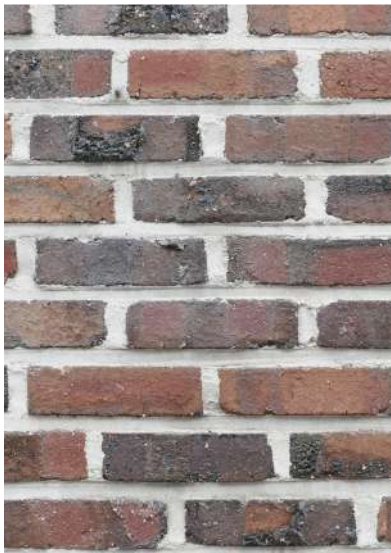
CONTEXTUALITY

4.1.1

Hope Village is located by the foot of a mountain and the land is sloping quite steeply towards northwest. Since the buildings were built by the residents themselves, the one story buildings sit gently on top of the land and follow the silhouette of the mountain. The steep topography has a heavy presence when walking along the roads. The slope is varying in direction and since one can look over the buildings and get glimpses of the mountainous view in the west, one easily finds a sense of orientation.

CONCLUSION

- Located by the foot of a mountain
- Steep topography facing north-west
- Small buildings follow landscape silhouette
 - Connected with surrounding nature
- Views of the mountains to north and west



MATERIALITY

4.1.2

A variety of materials have been used to build and rebuild the village throughout the years and even though most of them are in pretty bad shape, there is something beautiful and enchanting with the wide spread of building materials, all telling their own story of their purpose and what they once was. Most buildings are constructed of concrete blocks and clad with white washed render or red or brown bricks sitting on a rough stone base. The roofs are sloping and covered with traditional korean clay tiles or corrugated sheet metal.

Time is an ever present factor in the detailing of the village. Every single building has its own personality with objects of practical use, though the fact that they have been neglected for a long time gives a certain patina and unique character to the buildings.

CONCLUSION

- Large variety of building materials
- Stone bases with concrete brick walls
- Typical korean tiled, pitched roofs
- Buildings are full of personality and character
- Time has given every object its own patina



USABILITY

4.1.3

The roads are used as communal spaces for the residents to gather and socialize, though some are mainly used as storage space where homes have been left and nobody use for transportation. Roads as well some rooftops and empty lots are used for urban farming. Since the actual living spaces are quite small, these "extra" spaces are as well used for everyday activities such as cooking, hanging laundry, gambling or making kimchi.

CONCLUSION

- Roads are used as communal space for socializing
- Residents use uninhabited roads as storage spaces
- Roads and empty lots are used for urban farming
- In-between spaces functions for everyday chores



INTIMACY

4.1.4

Throughout the village the roads are only 1-2 meters wide, yet they do not seem too narrow since the buildings are only one story high. Since they are also slightly dug into the hill, the facades defining each road vary in height which gives a characteristic rhythm when orienting through the neighborhood. The residents use these in-between spaces not just for transportation but also for communal activities and as storage spaces. Private belongings are scattered along the roads, taking ownership as if they were a part of the private households. Oftentimes the doors are left open, which also adds to the sense of the border between public and private are being blurred.

CONCLUSION

- The 1-2 meter wide roads do not seem too narrow since the buildings are only one story high
- Private belongings are scattered in the public roads, as if the spaces are part of the private household
- Doors are left ajar to let the homes always stay connected to the communal life outside



PRIVACY

4.1.5

To deal with the steep topography, every building is slightly dug into the hill, which result in the fact that they are never really accessed from the back but mostly from the sides. This also means that most entrances can be reached through a few steps which also doubles as seating and a mental border of privacy for the private household.

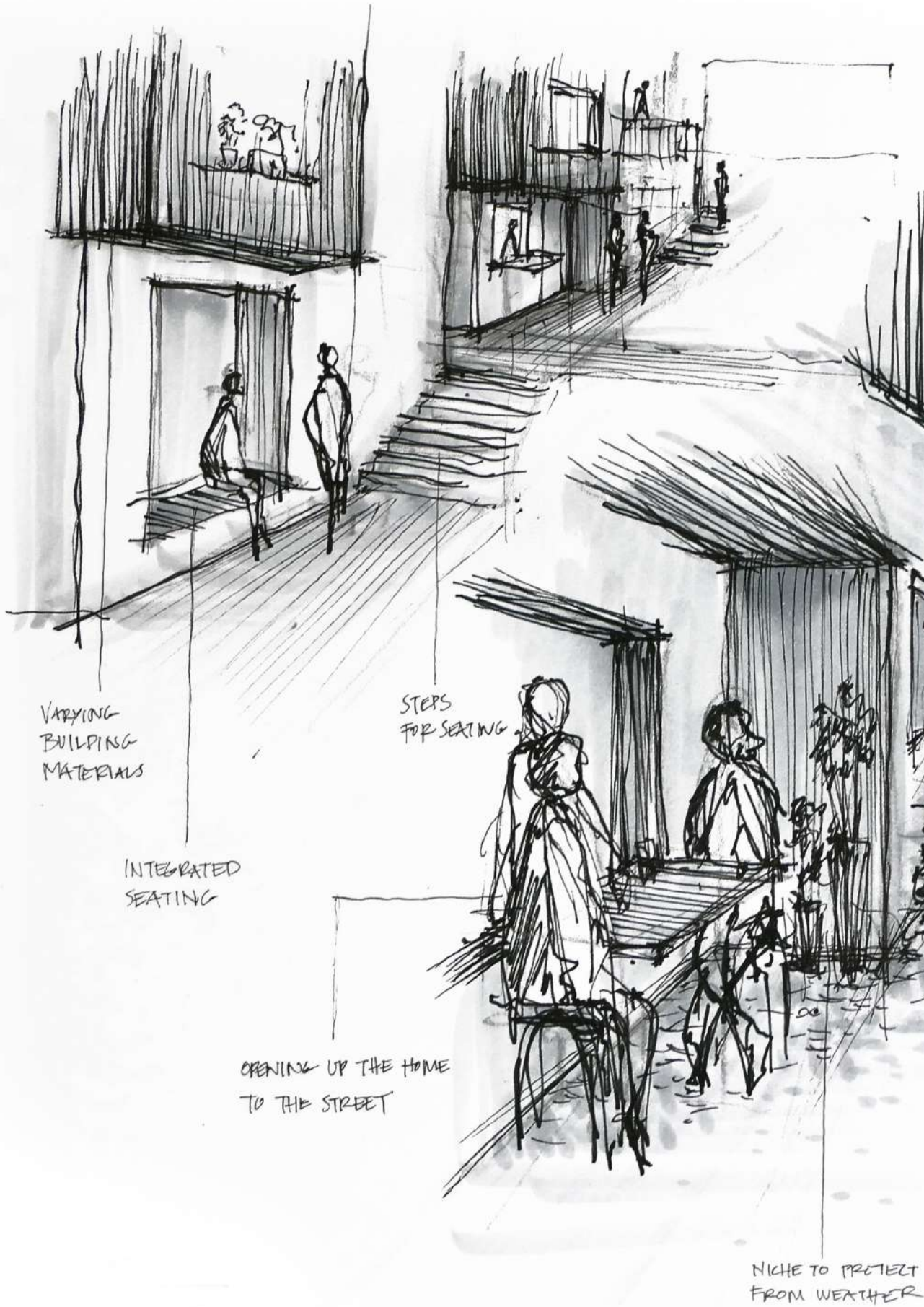
The doors in the village come in all shapes and sizes. They normally lead into courtyards or storages facing the roads, but sometimes directly into the houses. In most cases steps lead up to the door and but occasionally they seem rather inaccessible, placed quite high up on the facade. Most doors are so small that it seems as if no one could possibly walk through them straight. Usually there is a small window in the door, though never really clear in order to keep privacy from the narrow roads.

Windows facing the roads are often very small and one could wonder if any daylight comes through them at all. Though, their purpose is most likely to serve as ventilation and not much else. Since the roads are so narrow, they are all covered with bars for security reasons and other materials for privacy or shade.

CONCLUSION

- Buildings are rarely accessed from the side of the buildings because of the steep topography
 - Zoned entrance through covered courtyard
- Steps in front of entrances often double as seating
 - Doors are small and quite inaccessible
- Small windows are covered for privacy and shade

4. Hope Village
4.1. Perception
4.1.6. Vision for future road space

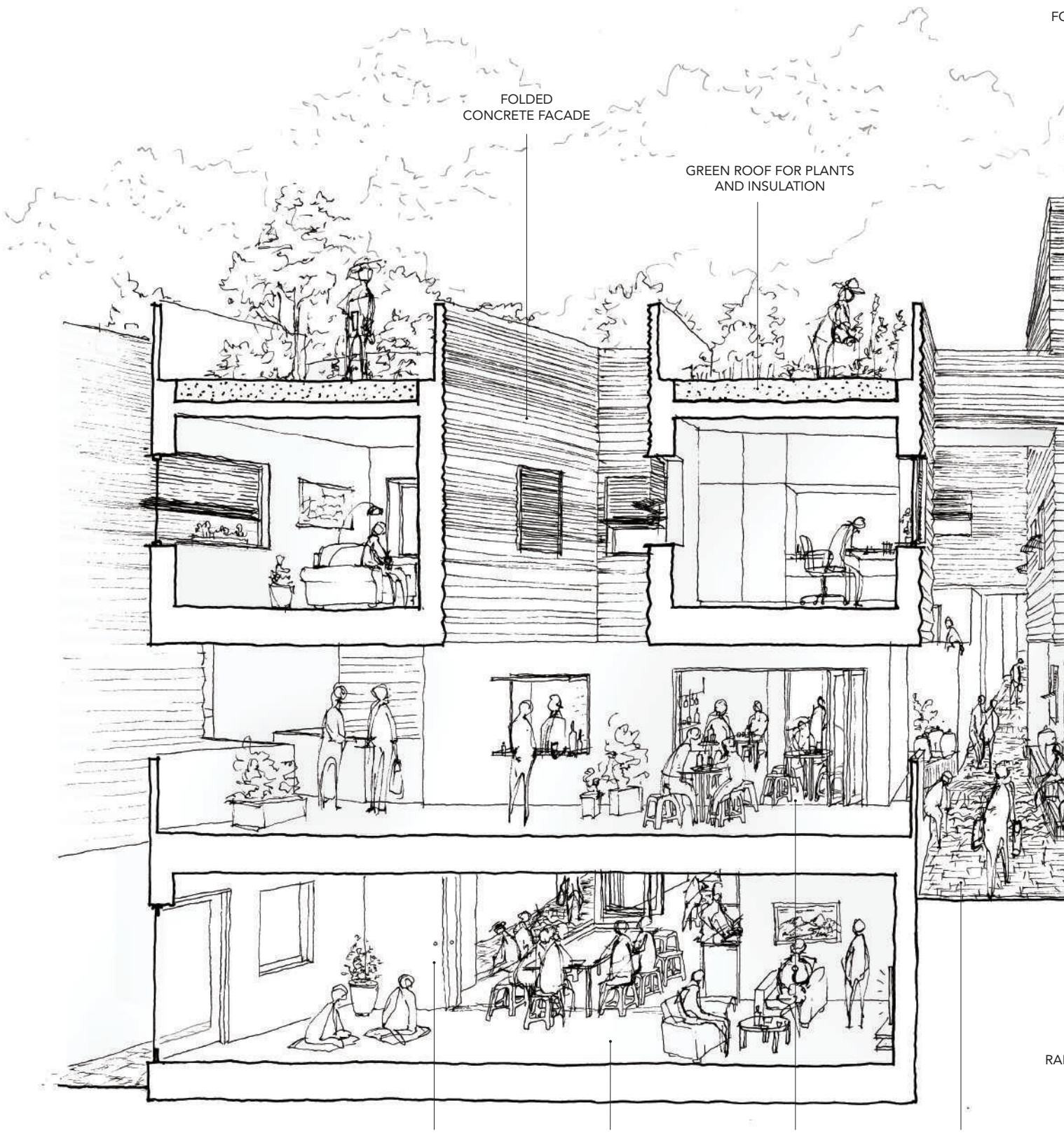




BALCONIES
AND ROOFTOPS

VARIOUS OPENINGS
TO CONNECT TO STREET

4. Hope Village
4.1. Perception
4.1.7. Vision for future community



FOLDED
CONCRETE FACADE

GREEN ROOF FOR PLANTS
AND INSULATION

0 0.5 1 2.5 m

SLIDING WALL
PARTITIONS

COMMUNITY CENTER

CAFÉ

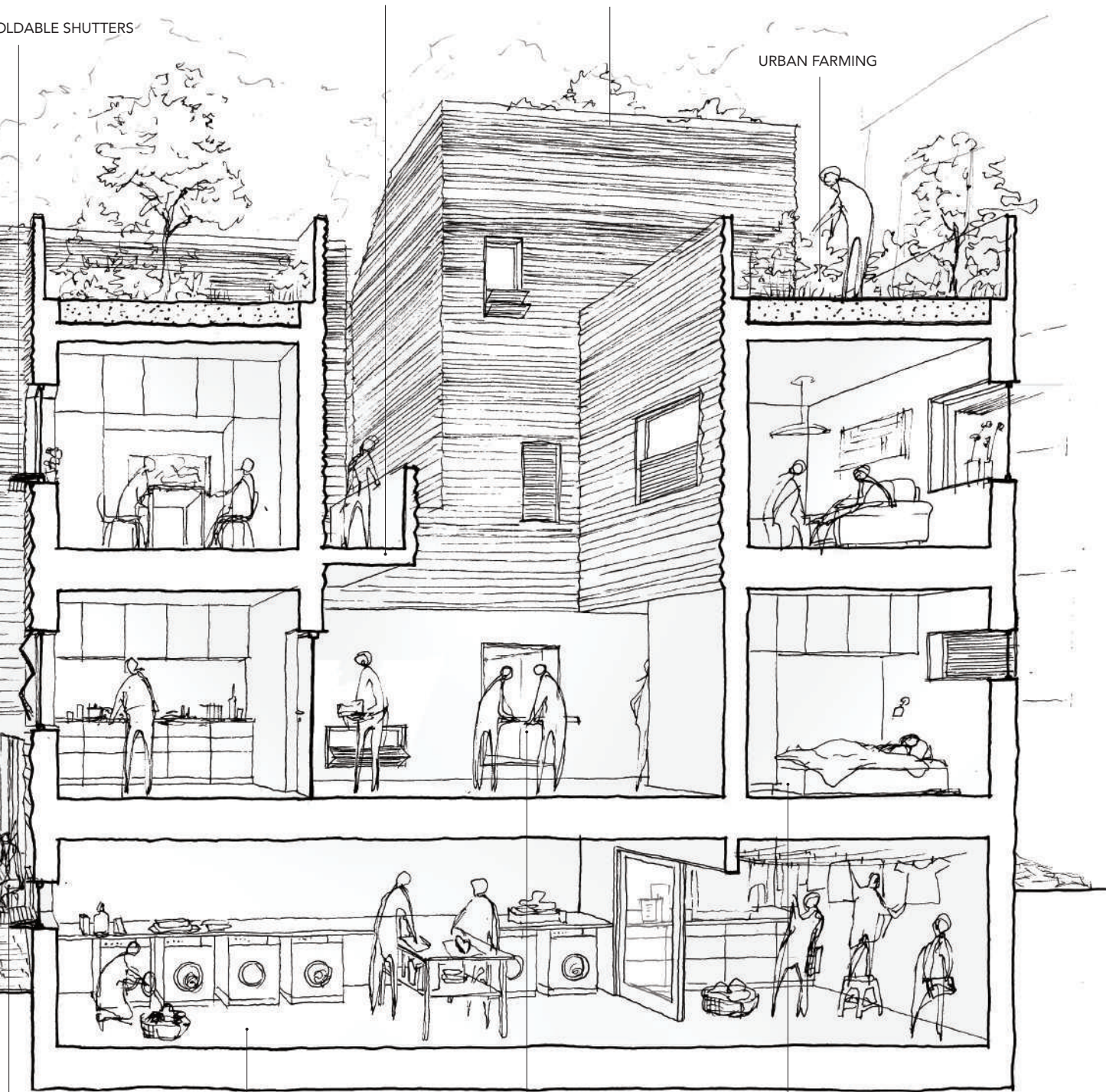
RECLAIMED BUILDING
MATERIALS FOR PATHWAYS

RAISED WALKWAY FOR
HORIZONTAL ACCESS

ROOFTOP GARDEN

FOLDABLE SHUTTERS

URBAN FARMING



RAISED FLOOR DOUBLES
AS SEATING AREA

FOLD-OUT FURNITURE
IN FACADE

COMMUNAL LAUNDRY

FOLD-OUT FURNITURE
IN APARTMENT



Sketch of Hope Village, February 2018.

PROPORTIONS

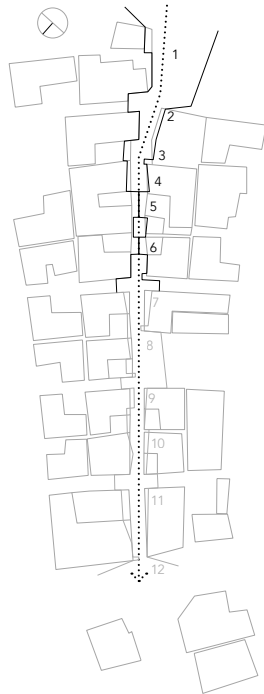
4.2

By studying the existing conditions in Hope Village and focusing on the effects the topography has on the experience walking along a road either uphill or downhill, key features will be extracted and introduced in model studies. The narrow roads, merely 1.5-2 meters wide, occur almost everywhere throughout the village. Just a couple of roads are wider, though 2-3 meters at most. The studies will be analyzed further in chapter 5 to inspire parameters used to assess qualities in varying scenarios of proportions for the final design.

NARROW ROAD

WALKING DOWN

When walking downhill, one would think that the eye should wander away over the horizon, yet it is mostly focusing on the buildings coming up along the sides. Since the houses follow the topography, they keep similar heights and there is no apparent breaks in the facade line. Yet it does feel quite airy since one is allowed to look over the rooftops and get glimpses of the view.



1



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3



4



5



6





12



11



10



9



8

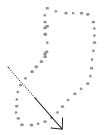
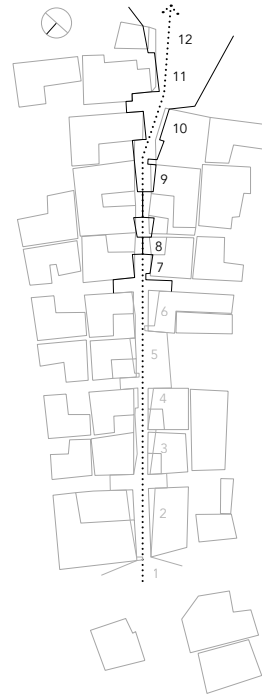


7

NARROW ROAD

WALKING UP

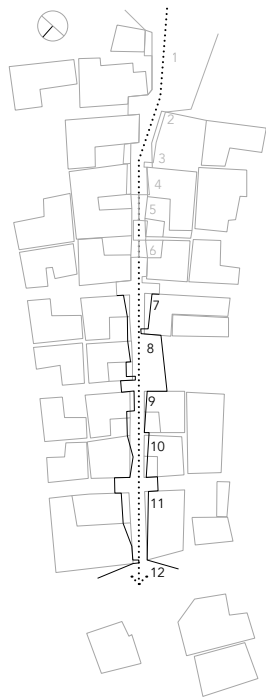
Continuing the walk uphill along the same road, the eye is focusing on the great mountain in the back and thus gets a sense of openness. The changes in rooftop levels seem more apparent as one seems to constantly walk towards a lower building. Even the road intersections seem larger and more articulated. Yet the field of vision is strongly dominated by ground so there is a sense of intimacy as well.



NARROW ROAD

WALKING DOWN

The lower part of the road is a bit flatter which limits the field of periphery. The facades seem even more continuous as the roof line is level and the eye is rather focusing on the ground than on the horizon. However, a missing building on the left creates a welcome break in the feeling of almost an uncomfortable intimacy.



7



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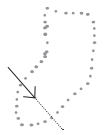
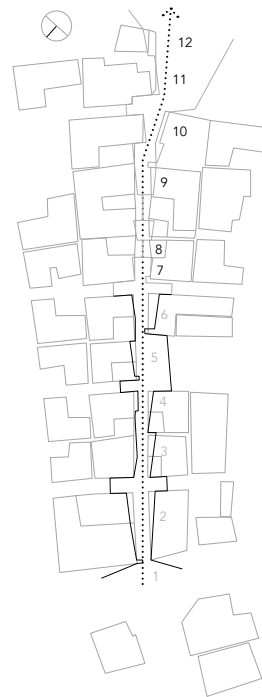
2

1

NARROW ROAD

WALKING UP

Even when starting the path upward, the mountain in the far back are ever present and even larger in contrast to the single story buildings. The eye is not fully occupied by the ground since it is a bit flatter, yet it is still quite present. The missing building (now to the right) is giving an even larger impression of openness and somehow the journey are a bit more comfortable, at least regarding the intimacy which is less overbearing.



WIDE ROAD WALKING DOWN

When walking down one of the wider roads in the village, the experience turns out to be a bit different. Since the buildings keep similar heights throughout the village, the sky is more visible and therefore the space seems quite open. However, the further down one walks, the more present the neighboring 3-4 story buildings become and the sense of intimacy gets exponentially more vague.



1



2



3



4



5



6

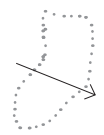
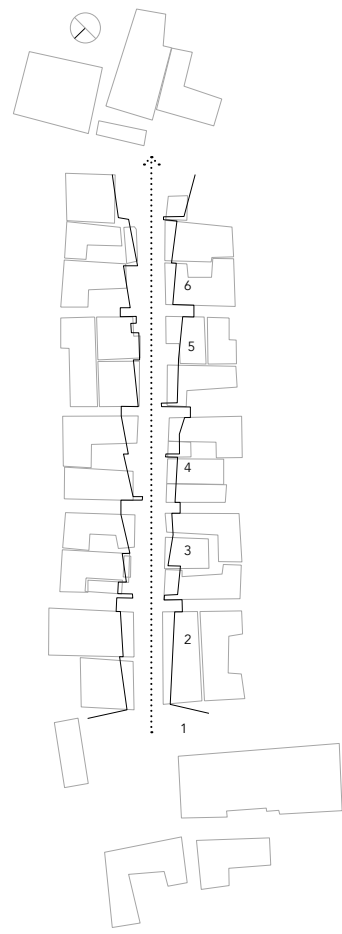




WIDE ROAD

WALKING UP

Walking uphill, similar feeling of openness lingers since the wider view allows the eye to fully appreciate the mountain in the far back. The ground still is quite present the field of vision, though not as much as in the narrow roads which also contributes to a less intimate experience. The intersections also become more accentuated which makes one appreciate each individual building.





THE IN-BETWEEN

5

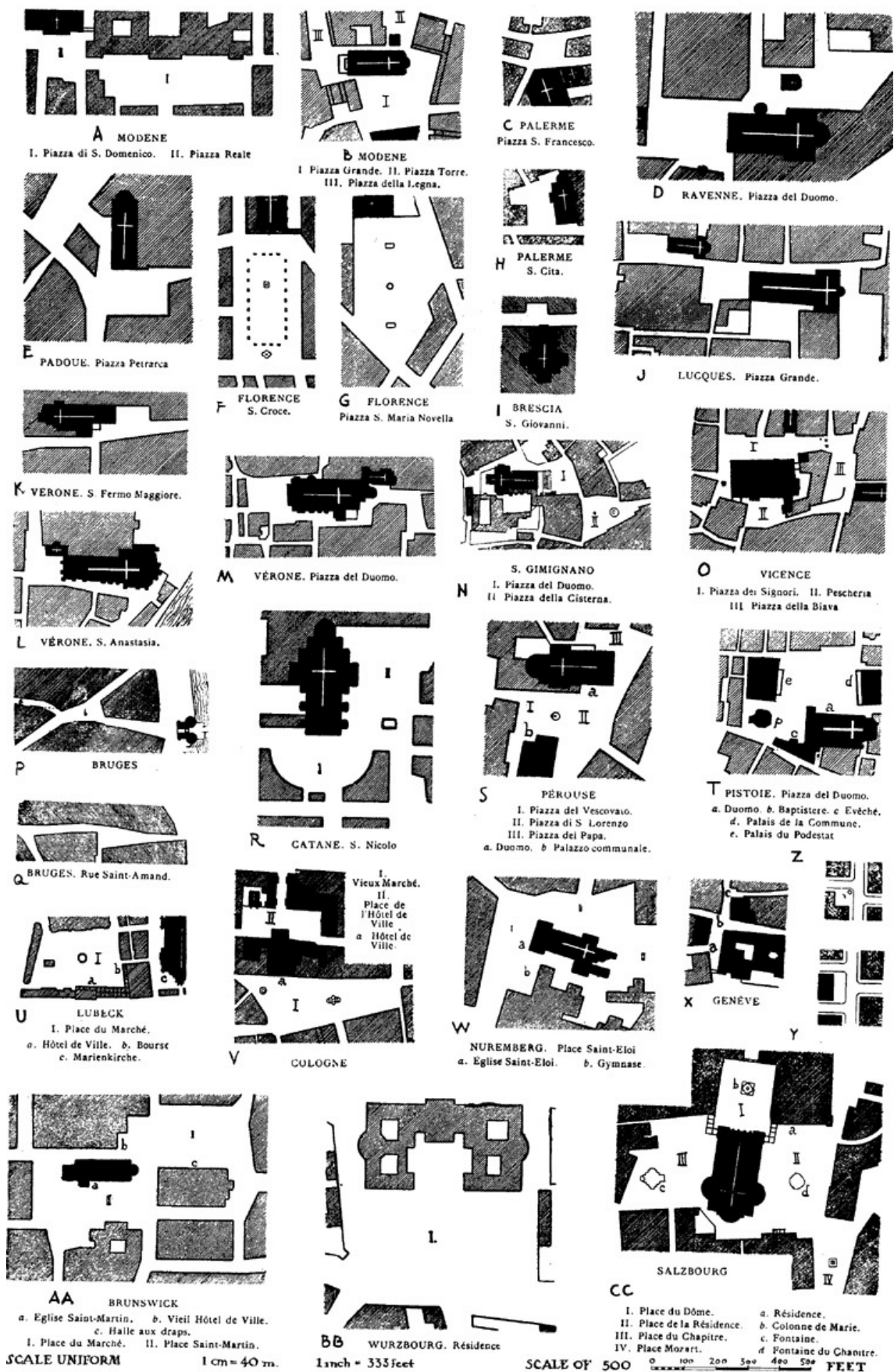
DESIGN STUDIES & PROPOSAL

This chapter is taking into account the findings and conclusions of previous chapters, i.e. mapping of the identity, by investigating them further through sketch and model studies. Since many of the key characteristics found in the analysis of the existing village revolve around usability and social structure of in-between space, they are the focus of this chapter. Design studies and proposal images are presented together since the aim of this thesis is to find various solutions for how to redesign Hope village.

The entire village is 30.600 square meters and has about 270 units. In order to be able to zoom into the identity of the in-between spaces, the proposal is focusing on only a part to be seen as a prototypical design solution that could be used for the entire village.

The focus area is 4000 square meters and located in the southern part of the village. It is chosen for its contextual qualities, since it is bordering both the forest, the multi-family houses of Sanggye-dong and is located where the high-rise apartment buildings of Hyundai can be seen in the background. There are 50 units, covering 2260 square meters (BC), though 19 of them are uninhabited and in quite bad shape.

◁ *Intersection model in scale 1:50 of the final proposal. Since the focus of the thesis is the in-between spaces, the interior spaces are not shown.*



FIGS. 48-76 (A-CC)—TWENTY-NINE PLANS, AT UNIFORM SCALE, FROM CAMILLO SITTE

Figure 6. Examples of city plans in figure-ground. (Sitté, 1945)

LITERARY REFERENCE

5.1

THE ART OF BUILDING CITIES

Camillo Sitte, 1945

“We shall examine the plans of a number of cities, but neither as historian nor critic. We wish to seek out, as technician and artist, the elements of composition which formerly produced such harmonious effects, and those which today produce only loose and dull results. Perhaps this study will permit us to find the means of satisfying the three principal requirements of practical city building: to rid the modern system of blocks and regularly aligned houses; to save as much as possible of that which remains from ancient cities; and in our creation to approach more closely the ideal of the ancient models.”

“The typical irregularity of these old squares indicates their gradual historical development. We are rarely mistaken in attributing the existence of these windings to practical causes - the presence of a canal, the lines of an old roadway or the form of a buildings. Everyone knows from personal experience that these disruptions in symmetry are not unsightly. On the contrary, they arouse our interest as much as they appear natural, and preserve a picturesque character. Few people, however, understand why irregularity can avoid giving an unpleasant appearance. We must study a map to understand it.”

“...we are charmed by the picturesque appearance of old cities. We simply overlook the methods that were used to obtain the varied artistic impressions they make.”
(Sitte, 1945)

Sitte refers to how modern cities usually are planned by laying out orthogonal road patterns and lining them with buildings and how, by contrast, medieval cities developed over time and taking natural elements into consideration. Furthermore, he puts emphasis on how most of us appreciate the irregularities of the medieval cities because they give identity and contrast to each individual space. In figure X he shows examples of how he studies these informal spaces.

The method of this thesis is exploring something in-between these two strategies. When developing an area, there are most often contextual elements that could influence and become visible in the new design even though the existing structure may be entirely replaced. However, the idea is not to recreate something from a nostalgic point of view, rather to explore what qualities there are today and how to reinterpret them into a design fit for its new purpose.



PLAN

5.2

The following chapter explores how to keep as many aspects of the existing structure as possible - one of them being the outline of the roads, averaging 2 meters in width. Since the village today mostly has one story buildings, it is key to find out how high one can build without losing the sense of comfortability and openness.

The entire village is 30.600 square meters and has about 270 units. In order to be able to zoom into the identity of the in-between spaces, the proposal is focusing on only a part to be seen as a prototypical design solution that could be used for the entire village.

The chosen focus area is 4000 square meters and located in the southern part of the village. It is chosen for its contextual qualities, since it is bordering both the forest, the multi-family houses of Sanggye-dong and is located where the high-rise apartment buildings of Hyundai can be seen in the background. There are 50 units, covering 2260 square meters, though 19 of them are uninhabited and in quite bad shape.

◁ *Intersection model in scale 1:50 of the final proposal. Shifts the facades create cover, terraces and raised walkways to create accessibility and versatility throughout the structure.*



Model in scale 1:500. Final proposal in acrylic glass, painted to highlight raised walkways and rooftops.



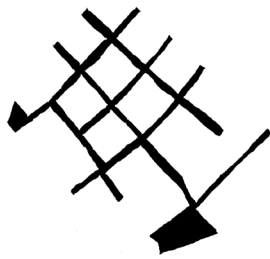
Model split down the central axis, facing south-west, for better view of accessibility from each level.



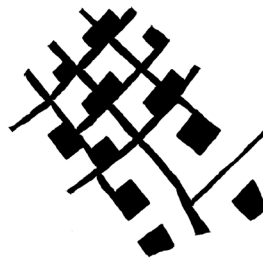
The model can be split in four pieces for better understanding of the in-between spaces and connections.

EXPLORING THE IN-BETWEEN IN PLAN

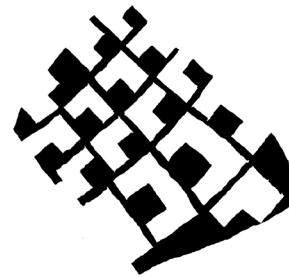
Variations of road plans on site in reversed figure-ground to accentuate the in-between and to determine hierarchy and versatility of the spaces.



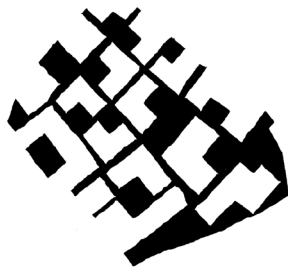
1. EXISTING



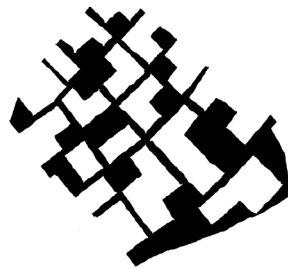
2. SIMILAR SPACES



3. RIGID



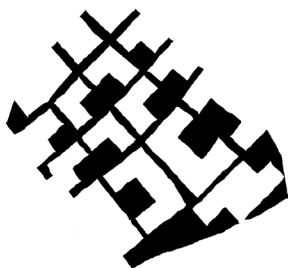
4. CLUSTERS



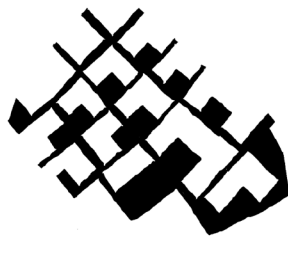
5. CONNECTED SPACES



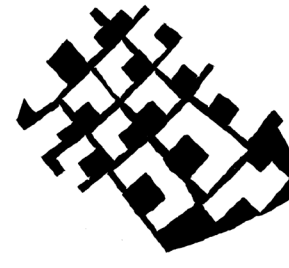
6. HIERARCHY



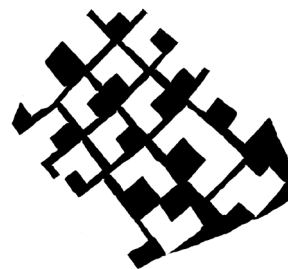
7. CENTRAL AXIS



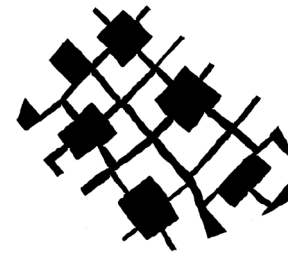
8. GRADIENT



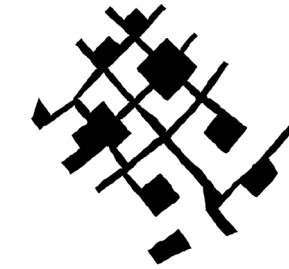
9. EVENLY SPREAD OUT



10. NO HIERARCHY



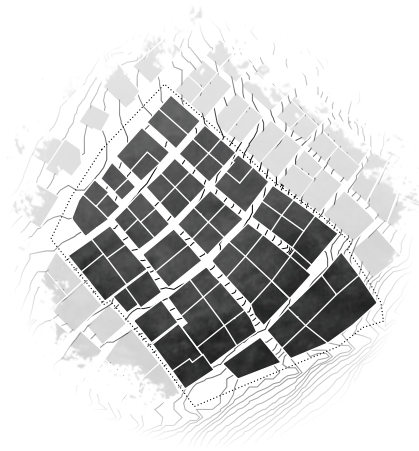
11. CONTRASTING



12. SMALL AND BIG

DESIGN STRATEGY

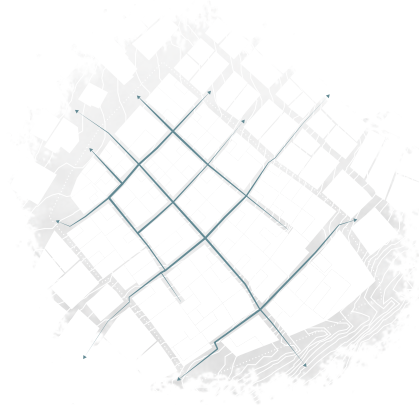
The strategy is to keep as much of the existing road network as possible, though connecting some paths. By adding hierarchy to the roads, and adjusting (push-backs in the facades) them accordingly, the neighborhood will be more versatile and somewhat easier to orientate through. With every floor that is added, further adjustments are made to create raised pathways through the entire structure, making the rooftops accessible as well.



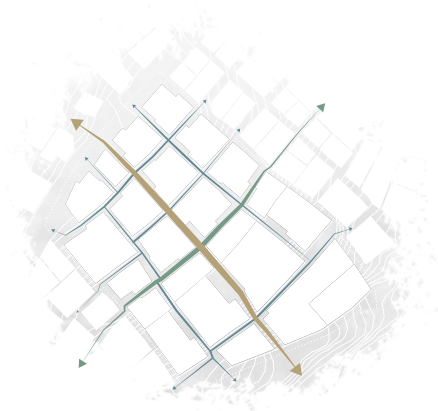
1. MAP EXISTING BUILDING AREA
 BC 2320 m² / BCR 58%



2. MAP EXISTING ROAD AREA
 RC 1280 m² / RCR 42%



3. MAP EXISTING ROAD HIERARCHY
 ● PRIVATE



4. ESTABLISH NEW ROAD HIERARCHY
 ● PRIVATE ● SEMI-PRIVATE ● PUBLIC



5. ADJUST BUILDING FOOTPRINT
 & ADD MORE FLOORS

EXISTING SITEPLAN



TOTAL RCR IN PROPOSAL



+75
RC 245 m²



+76
RC 530 m²



+79
RC 610 m²



+82
RC 490 m²



+85
RC 1130 m²



+88
RC 635 m²



+91
RC 570 m²



+94
RC 335 m²



+97
RC 160 m²

PROPOSED SITEPLAN



SECTION

5.3

The following chapter is exploring the in-between space through a series of sections in both model and sketch. By experimenting with the proportions, building height in relation to the road width as well as direction of the road and interruptions in the facades, the aim is to achieve a functional as well as an aesthetically pleasing solution for about 4-5 story buildings.

◁ *By using a study model in scale 1:200, various constellations can be evaluated in order to find suitable solutions to create different kinds of spaces.*

SE
PUBLIC



NE
SEMI-PUBLIC



NW
PUBLIC

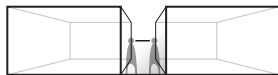


SW
PRIVATE



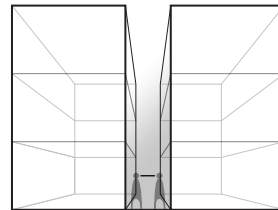
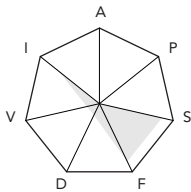
DESIGN STRATEGIES

To design the in-between spaces, various strategies can be used. By taking Landscape into consideration as well as trying to achieve new qualities while still maintaining a relatively high FAR is challenging. By combining different strategies and evaluating each scenario, a combination of spaces can be achieved.



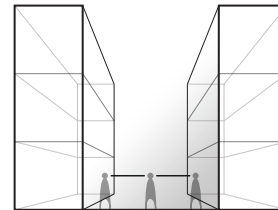
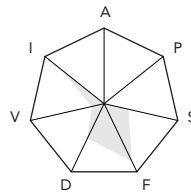
1 KEEP EXISTING

The existing in-between space average 3:2 in proportions. Buildings are 1 story high and roads are 2 meters wide.



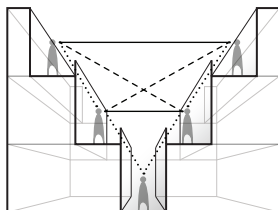
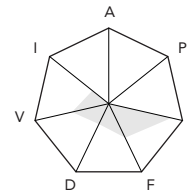
2 KEEP FOOTPRINT

In order to achieve a FAR of 200%, the new buildings need to average 3 stories high. Though, keeping the same road width would result in rather different proportions and non-desired light conditions.



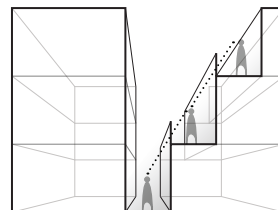
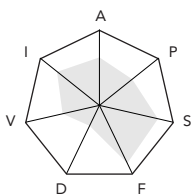
3 KEEP PROPORTIONS

By instead keeping the existing proportions, the result would produce similar light conditions, though not the same kind of intimacy nor the desired FAR.



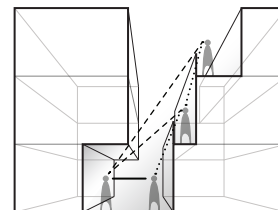
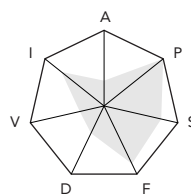
4 INCREASE INTERACTIVITY

By keeping the proportions of the first story and pushing back the top floors, similar light conditions and intimacy would be achieved, though more stories would need to be added in order to achieve 200% FAR.



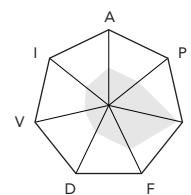
5 INCREASE FAR

In order to increase the FAR without losing intimacy or light, one side can be adjusted. This will also increase sun exposure, since light will be reflected down into the in-between space.



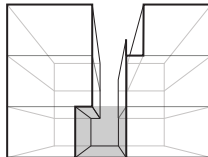
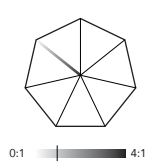
6 ADJUST PRIVACY

Further adjustments can be made without decreasing FAR. By pushing back the ground floor, interactivity with the volumes are increased as well as sheltered spaces are created.



PARAMETERS OF EVALUATION

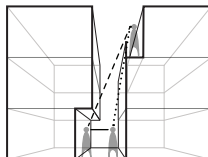
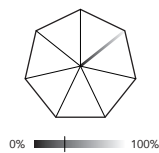
Parameters are used to evaluate different scenarios. The value of each parameter is collected in a graph for every set-up. This way, various scenarios can be compared and evaluated to decide the character in each particular situation.



I INTIMACY

Ratio of height and width defining the ground floor in-between space.
 Example: H: 3 m / W: 3 m = 3:1 = 25%

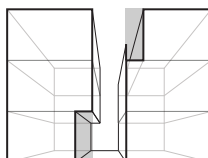
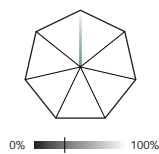
Scale: Low 0 - 4 High



P PRIVACY

Degree of obstructed sightlines between people.
 — : full view, - - : limited view. ···· : obstructed view.
 Example: 1/3 = 33%

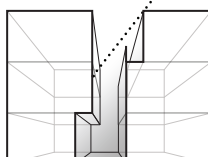
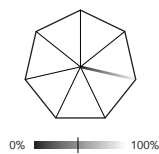
Scale: Low/Public 0% - 100% High/Private



A INTERACTIVITY

Adjustments to the borders giving the in-between space interactivity on several floors.
 Example: 2/6 = 33%

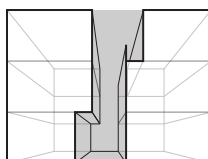
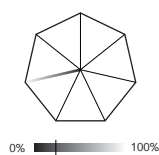
Scale: Low 0 - 100% High



S SUN EXPOSURE

Area of in-between space reached by direct sunlight (average, fall/spring solstice 12.00)
 Example: 13 m² / 24 m² = 46%

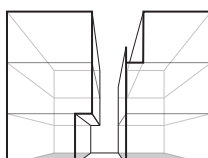
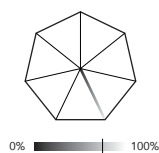
Scale: Low 0% - 100% High



V VOID AREA

Area of in-between space in relation to entire section cut area (including buildings).
 Example: 24 m² / 108 m² = 22%

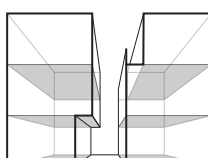
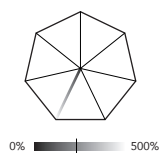
Scale: Low 0% - 100% High



F FOOTPRINT (BCR)

Area of built space in relation to the plot.
 Example: 54 m² / 72 m² = 75%

Reference: 65% (desired development)
 Scale: Low 0% - 100% High



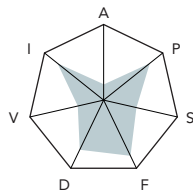
D DENSITY (FAR)

Total built area in relation to the plot.
 Example: 168 m² / 72 m² = 233%

Reference: 250% (desired development)
 Scale: Low 0% - 500% High

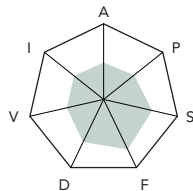
ASSESSING QUALITIES

In order to assess the qualities of each scenario, two reference graphs are used to decide whether the particular set-up is more suited for a residential or a commercial road. Naturally most situation will end up somewhere in-between, yet by combining many sections of the same category, the character of the entire road will be defined.



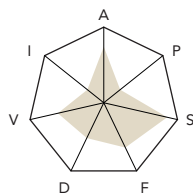
PRIVATE ROAD

INTIMACY	HIGH	<i>Attracts less traffic and becomes more private.</i>
PRIVACY	HIGH	<i>Allows people to not be seen to keep their privacy.</i>
INTERACTIVITY	LOW	<i>Directs activity to other areas.</i>
SUN EXPOSURE	LOW	<i>Shade allows for activities on sunny days.</i>
VOID AREA	LOW	<i>Allows limited views and sightlines.</i>
FOOTPRINT	HIGH	<i>Narrower roads allow less traffic at a slower pace.</i>
DENSITY	HIGH	<i>A consequence of higher F and lower V.</i>



SEMI-PUBLIC ROAD

INTIMACY	MID	<i>Attracts certain amounts of traffic and becomes semi-public.</i>
PRIVACY	MID	<i>Allows people to be seen to some extent.</i>
INTERACTIVITY	MID	<i>Enables limited activity.</i>
SUN EXPOSURE	MID	<i>Provides both shade and direct sunlight.</i>
VOID AREA	MID	<i>Allows some views and sightlines.</i>
FOOTPRINT	MID	<i>Medium wide roads allow some at a relatively slow pace.</i>
DENSITY	MID	<i>A consequence of medium F and V.</i>



PUBLIC ROAD

INTIMACY	LOW	<i>Attracts traffic and becomes more public.</i>
PRIVACY	LOW	<i>Allows people to see and be seen to promote socialization.</i>
INTERACTIVITY	HIGH	<i>Enables traffic on several levels as well as activities to occur.</i>
SUN EXPOSURE	HIGH	<i>Sunlight attracts people to use outdoor spaces.</i>
VOID AREA	HIGH	<i>Allows views and sightlines.</i>
FOOTPRINT	LOW	<i>Wider roads allow more traffic and gathering spaces.</i>
DENSITY	LOW	<i>A consequence of lower F and higher V.</i>

APPLICATION IN CONTEXT

Though the character of the existing roads are mainly of the same private character, there is potential of a new hierarchy according to its surrounding context. By defining the potential for varying character of roads, the new typology will adjust accordingly.



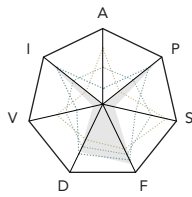
MODEL STUDIES

1.5 METER WIDE ROAD

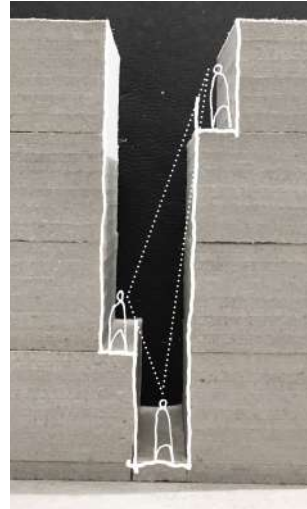


1.5M - 1

I 12:1.5
 P 0
 A 0
 S 16 %
 V 13 %
 F 88 %
 D 350 %

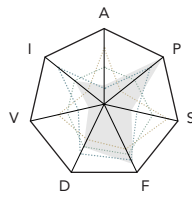


CONCLUSION: Private road

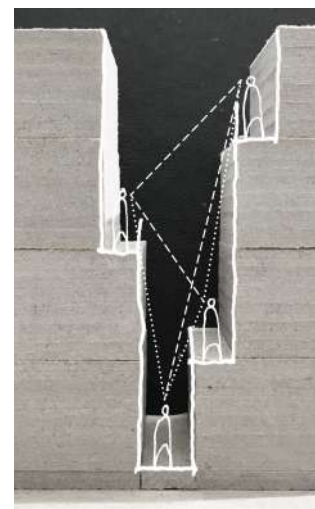


1.5M - 2

I 3:1.5
 P 3/3
 A 2/8
 S 37 %
 V 21 %
 F 88 %
 D 317 %

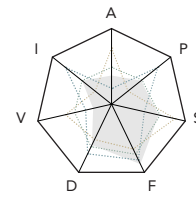


CONCLUSION: Private road

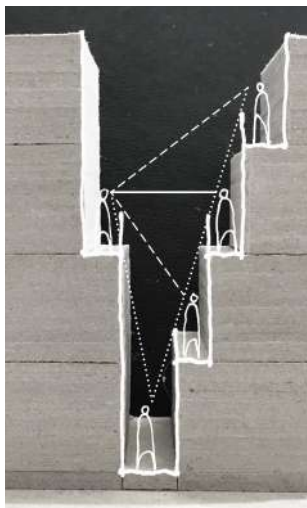


1.5M - 3

I 3:1.5
 P 3/6
 A 3/8
 S 64 %
 V 25 %
 F 88 %
 D 300 %

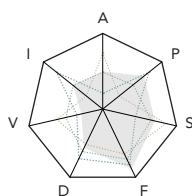


CONCLUSION: Semi-public road

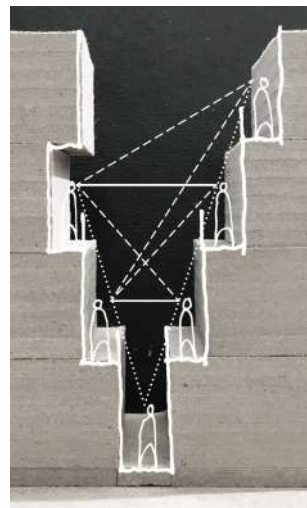


1.5M - 4

I 3:1.5
 P 7/10
 A 4/8
 S 71 %
 V 29 %
 F 88 %
 D 283 %

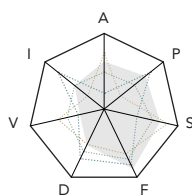


CONCLUSION: Semi-public road

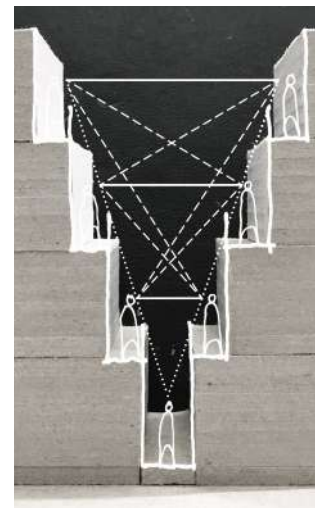


1.5M - 5

I 3:1.5
 P 7/10
 A 5/8
 S 76 %
 V 33 %
 F 88 %
 D 267 %

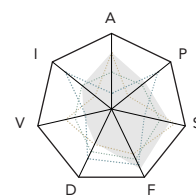


CONCLUSION: Semi-public road



1.5M - 6

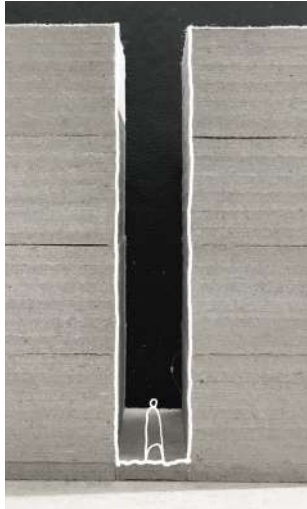
I 3:1.5
 P 12/21
 A 6/8
 S 79 %
 V 38 %
 F 88 %
 D 250 %



CONCLUSION: Active road

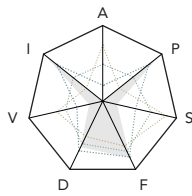
MODEL STUDIES

2 METER WIDE ROAD

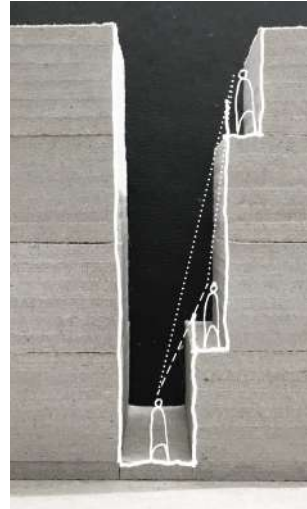


2M - 1

I 12:2
 P 0
 A 0
 S 21 %
 V 17 %
 F 83 %
 D 333 %

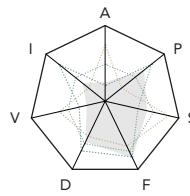


CONCLUSION: Private road

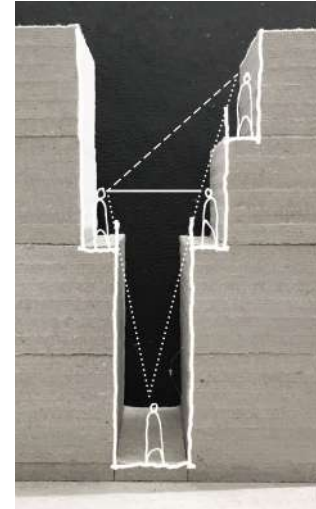


2M - 2

I 3:2
 P 2/3
 A 2/8
 S 50 %
 V 25 %
 F 83 %
 D 300 %

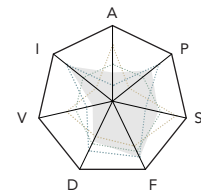


CONCLUSION: Private road

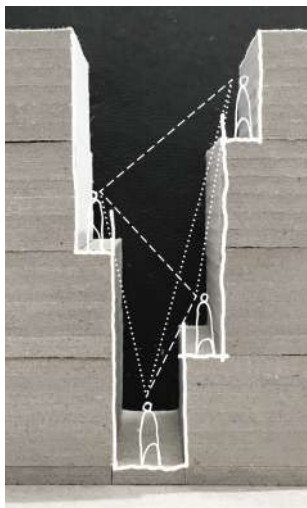


2M - 3

I 6:2
 P 4/6
 A 3/8
 S 62 %
 V 27 %
 F 83 %
 D 291 %

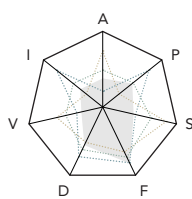


CONCLUSION: Private road

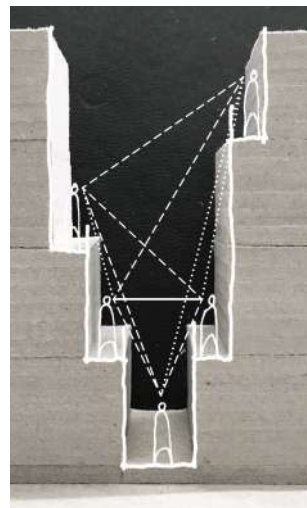


2M - 4

I 3:2
 P 3/6
 A 3/8
 S 57 %
 V 29 %
 F 83 %
 D 283 %

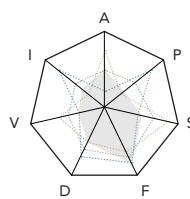


CONCLUSION: Semi-public road

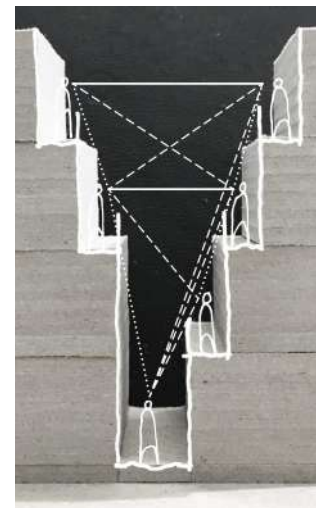


2M - 5

I 3:2
 P 3/9
 A 4/8
 S 66 %
 V 35 %
 F 83 %
 D 258 %

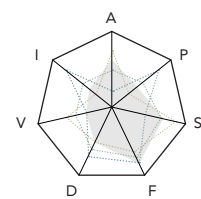


CONCLUSION: Semi-public road



2M - 6

I 3:2
 P 6/14
 A 5/8
 S 70 %
 V 35 %
 F 83 %
 D 258 %



CONCLUSION: Public road

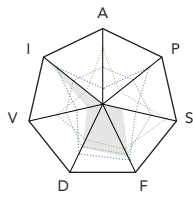
MODEL STUDIES

2.5 METER WIDE ROAD

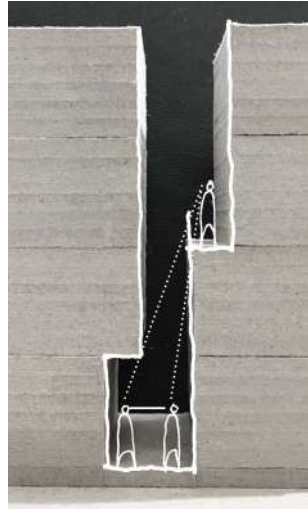


2.5M - 1

I 12:2.5
 P 0
 A 0
 S 27 %
 V 21 %
 F 79 %
 D 316 %

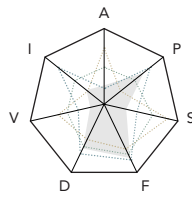


CONCLUSION: Private road

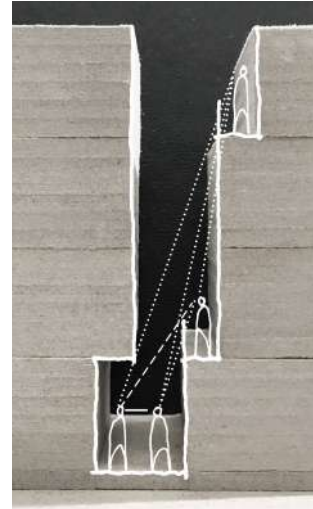


2.5M - 2

I 3:2.5
 P 2/3
 A 2/8
 S 30 %
 V 19 %
 F 79 %
 D 325 %

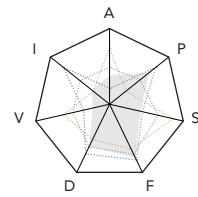


CONCLUSION: Private road

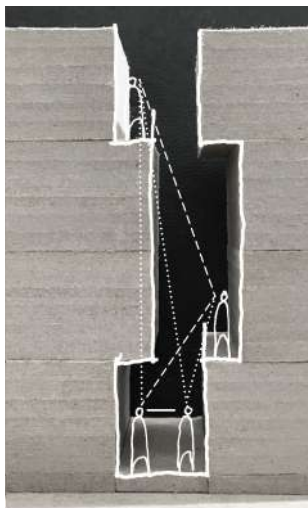


2.5M - 3

I 3:2.5
 P 4/6
 A 3/8
 S 42 %
 V 23 %
 F 79 %
 D 308 %

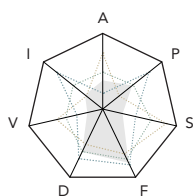


CONCLUSION: Semi-public road

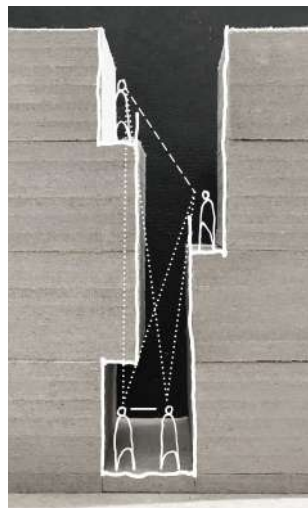


2.5M - 4

I 3:2.5
 P 3/6
 A 3/8
 S 27 %
 V 21 %
 F 79 %
 D 316 %

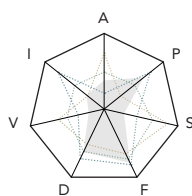


CONCLUSION: Semi-public road

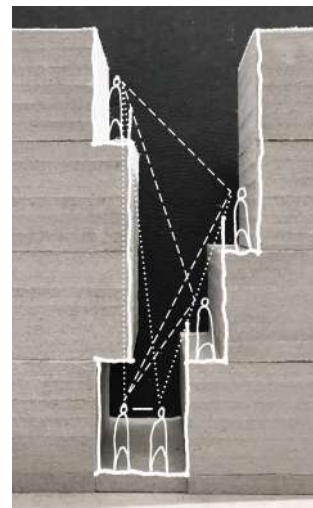


2.5M - 5

I 3:2.5
 P 4/6
 A 3/8
 S 27 %
 V 21 %
 F 79 %
 D 316 %

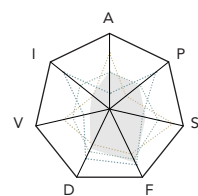


CONCLUSION: Semi-public road



2.5M - 6

I 3:2.5
 P 5/10
 A 4/8
 S 49 %
 V 27 %
 F 79 %
 D 291 %



CONCLUSION: Semi-public road

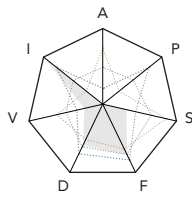
MODEL STUDIES

3 METER WIDE ROAD

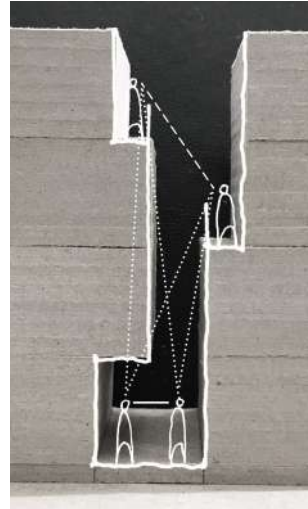


3M - 1

I 12:3
 P 0
 A 0
 S 32 %
 V 25 %
 F 75 %
 D 300 %

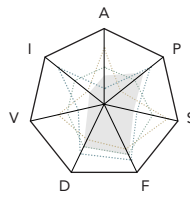


CONCLUSION: Private road

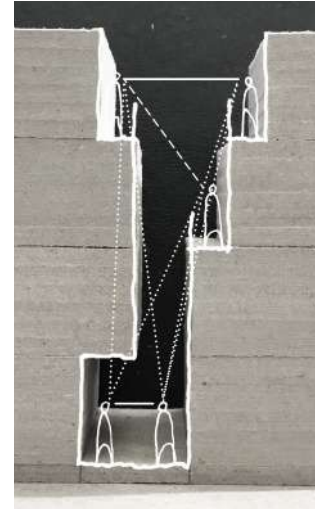


3M - 2

I 3:3
 P 4/6
 A 3/8
 S 40 %
 V 22 %
 F 75 %
 D 313 %

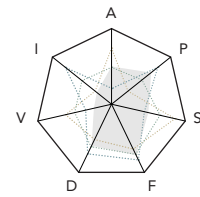


CONCLUSION: Private road

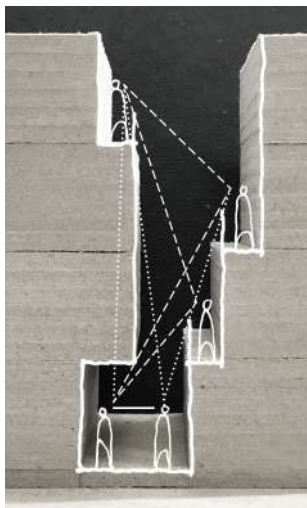


3M - 3

I 3:3
 P 6/9
 A 4/8
 S 50 %
 V 24 %
 F 75 %
 D 304 %

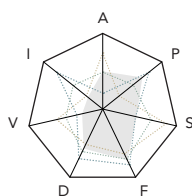


CONCLUSION: Semi-public road

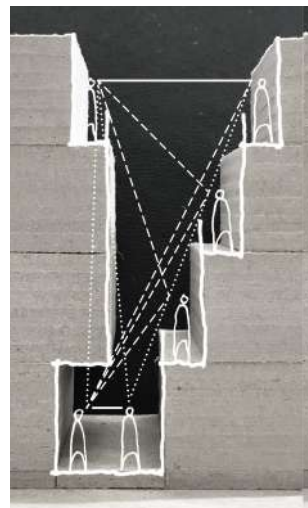


3M - 4

I 3:3
 P 6/9
 A 4/8
 S 46 %
 V 28 %
 F 75 %
 D 288 %

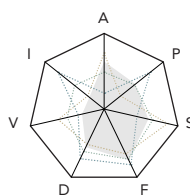


CONCLUSION: Semi-public road

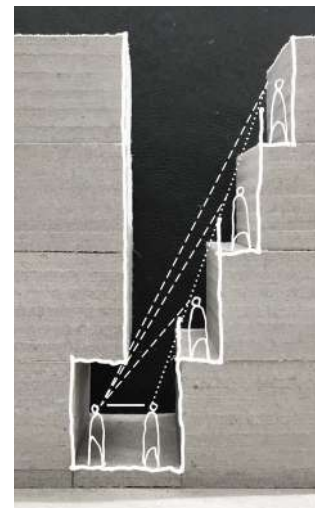


3M - 5

I 3:3
 P 8/15
 A 5/8
 S 60 %
 V 30 %
 F 75 %
 D 279 %

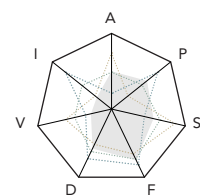


CONCLUSION: Semi-public road



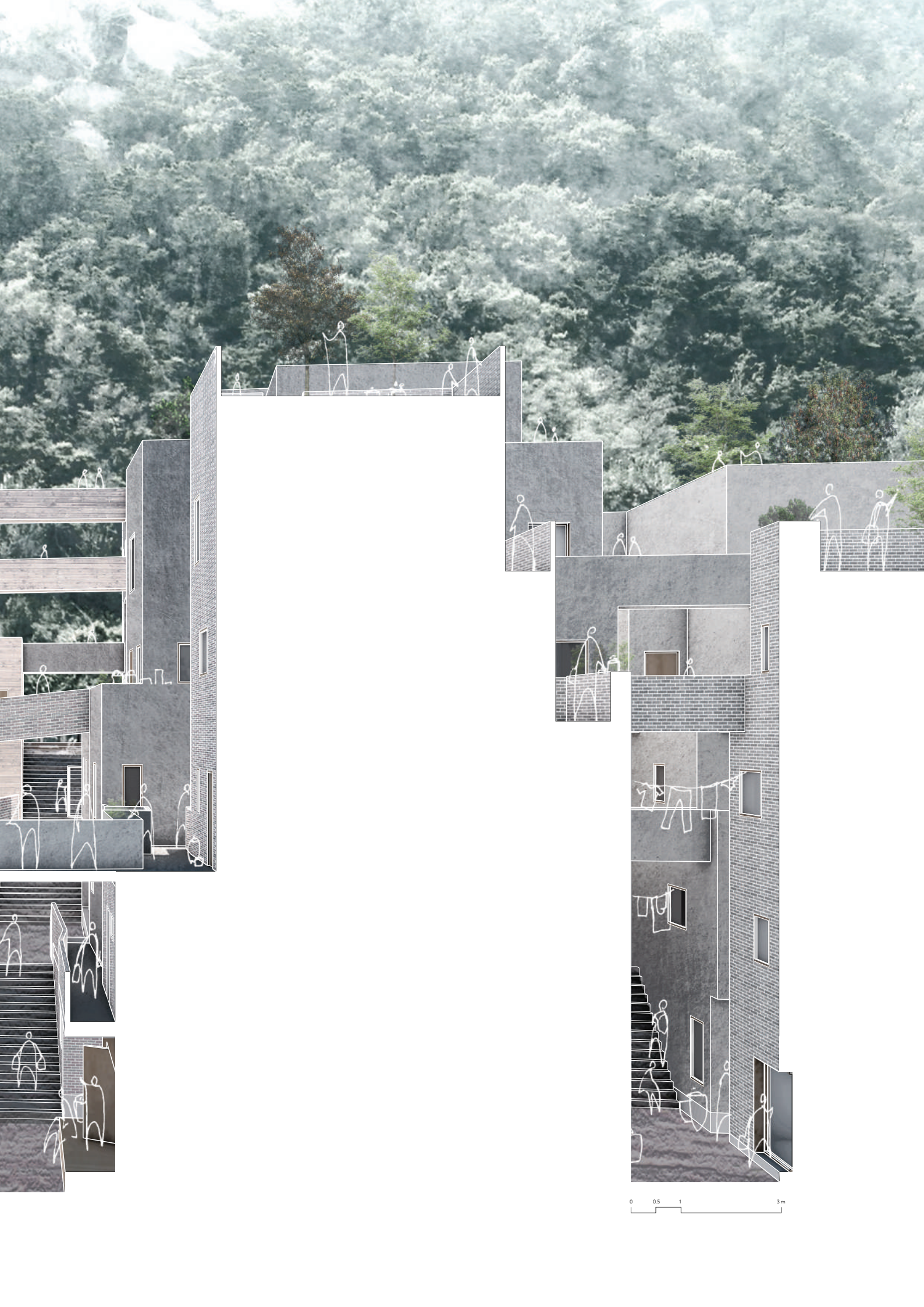
3M - 6

I 3:3
 P 6/10
 A 4/8
 S 57 %
 V 28 %
 F 75 %
 D 288 %



CONCLUSION: Semi-public road





0 0.5 1 3m

SECTIONS

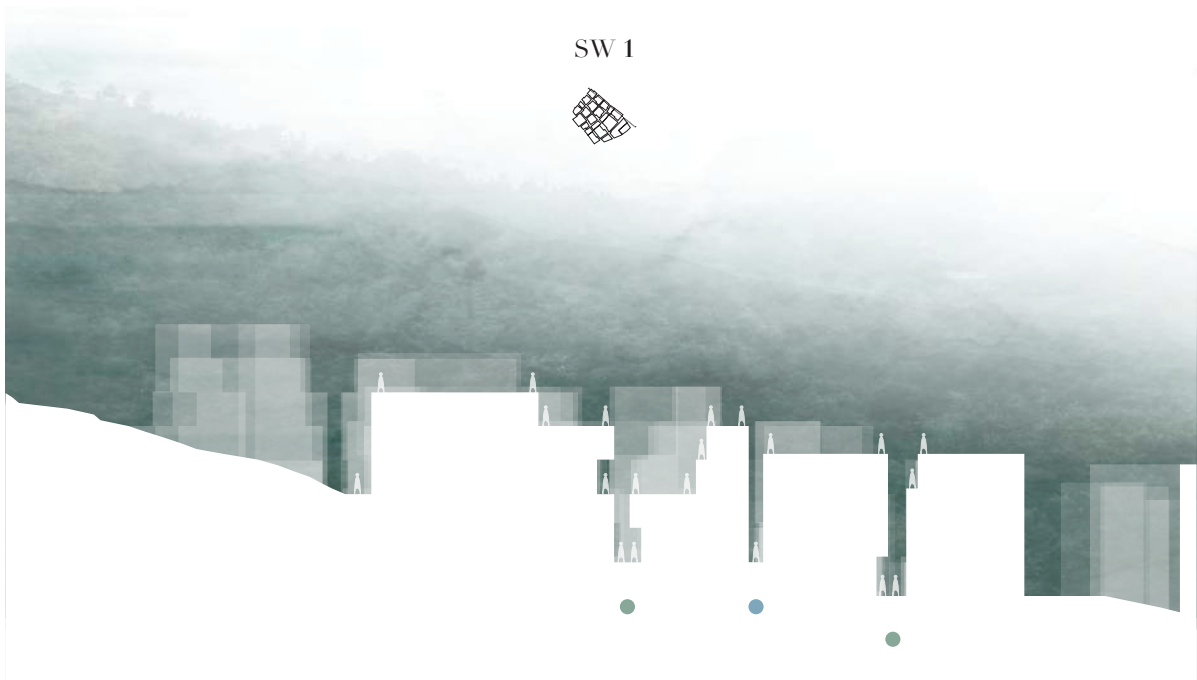
● PRIVATE ● SEMI-PUBLIC ● PUBLIC

SE 1



● ● ●

SW 1



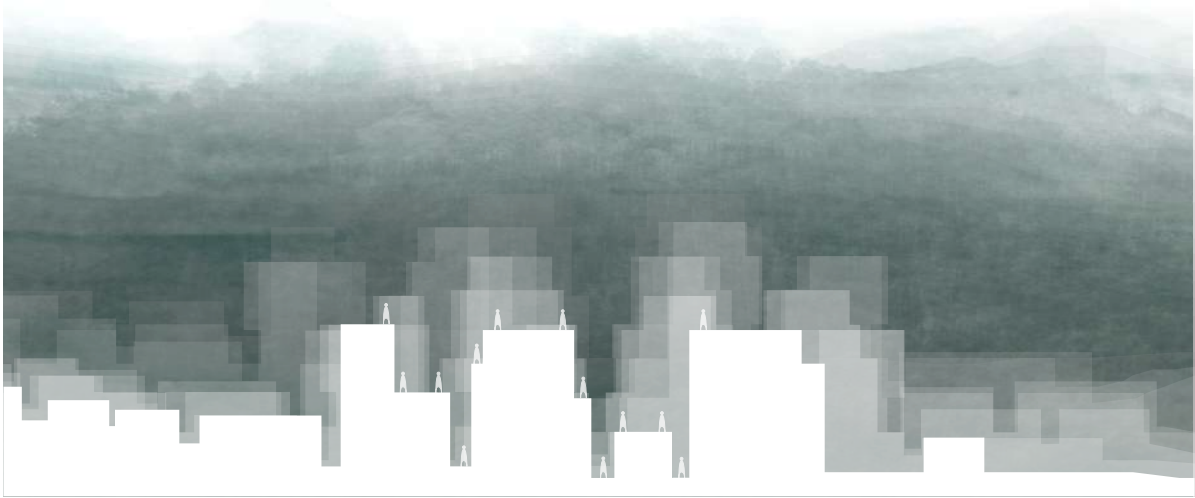
● ● ●



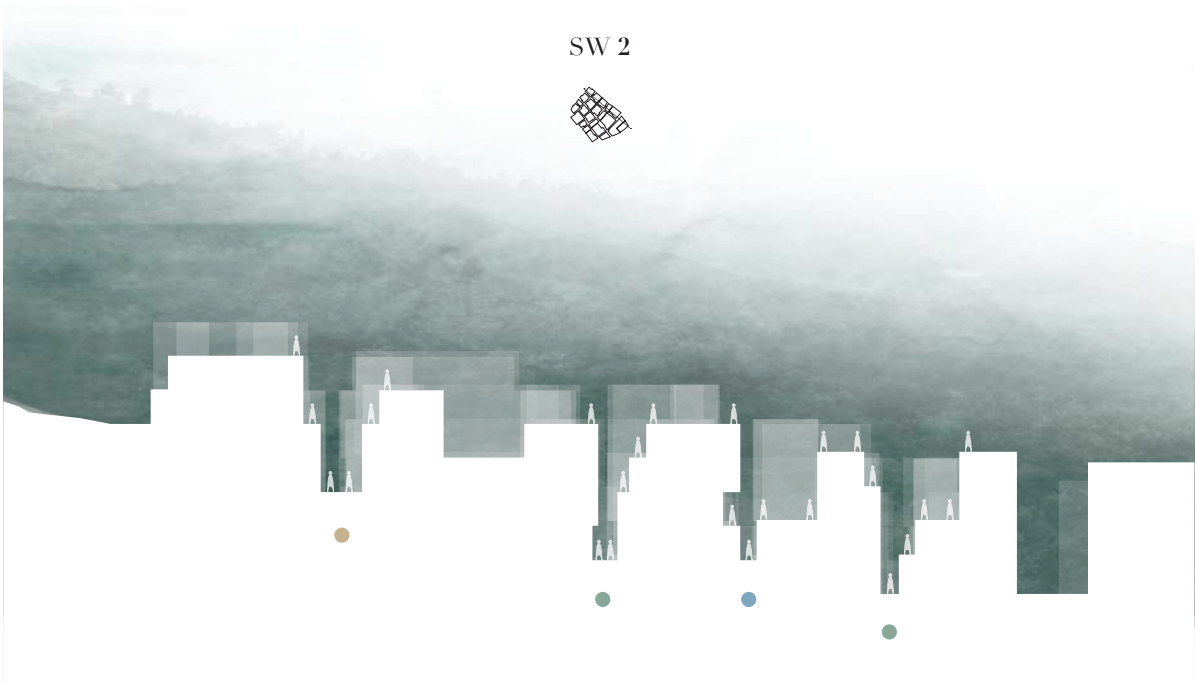
SECTIONS

● PRIVATE ● SEMI-PUBLIC ● PUBLIC

SE 2



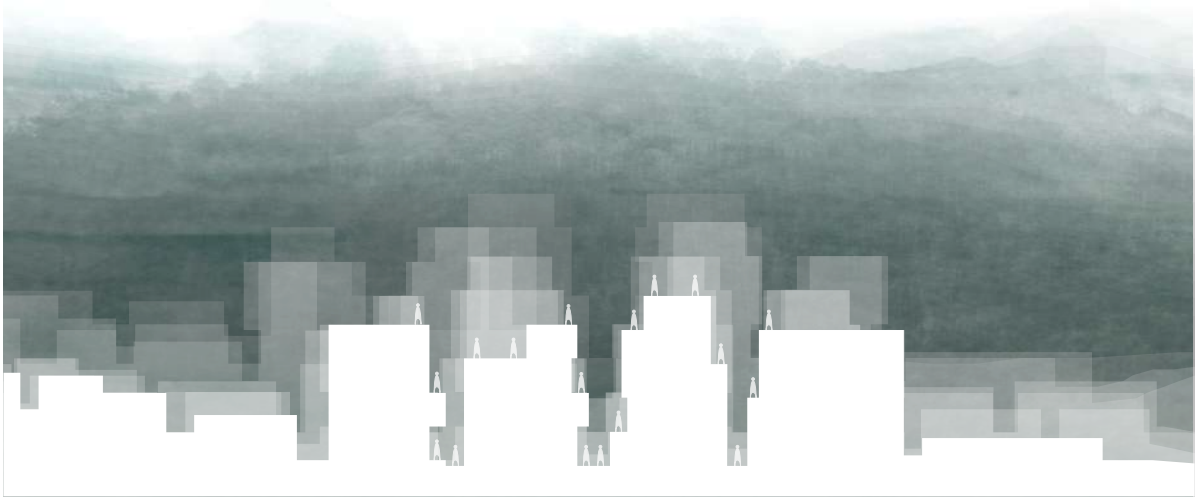
SW 2



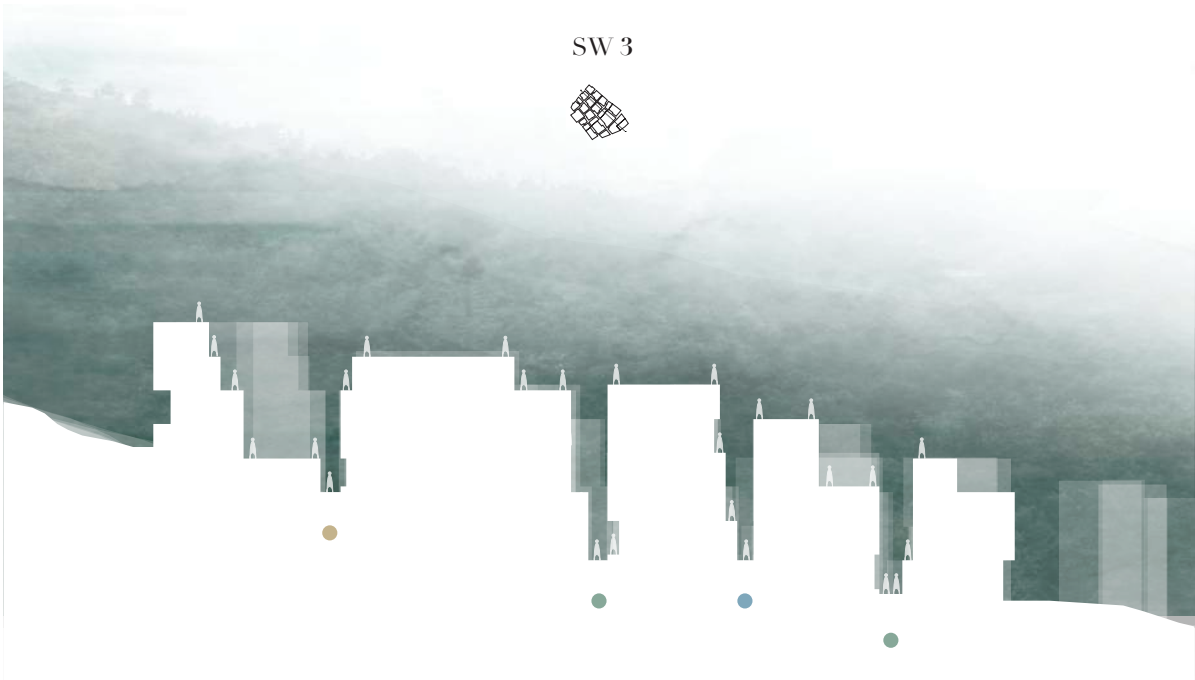
SECTIONS

● PRIVATE ● SEMI-PUBLIC ● PUBLIC

SE 3



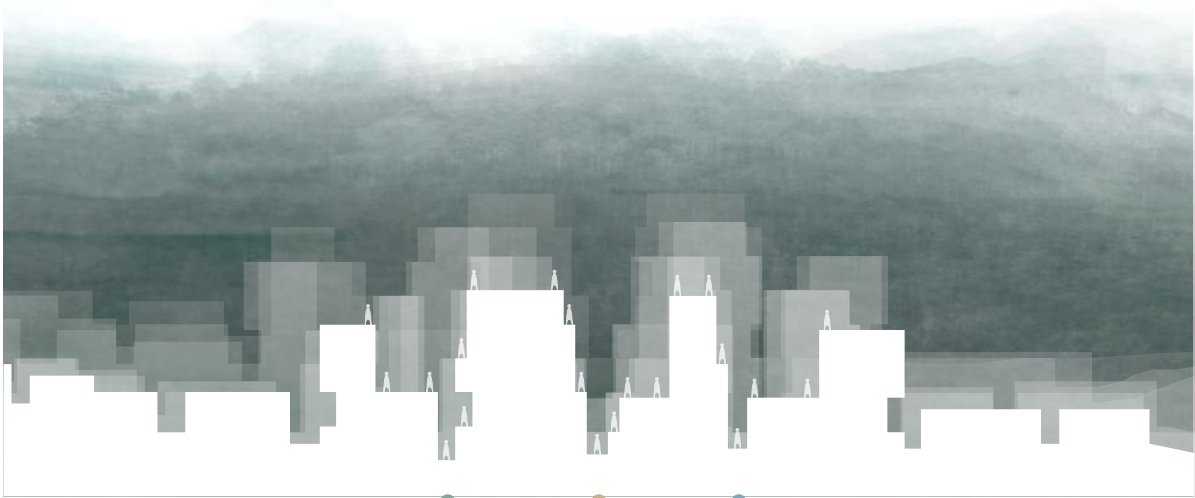
SW 3



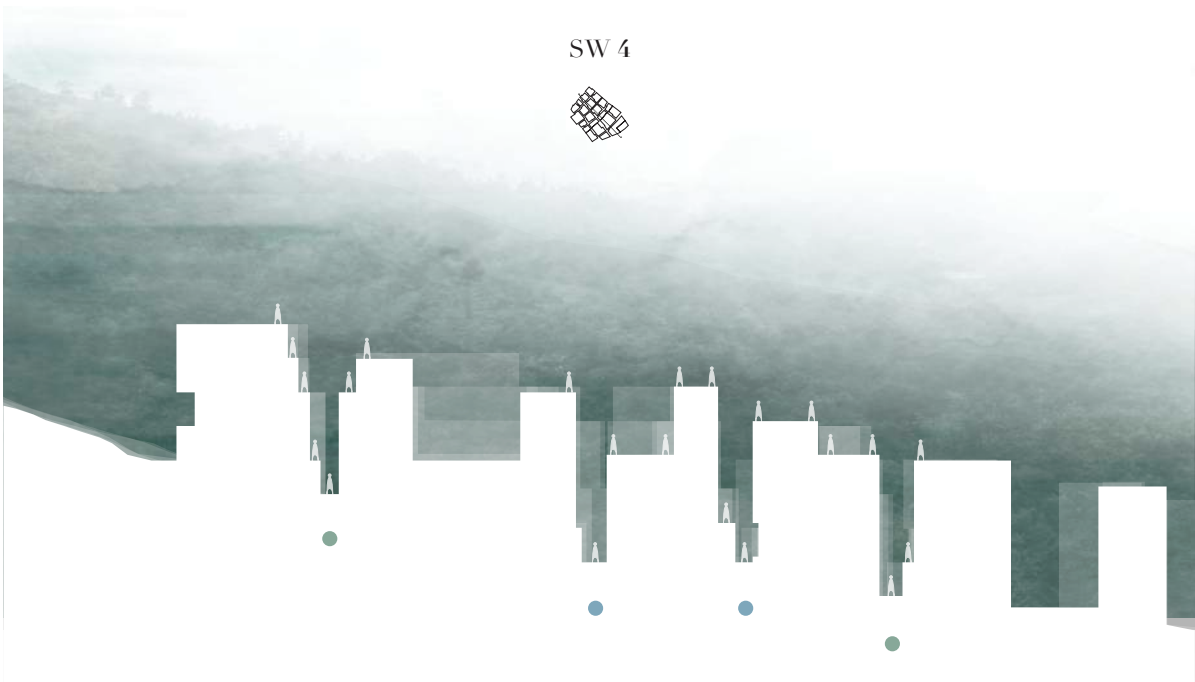
SECTIONS

● PRIVATE ● SEMI-PUBLIC ● PUBLIC

SE 4



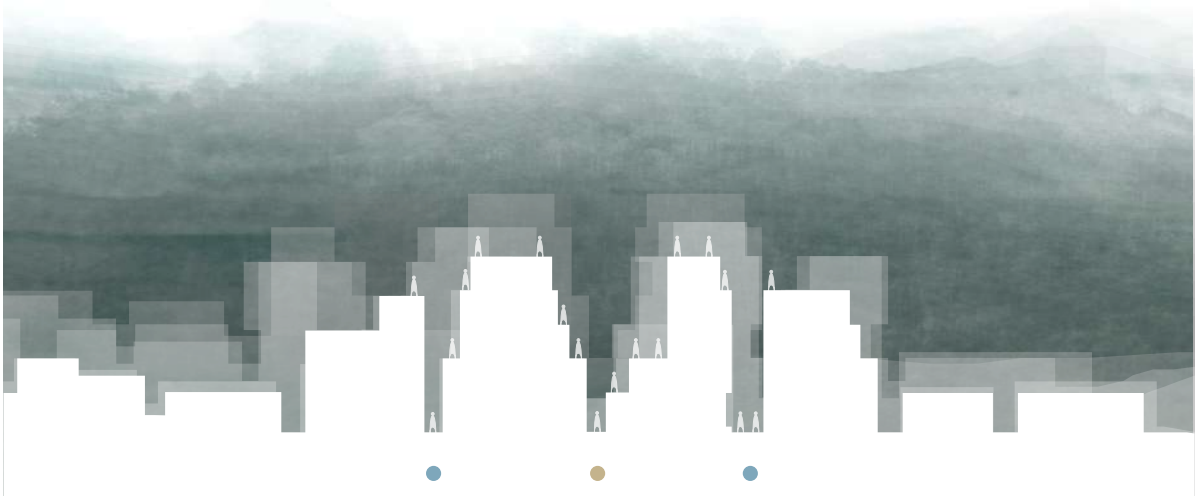
SW 4



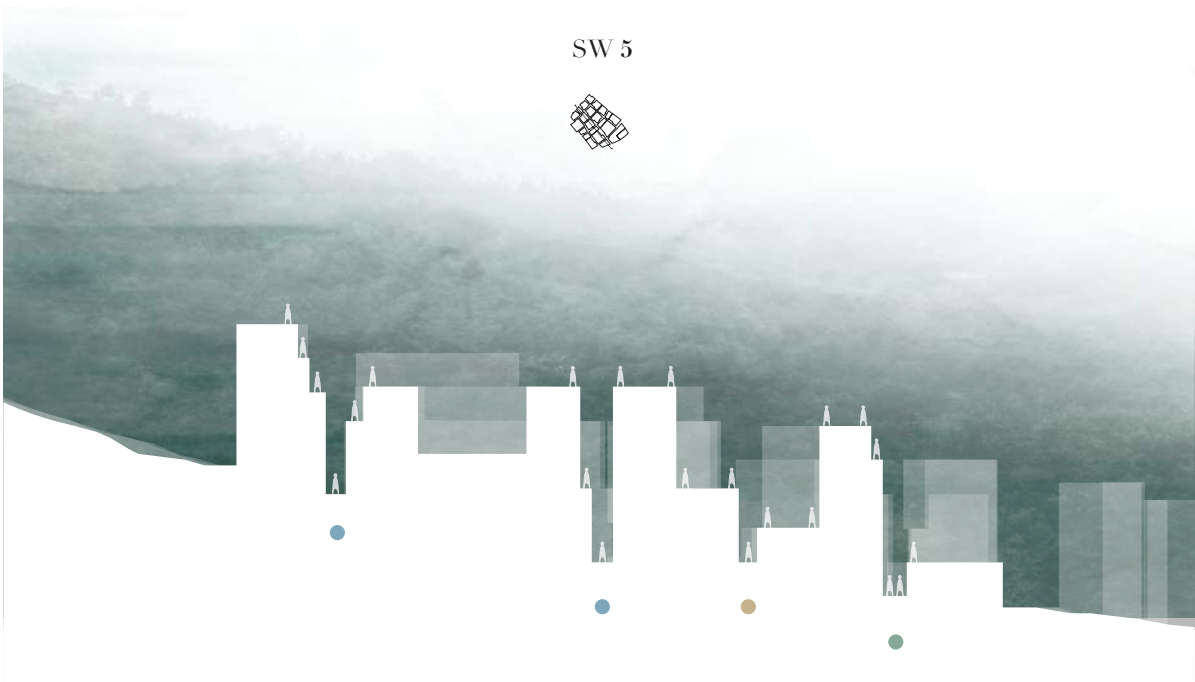
SECTIONS

● PRIVATE ● SEMI-PUBLIC ● PUBLIC

SE 5



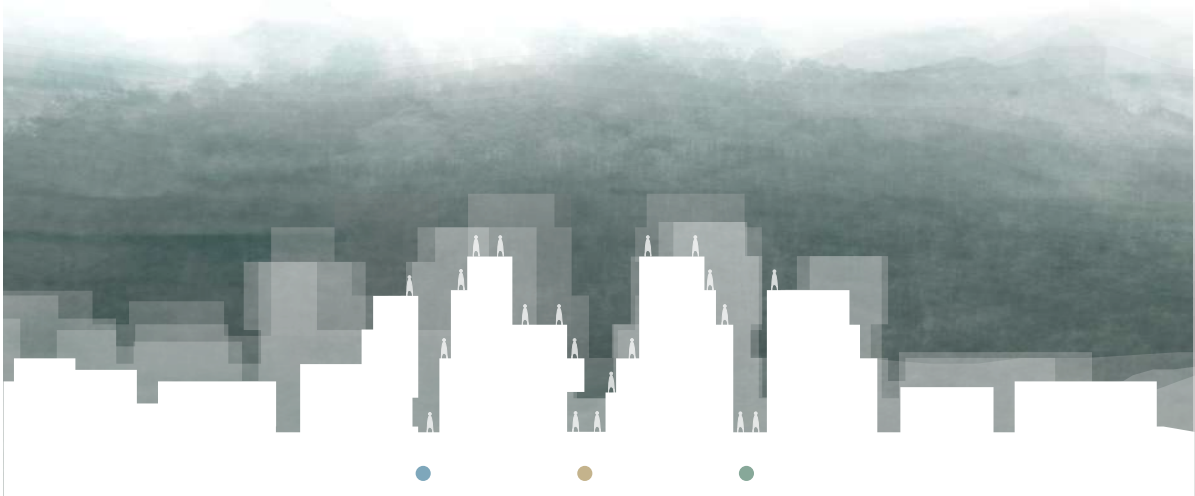
SW 5



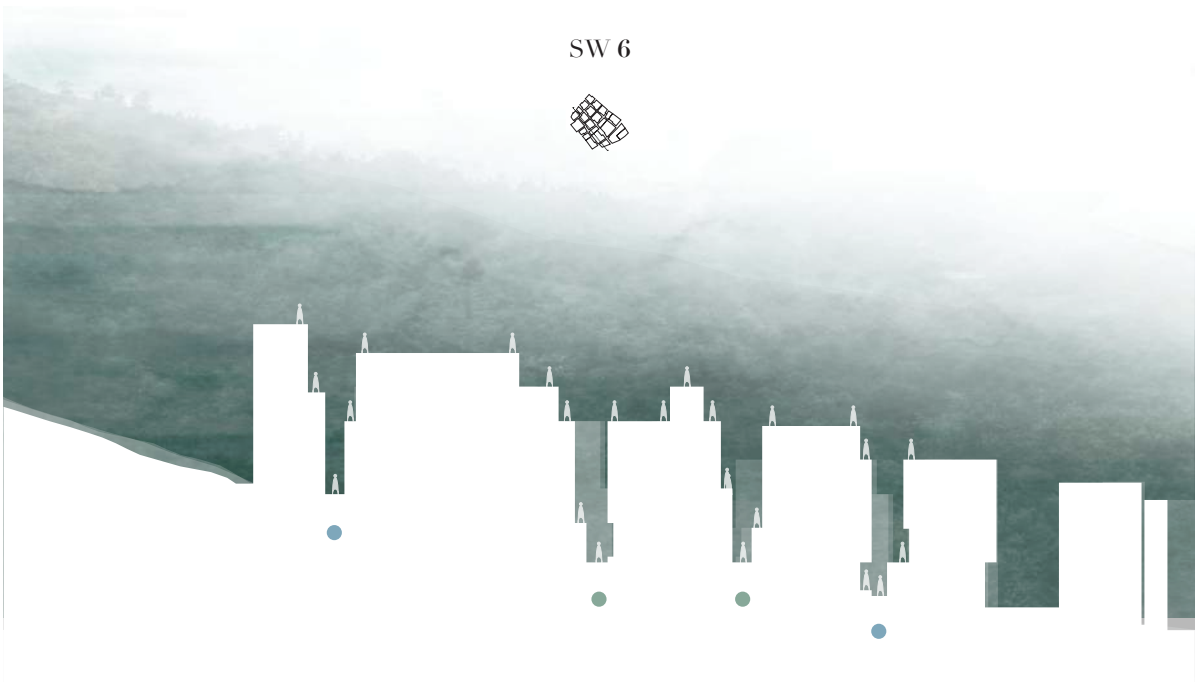
SECTIONS

● PRIVATE ● SEMI-PUBLIC ● PUBLIC

SE 6



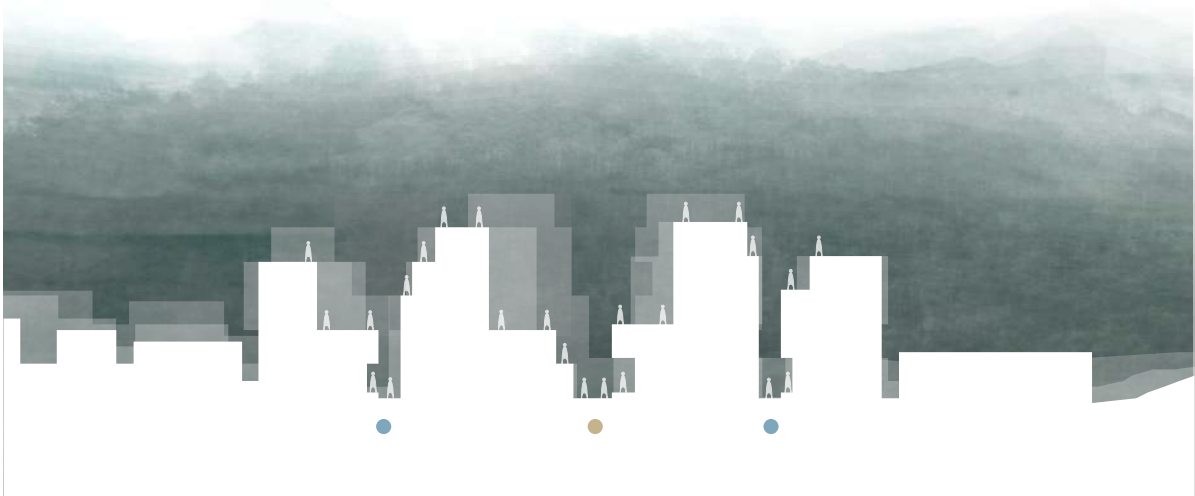
SW 6



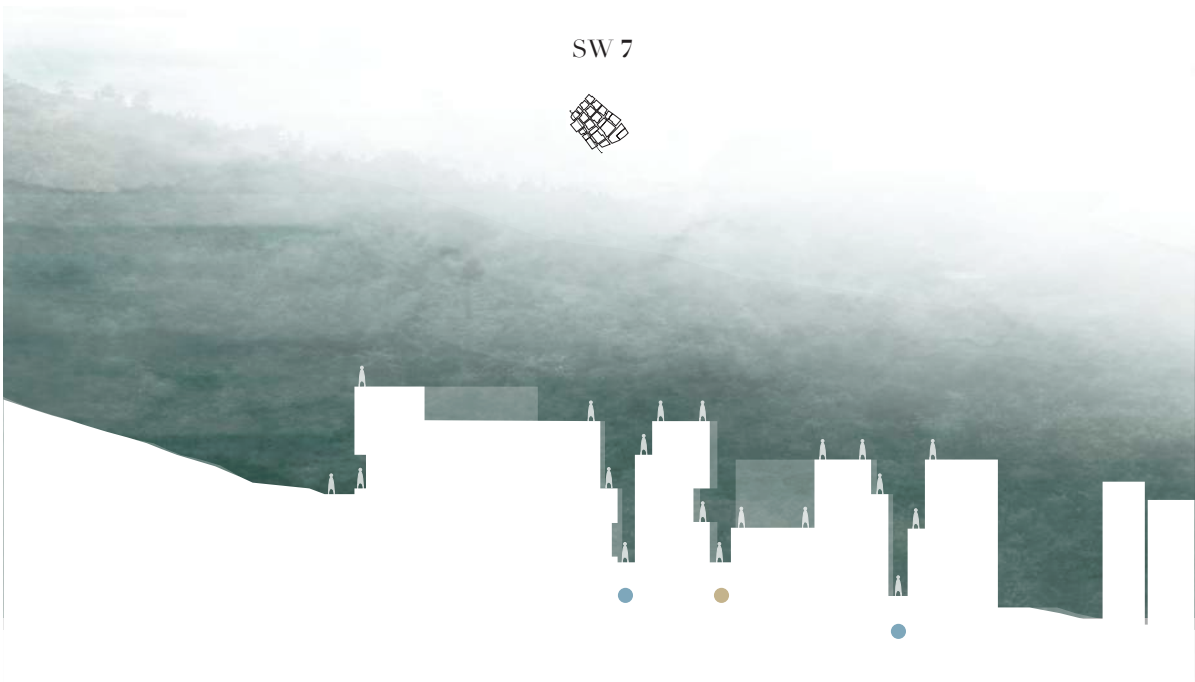
SECTIONS

● PRIVATE ● SEMI-PUBLIC ● PUBLIC

SE 7



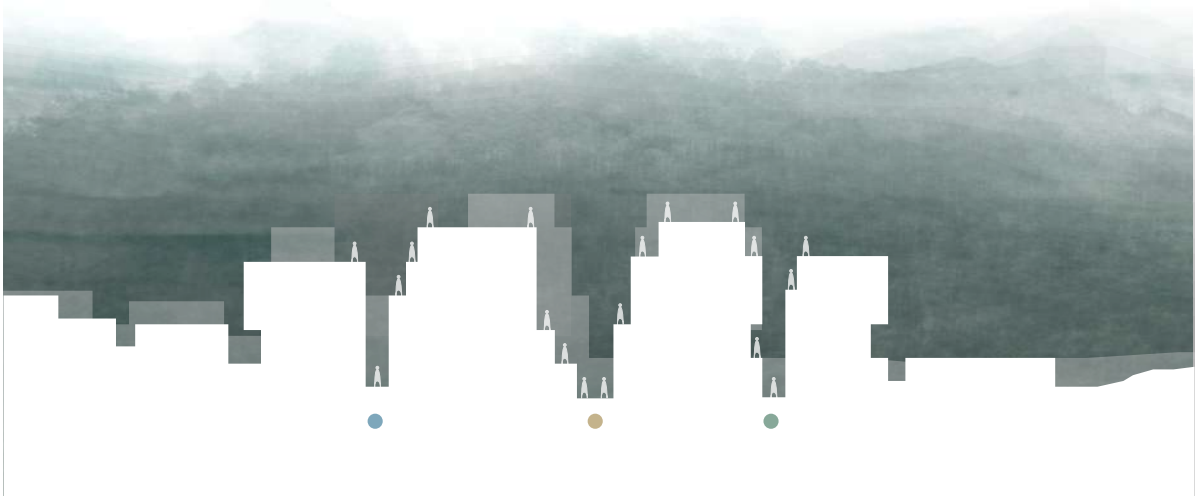
SW 7



SECTIONS

● PRIVATE ● SEMI-PUBLIC ● PUBLIC

SE 8



SW 8









VOLUME

5.4

Combining results from the studies of plan and section, a three dimensional structure can be designed. This chapter focuses on sequences of sections and how various parameters affect the overall impression when experiencing the in-between spaces. Referring to the study 3.2.1 of the existing village, similar conditions are preferable regarding sun exposure and intimacy. However, since the new design will be of higher density, innovative measures need to be taken in order to achieve this.

◁ *Study model in scale 1:200. Raised walkways and shifted facades makes the upper floors accessible from ground level.*

STRAIGHT ROAD

ONE STORY

WIDTH	2 m	LIGHT	5
HEIGHT	3 m	VEWS	5
SLOPE	1/6 m	INTIMATE	1
FLOORS	1	VARIATION	3

DOWN

Open and wide view. Possibility to look over the buildings.

UP

Parts of facades visible behind covering buildings. Roof silhouettes visible.



TWO STORIES

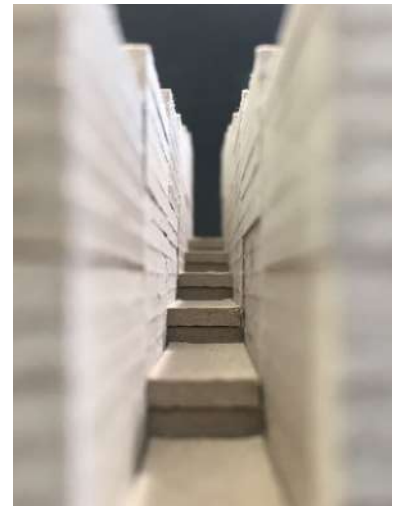
WIDTH	2 m	LIGHT	4
HEIGHT	6 m	VEWS	3
SLOPE	1/6 m	INTIMATE	3
FLOORS	2	VARIATION	1

DOWN

Quite intimate. Limited view to look over the buildings.

UP

Some facade visible behind covering buildings. Roof silhouettes partly visible.



THREE STORIES

WIDTH	2 m	LIGHT	2
HEIGHT	9 m	VEWS	1
SLOPE	1/6 m	INTIMATE	5
FLOORS	3	VARIATION	1

DOWN

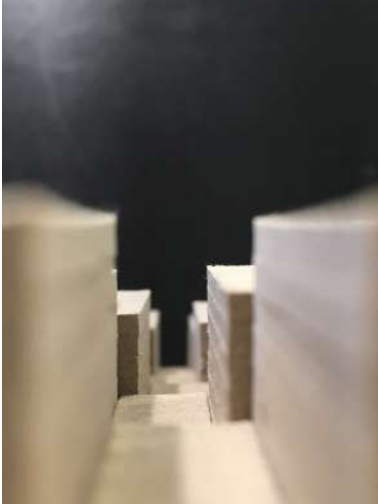
Very limited view. Somewhat dark and rather intimate. No wide view.

UP

Ground dominating the view. Very intimate and quite dark.



SHIFTED ROAD



ONE STORY

WIDTH	2 m	LIGHT	4
HEIGHT	3 m	VIEWS	5
SLOPE	1/6 m	INTIMATE	2
FLOORS	1	VARIATION	5

DOWN

Very open and wide view over roofs.
 Asymmetric and interesting.

UP

Clear view of every building and roof
 silhouettes are visible.



TWO STORIES

WIDTH	2 m	LIGHT	3
HEIGHT	6 m	VIEWS	4
SLOPE	1/6 m	INTIMATE	4
FLOORS	2	VARIATION	4

DOWN

View a bit more limited, though the
 shifts in facades provides a positive
 feeling of intimacy.

UP

Limited view, though the asymmetry
 makes the road seem less tunnel-like.



THREE STORIES

WIDTH	2 m	LIGHT	1
HEIGHT	9 m	VIEWS	1
SLOPE	1/6 m	INTIMATE	5
FLOORS	3	VARIATION	3

DOWN

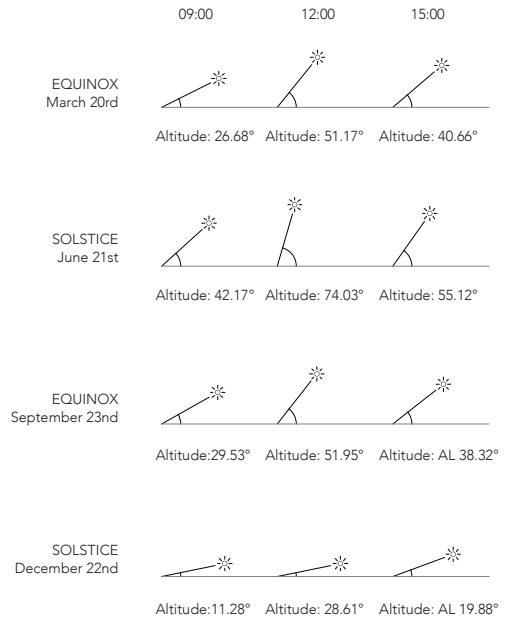
Very limited view and the shifts in
 facades become darker.

UP

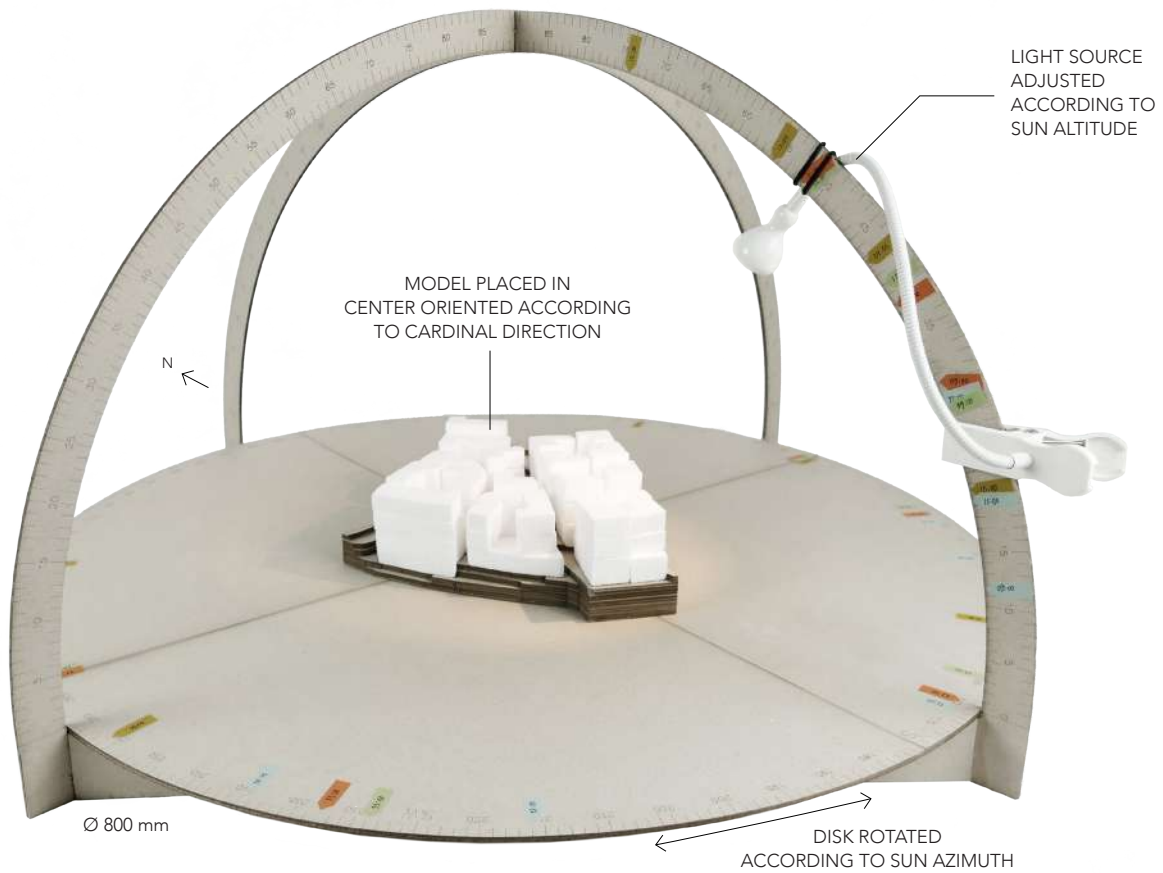
Very narrow and intimate in a less
 positive sense. Rather dark.

SUN STUDY

Given the nature of quite narrow roads, the parameter of sun exposure becomes quite important to investigate. Designing and using a "sun path machine" gives the opportunity to try various sun conditions on the study models. However, the rays from an artificial light are not parallel like the suns and therefore the studies are not completely accurate. Software such as DIVA for Rhinoceros have been used to achieve more accurate calculations.



SUN PATH MACHINE



09.00



MARCH 20th

PARAMETERS
Azimuth: 112.98°
Altitude: 26.68°

OUTCOME
Direct sunlight: 5
Brightness: 6
Contrast: 5



JUNE 21st

PARAMETERS
Azimuth: 91.04°
Altitude: 42.17°

OUTCOME
Direct sunlight: 3
Brightness: 4
Contrast: 7



SEPTEMBER 23rd

PARAMETERS
Azimuth: 115.80°
Altitude: 29.53°

OUTCOME
Direct sunlight: 6
Brightness: 6
Contrast: 5



DECEMBER 22nd

PARAMETERS
Azimuth: 131.61°
Altitude: 11.28°

OUTCOME
Direct sunlight: 7
Brightness: 5
Contrast: 3

12.00



MARCH 20th

PARAMETERS
Azimuth: 163.37°
Altitude: 51.17°

OUTCOME
Direct sunlight: 3
Brightness: 3
Contrast: 3



JUNE 21st

PARAMETERS
Azimuth: 149.03°
Altitude: 74.03°

OUTCOME
Direct sunlight: 8
Brightness: 8
Contrast: 7



SEPTEMBER 23rd

PARAMETERS
Azimuth: 169.32°
Altitude: 51.95°

OUTCOME
Direct sunlight: 3
Brightness: 3
Contrast: 3



DECEMBER 22nd

PARAMETERS
Azimuth: 171.57°
Altitude: 28.61°

OUTCOME
Direct sunlight: 2
Brightness: 2
Contrast: 4

15.00



MARCH 20th

PARAMETERS
Azimuth: 228.58°
Altitude: 40.66°

OUTCOME
Direct sunlight: 3
Brightness: 4
Contrast: 4



JUNE 21st

PARAMETERS
Azimuth: 255.95°
Altitude: 55.12°

OUTCOME
Direct sunlight: 5
Brightness: 5
Contrast: 6



SEPTEMBER 23rd

PARAMETERS
Azimuth: 233.43°
Altitude: 38.32°

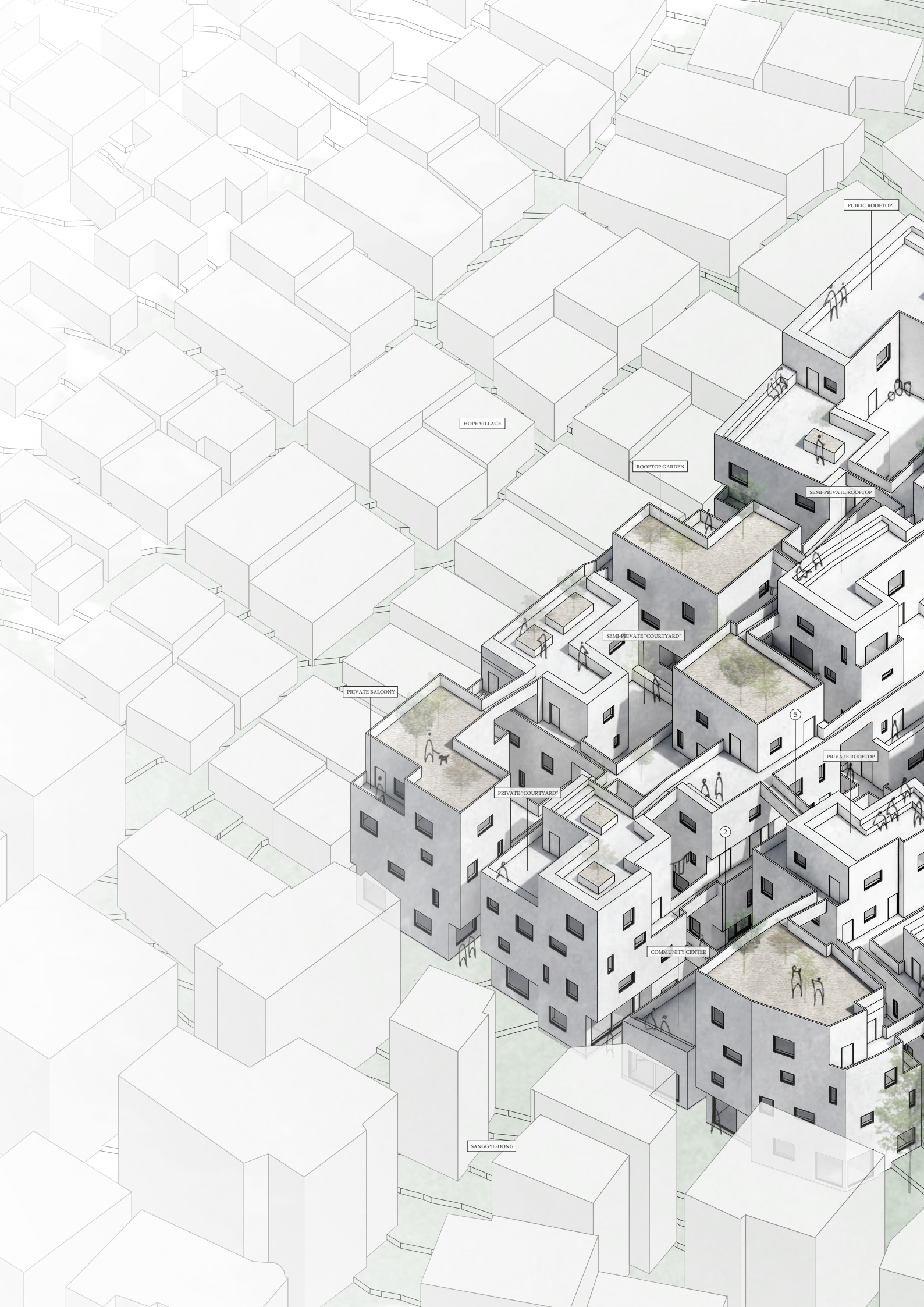
OUTCOME
Direct sunlight: 4
Brightness: 5
Contrast: 3



DECEMBER 22nd

PARAMETERS
Azimuth: 215.88°
Altitude: 19.88°

OUTCOME
Direct sunlight: 1
Brightness: 1
Contrast: 1



HOPE VILLAGE

PUBLIC ROOFTOP

ROOFTOP GARDEN

SEMI-PRIVATE ROOFTOP

SEMI-PRIVATE COURTYARD

PRIVATE BALCONY

PRIVATE COURTYARD

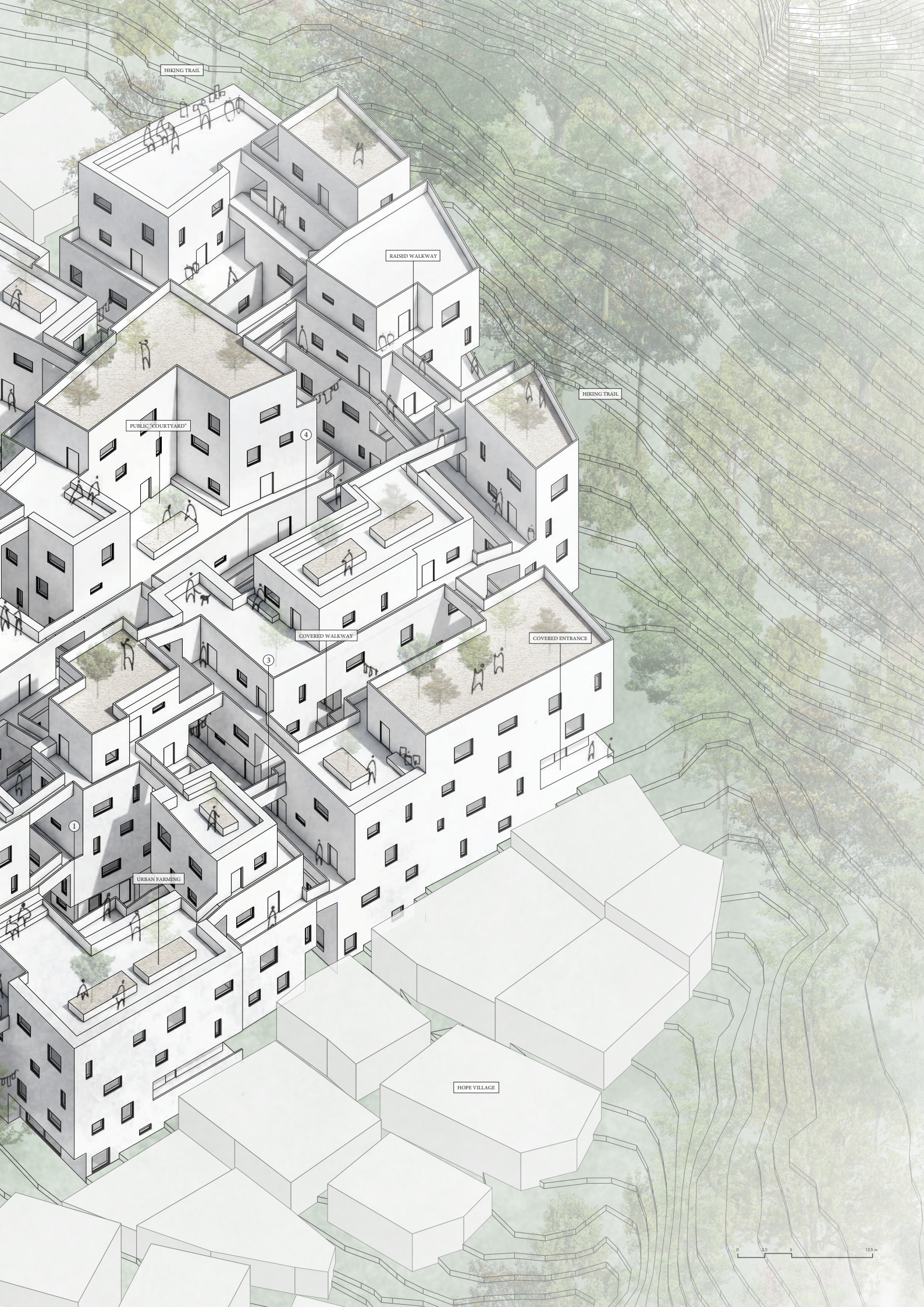
5

PRIVATE ROOFTOP

2

COMMUNITY CENTER

SANGGYE-DONG



HIKING TRAIL

RAISED WALKWAY

HIKING TRAIL

PUBLIC COURTYARD

COVERED WALKWAY

COVERED ENTRANCE

URBAN FARMING

HOPE VILLAGE





PUBLIC
① +88 SE



PUBLIC
② +82 NW



SEMI-PUBLIC

③ +88 NE



SEMI-PUBLIC

④ +76 SE



PRIVATE
⑤ +79 NE





LANDSCAPES
INTERPRETED

The exhibition wall consists of several panels displaying architectural and landscape-related content. From left to right, the panels include:

- Textual information and a large landscape photograph.
- A grid of small diagrams and site plans.
- Architectural drawings and a large map of a city or region.
- Architectural drawings and a large photograph of a building or landscape.



CONCLUSION

6

The aim of this thesis has been to find an innovative typology for a contextual densification of Hope Village through interpreting the method of Landscript. By establishing that the strongest identity of the Village lies in the frequent use of communal in-between spaces, i.e. the narrow roads, the focus has been to extract qualities from the existing situations to implement in a new design. Yet, it has been important to allow new ideas to influence the findings in order to create something unique and exciting for the village.

Much of the identity comes from the intimacy and informality of the low-rise neighborhood and when building higher, these qualities can easily be lost. However, since the final proposal is based on keeping the actual footprint of the current road network, the usability and proportions of the ground floor level does stay very much the same. Yet, some alterations have been made due to a newly established hierarchy of privacy, though this will hopefully provide a more varied and distinct use of the in-between spaces. Additionally, by shifting the facades, raised walkways and terraces created on the upper levels, an extra dimension is added to the communal spaces. The residents will be able to move horizontally instead of just vertically throughout the structure, which gives a stronger sense of community and flexibility.

By being influenced by the existing when creating something new, the proposed design for the village has become very specific for the site. The reinvented informality permeates the proposal and gives opportunity for a way of living that could not have been achieved in many other typical typologies of Sanggye-dong. Furthermore, it gives a sense of being anchored in both context and history, rather than a typology that could have been placed anywhere, anytime.

◁ *Master Thesis proposal at the Open Seminar Exhibition.
Chalmers University of Technology, May 2018.*

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FIGURES

- Figure 1-3. IROJE Architects & Planners. Retrieved from website: <http://www.iroje.com>
- Figure 4-5. TRU Architects. Retrieved from website: <http://www.trugroup.co.kr>
- Figure 6. Sitte, C. (1945). *The Art of Building Cities*. New York: Reinhold Publishing Corporation.
- Figure 7. Seoul Biennale for Architecture and Urbanism. Retrieved from website: <http://seoulbiennale.org/en>
- Figure 8. Seoul Center for Architecture and Urbanism. Retrieved from website: <http://sca.seoul.go.kr>

APPENDIX

6.1

In the spring of 2017 practicing Korean Architect and former City Architect of Seoul, Prof. Seung H-Sang came to the Technical University of Vienna to hold a studio together with Prof. Mladen Jadric and 25 students of architecture. The aim of the studio was to learn from famous social housing projects of Vienna and integrate the findings in a regeneration design of Hope Village in Seoul. During that time, I was doing my second semester of an Erasmus exchange at the university and was chosen for a place in the studio. A very intense semester resulted in our work being exhibited at the first ever Biennale of Architecture and Urban Design in Seoul. Further on, my group's project was selected to be the foundation for another semester of work on the village. Since I was leaving for Chalmers, I could not actively participate in the studio but designed my own project as preparatory work for my Master Thesis. In February of 2018 we exhibited our works at a forum for Seoul's future development at Donuimun Museum Village in Seoul where I also held a lecture on the subject.

EXHIBITION 2017

LANDSCAPES FOR NEW COMMUNITIES: SEOUL VIA VIENNA

Seoul Biennale of Architecture and Urbanism
Dongdaemun Design Plaza, Seoul



1. Figure 7. Seoul Biennale of Architecture and Urbanism.
2. Exhibition by the students of Technical University of Vienna, spring 2017.
- 3-4. My group's project at the exhibition opening.

EXHIBITION 2018

LANDSCAPES FOR NEW COMMUNITIES: SEOUL VIA VIENNA

*Forum for Architectural and Urban Development in Seoul
 Donuimun Museum Village, Seoul*



1. Figure 8. Landscapes for new Communities: Seoul via Vienna.
2. Forum discussion regarding new ideas for future development of Seoul.
3. Exhibition model in scale 1:200 of student proposals for Hope Village.
4. Exhibition by the students of Technical University of Vienna, fall 2017.