



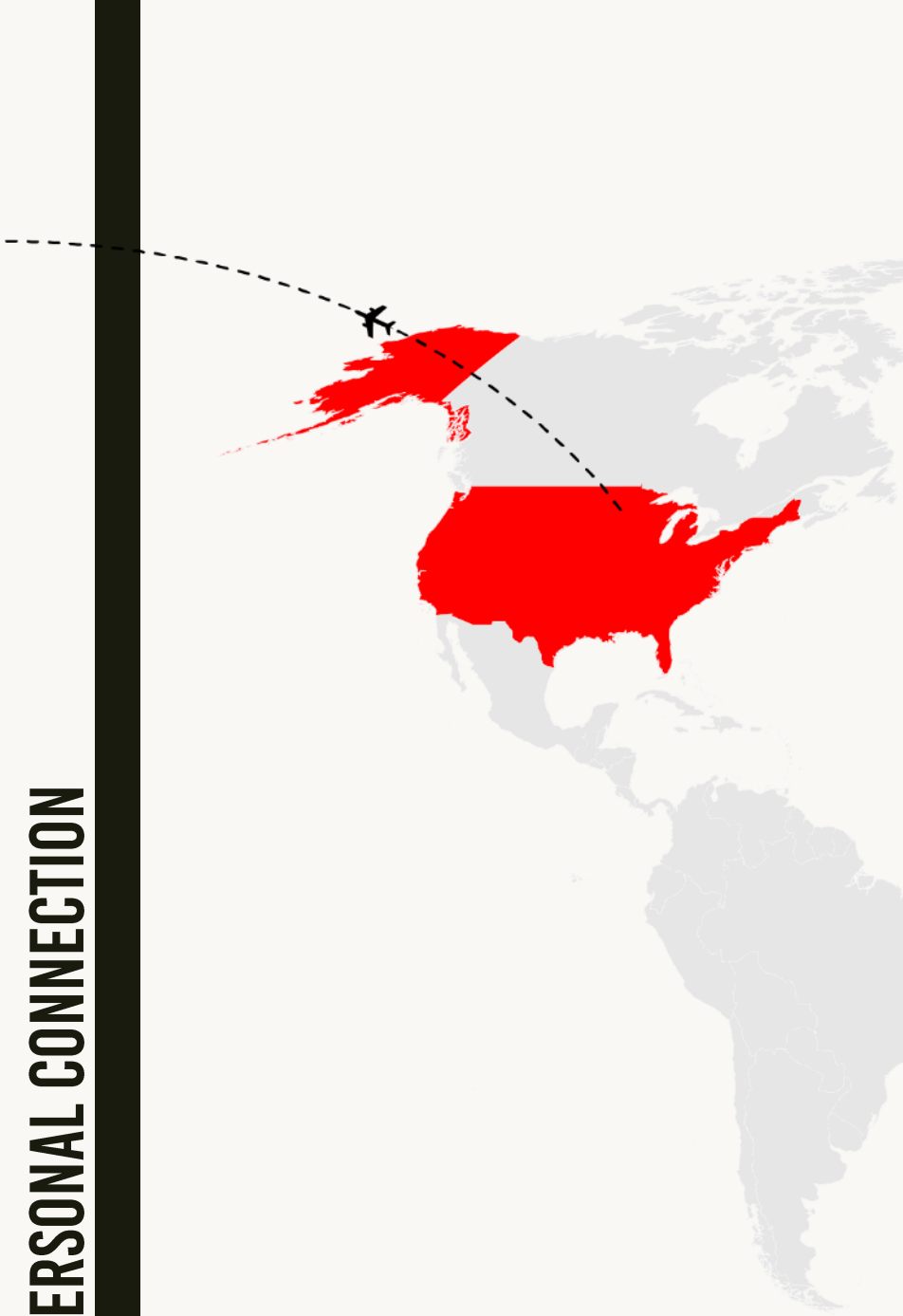
BORROWED PAST

Reexamining High-Density Housing in South Korea

MULTI-FAMILY HOUSING PROJECT IN BUSAN SOUTH KOREA

Elliott Klinger / ARCH 772 / Design Thesis / Booker / Spring 2016 / NDSU

PERSONAL CONNECTION



**HAPPY
COUPLE!**





BUSAN, SOUTH KOREA

- Metro population of 8M
- Rich History
- First city to be annexed by Japan
- Only city to never be captured by North Korea
- Strong Sense of local Identity



ZENTIH TOWERS / GWANGAN BRIDGE

ARCHITECTURE

TEMPLES

HANOKS

APARTMENT BLOCKS

DISCONNECT

WHY?



RAGS TO RICHES

South Korea has made a lot of progress in the last 6 decades; from being one of the poorest countries to having the 11th largest economy in the world.

MODERNIZATION

The country transformed rapidly after the Korean War and today represents one of the most technological and modern countries on earth.

GROWING PAINS

However, this transformation did not happen without having to make sacrifices.



HOUSING SHORTAGE

The rapid economic growth and urbanization led to a shortage in housing within the cities.

OUT WITH THE OLD

To accommodate the influx of new residents, traditional Korean homes, called Hanoks, were leveled, along with thousands of years of history, to make room for faceless apartment blocks that do nothing to respect and honor their culture.

IN WITH THE NEW

For decades, this approach went largely unopposed because it was seen as the fastest way to modernize.



SECOND THOUGHTS

Today Koreans have woken up and realized that centuries of tradition have been destroyed in the name of progress and that the housing blocks that replaced many of the traditional neighborhoods are not meeting the needs of residents.

WHAT'S OLD IS NEW

In recent years there has been a demand for housing that reintroduces elements of the Korean Hanok.



“HOW CAN ARCHITECTURE
HELP **KOREANS** RECONNECT WITH
THEIR PAST?”

PEACE ON THE PENINSULA

Up until the early 1900s, Korea had existed in relative peace for the last 500 years.

Country was united under the Joseon Dynasty.



JAPANESE OCCUPATION

In 1910, Japan took over the small fishing village of Busan.

Quickly, Japan was able to take control of the Korean government and forcefully annex the country as a colony of Japan.



BUSAN 1905

CULTURAL REPRESSION

Japanese language was made mandatory in schools.

Korean language newspapers were made illegal.

Koreans were seen as inferior and sent to work camps or sent to fight in Japan's wars as involuntary soldiers.

Women were grossly mistreated for the pleasure and satisfaction of Japanese men



MODERNIZATION

The Japanese government is responsible for bringing the country into the modern era.

Updated the country's Infrastructure.

Introduced modern building techniques and styles to the country.

Built the first modern apartment building in 1944.

Continued until 1945 when Korea gained its independence from Japan



“POST” WAR KOREA

1950 - Present - Korean War

American military presence has influenced all aspects of culture.

In 1960s and 70s housing trends begin to move rapidly away from the Hanok style and towards a more western solution.

In the late 1980s Korea's economy took off and population moved quickly to the cities.

Housing shortages, lack of buildable land, and poor planning resulted in the adoption and development of large apartment complexes.

This trend continues into the present.



1985

**“HOW CAN ARCHITECTURE
HELP **KOREANS** RECONNECT WITH
THEIR PAST?”**

THE SITE

THE SITE



HAEUDAЕ

View From Site



DALMAJI

View From Haeundae Beach





EXISTING CONDITIONS ON SITE



STREET CONDITIONS

TRAIN TRACKS

Actively used as a walking path



MIPO FISH MARKET

Fresh Fish and Seafood
5 minute walk from
project site



CHERRY BLOSSOMS!!!!



THE PROCESS

TRADITIONALLY, WHAT WERE KOREAN'S ATTITUDE TOWARDS NATURE?

HANOK DESIGN PRINCIPLES

INCLUSIVENESS - The design and materials should embrace imperfections found in nature.

NON-ARTIFICIALITY - Priority is given to the overall balance of design rather than to ornate details.

CONTEMPLATIVENESS - The design should express innate beauty rather than superficial aesthetic.

MODESTY - The design should not call excessive attention to itself.



KEN YEANG

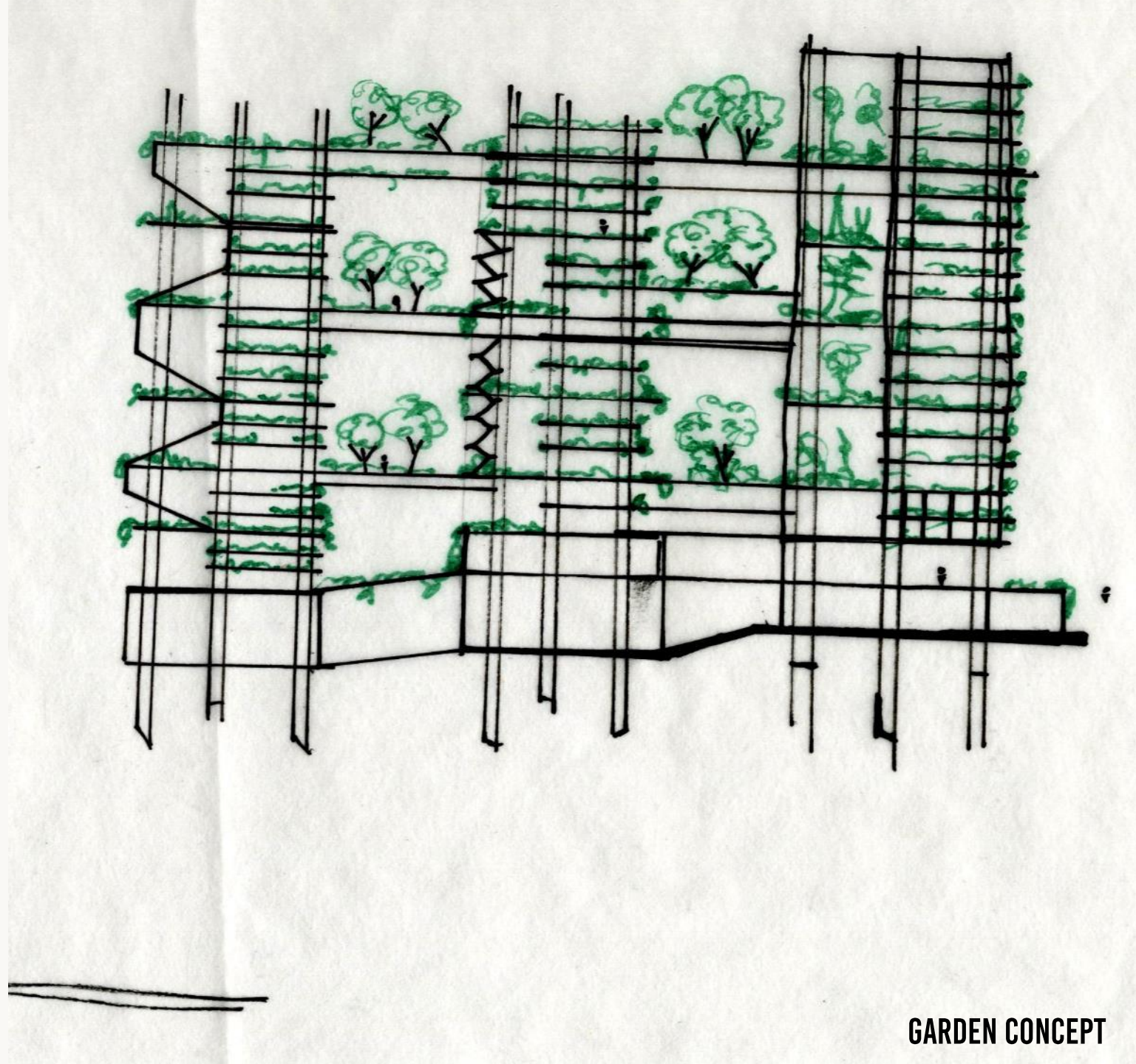
Nature Throughout
Variety of spaces

LIKES

Variety of spaces
Community formation

DISLIKE

Large
Not in-line with Hanok principles



HABITAT 67

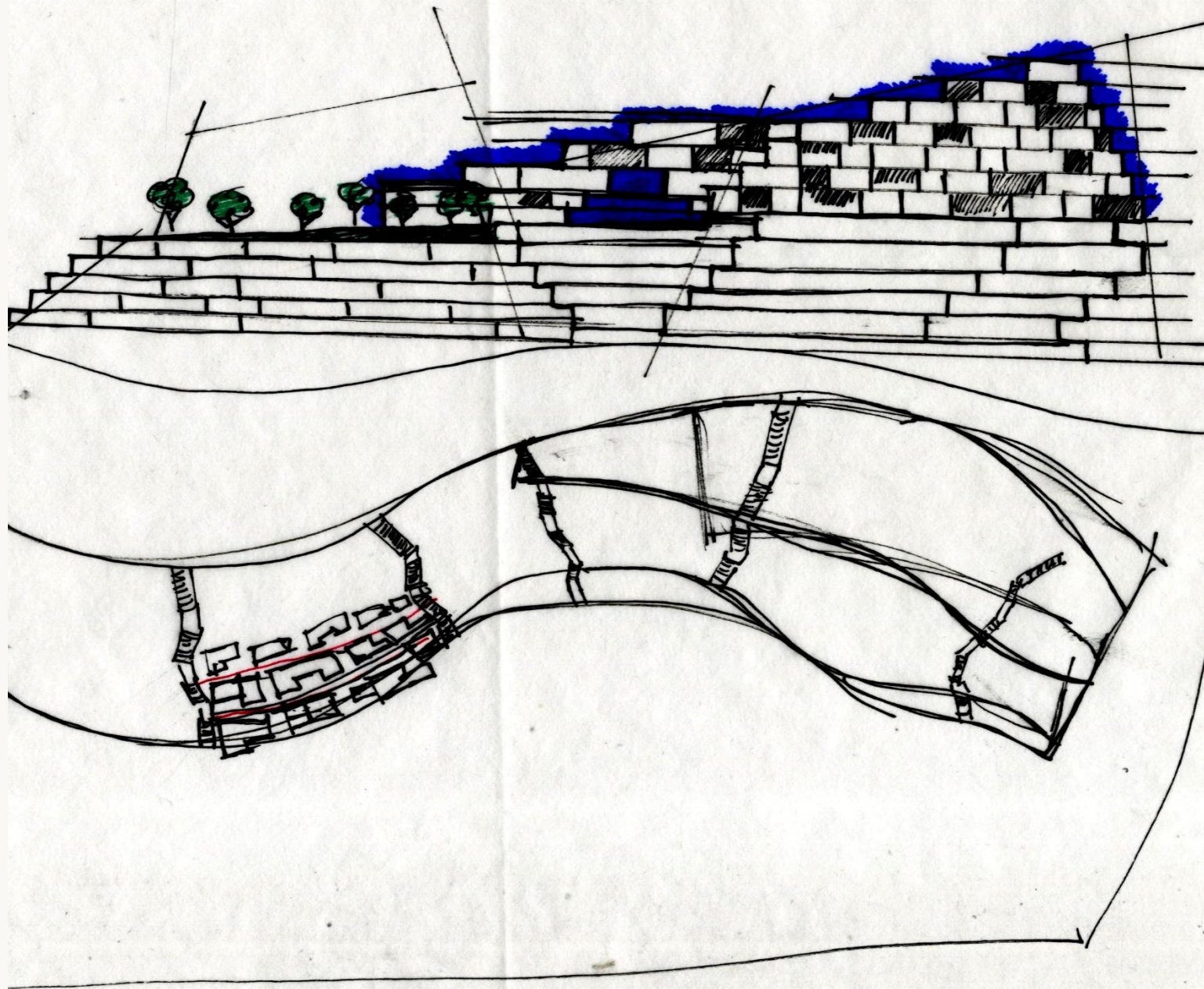
Scale
Stacking

LIKES

Scale
Stacked Arrangement
Outdoor Space
Community

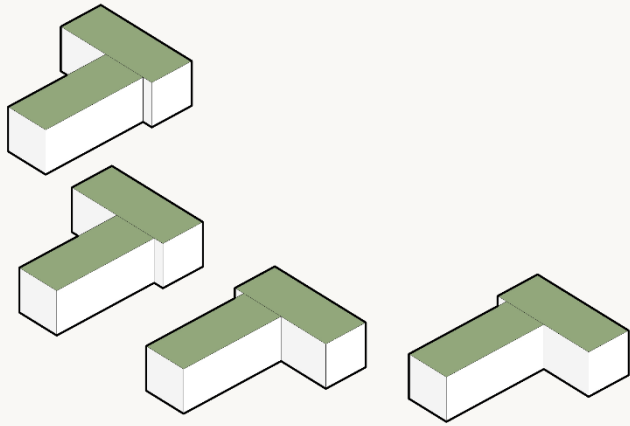
DISLIKE

none

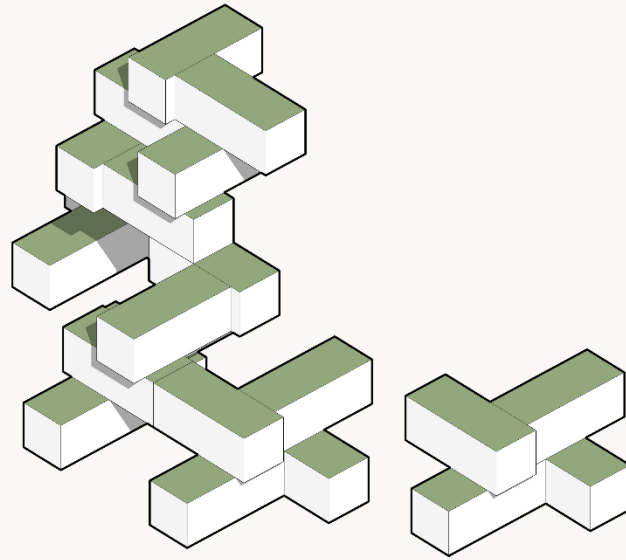


STACKING CONCEPT

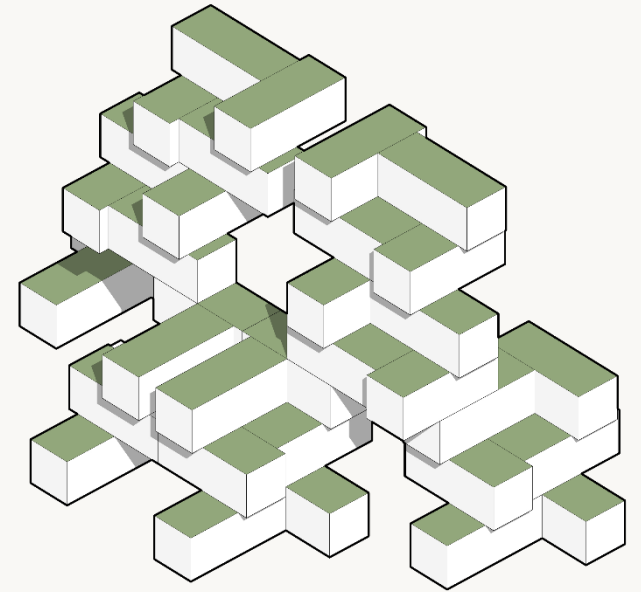
HABITAT 67 STUDY



BASIC MODULE



STACKED AND TRANSFORMED

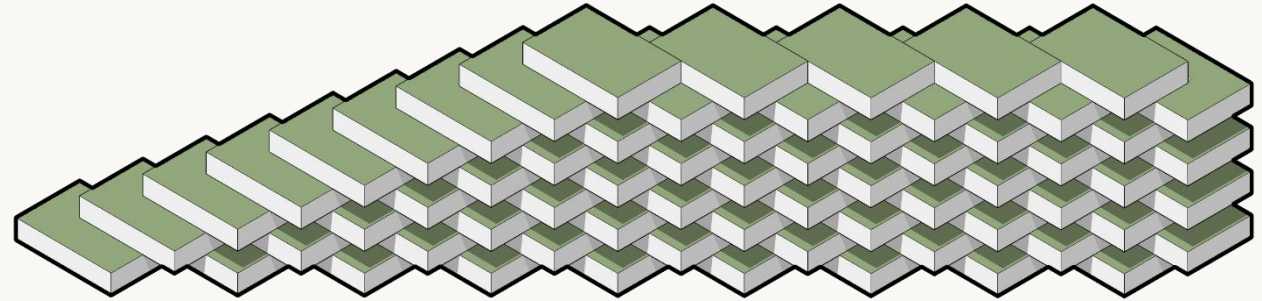


FINAL ARRANGEMENT

HORIZONTAL FORM STUDY

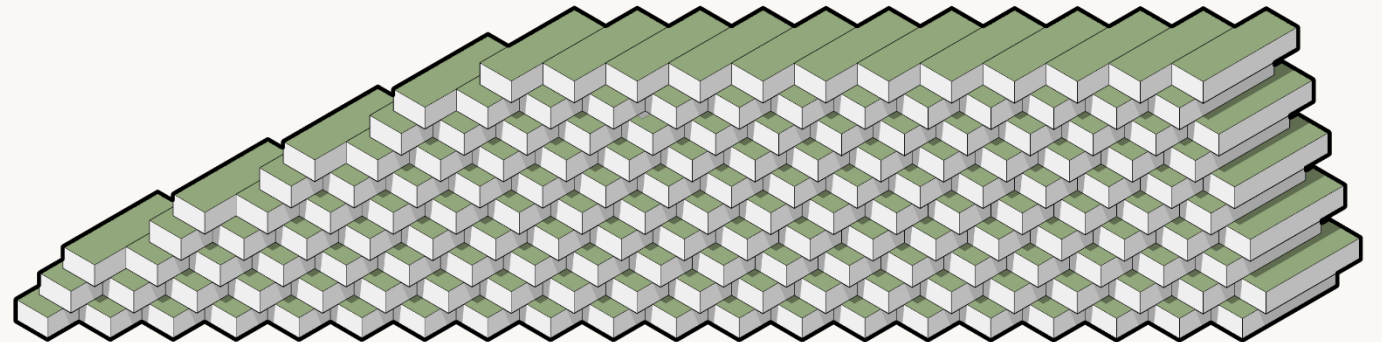
PROS

- Each unit had access to abundant natural light and views.
- Community spaces can easily be created within existing form
- Strong connection created between residents



CONS

- Privacy for individual units is compromised
- Higher = Wider
- Not scalable to typical building conditions in Korea



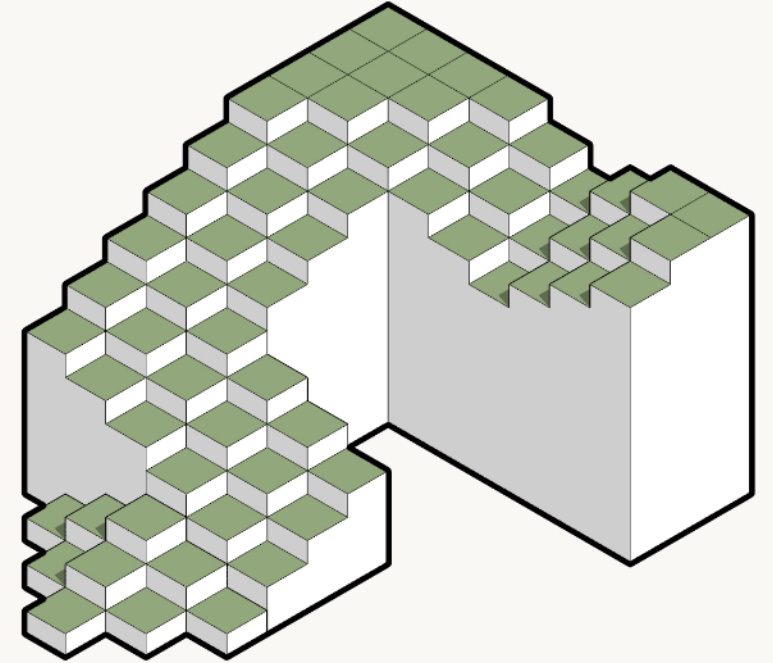
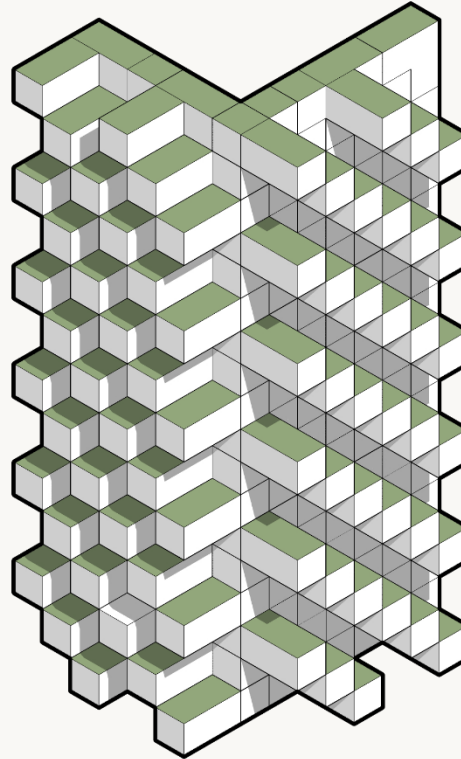
VERTICAL FORM STUDY

PROS

- Each unit had access to abundant natural light and views.
- Community spaces can easily be created within existing form
- Strong connection created between residents

CONS

- Privacy for individual units is compromised



INSPIRATION FROM THE HANOK

Dae Cheong

Kan

Screen

Urban Layout



PLAN

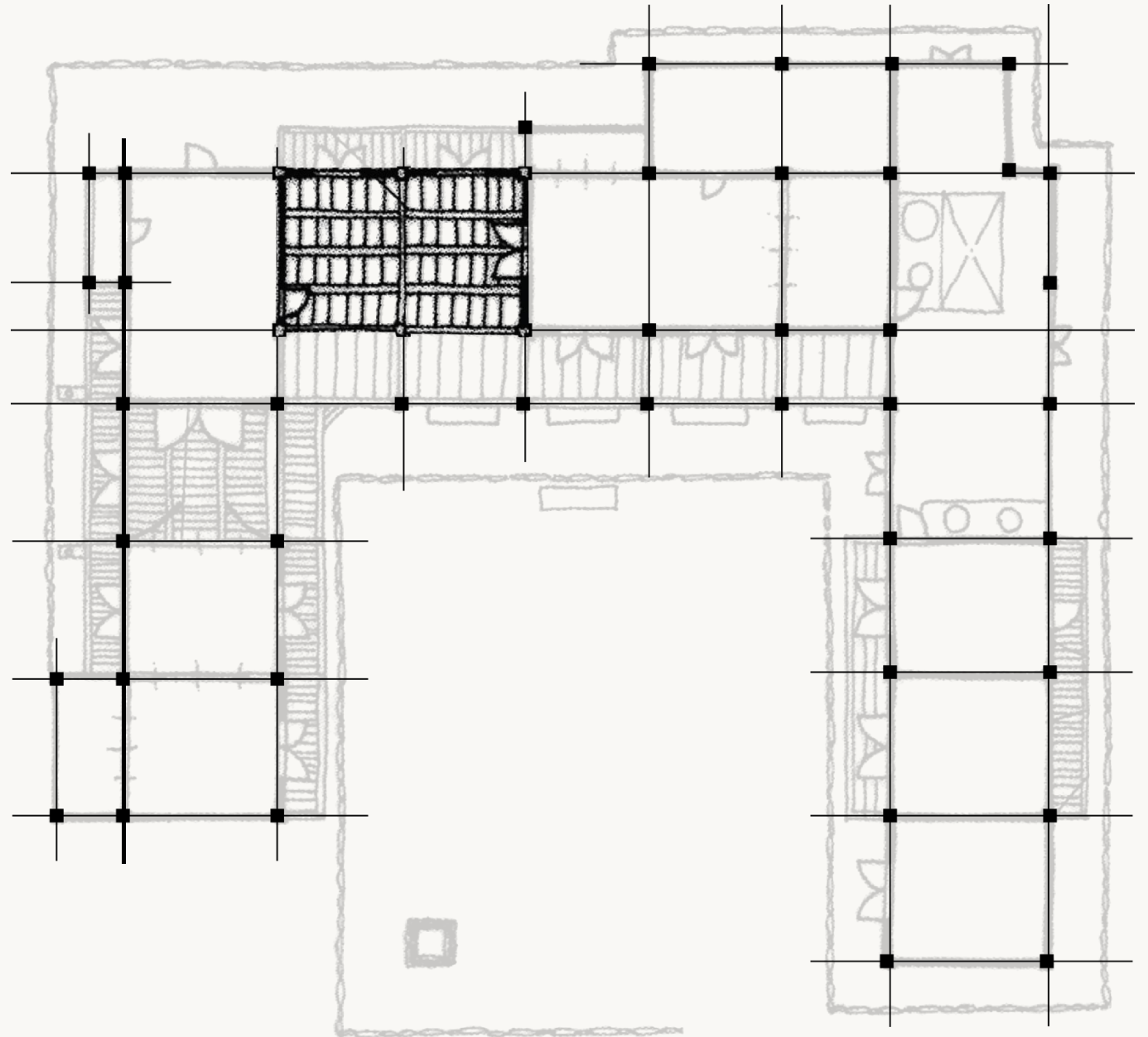
- Blurred line between interior and exterior spaces
- Rooms open out onto nature
- Structural rhythm
- Modular spatial arrangement

DAE CHEONG

- Multipurpose space
- Adaptability
- Raised wooden floor
- Removable Panel walls

KAN ORDERING SYSTEM

- Space enclosed by 4 posts
- Spans were dictated by availability of material
- Used to arrange and size rooms



DAE CHEONG

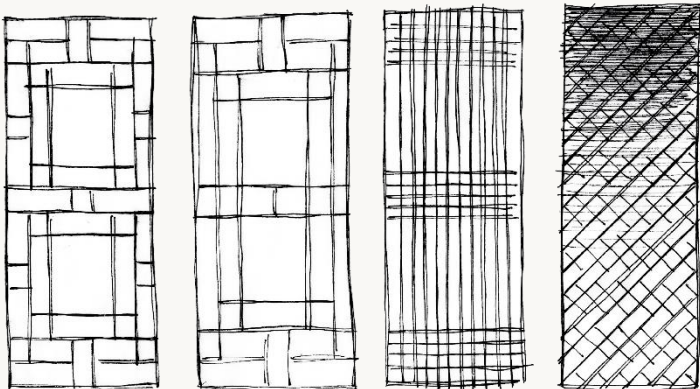
View of typical Korean Dae Cheong.
The space could be opened up in the hot summer months to allow for cool breezes to pass through.

Space could be expanded by opening walls between two adjoining spaces.

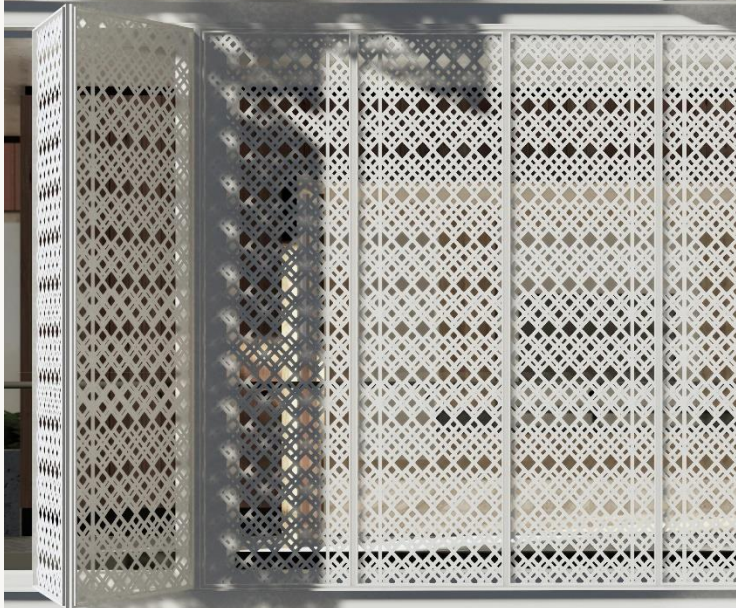


WOODEN SCREENS

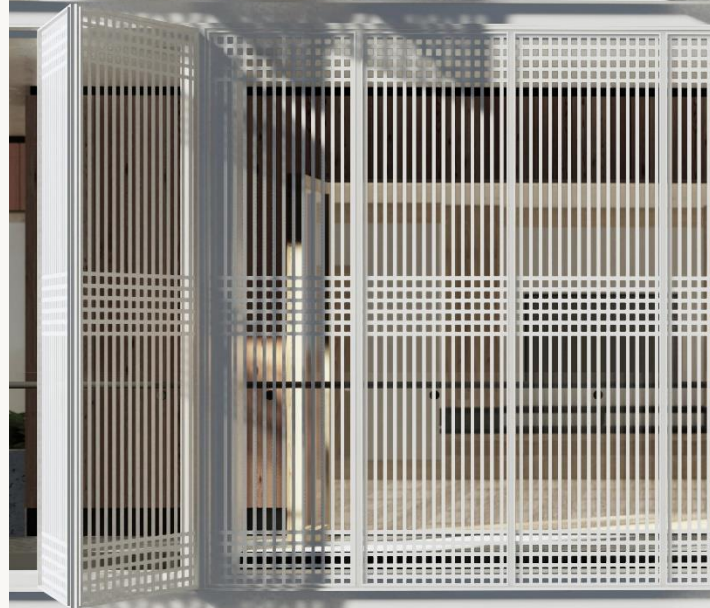
Wooden screens were an integral part of the traditional architecture. Not only did they keep the cold weather out but they gave the residents privacy and flexibility over their space.



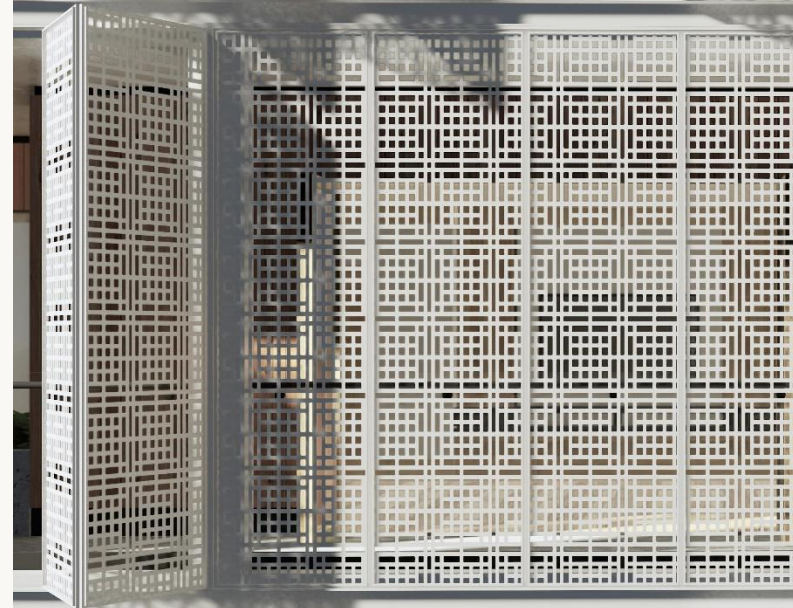
THE PROCESS



STUDY 1



STUDY 2

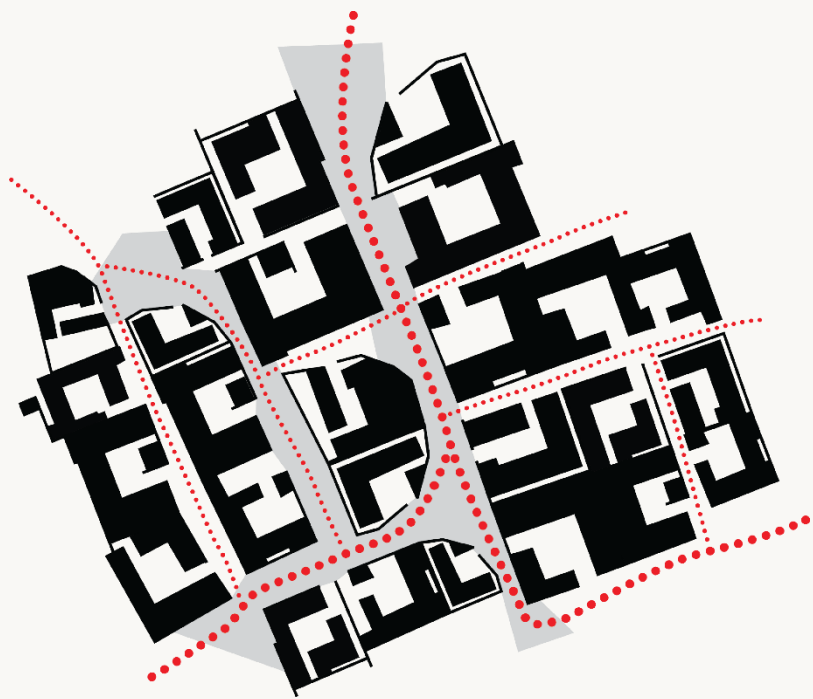


STUDY 3

URBAN LAYOUT

Traditionally, narrow streets led to wider thoroughfares where residents would gather and socialize; creating a rich community atmosphere.

Still common in low-rise neighborhoods developed in the 1980's.



DESIGN IDEA

DESIGN IDEA





DESIGN IDEA



DESIGN IDEA



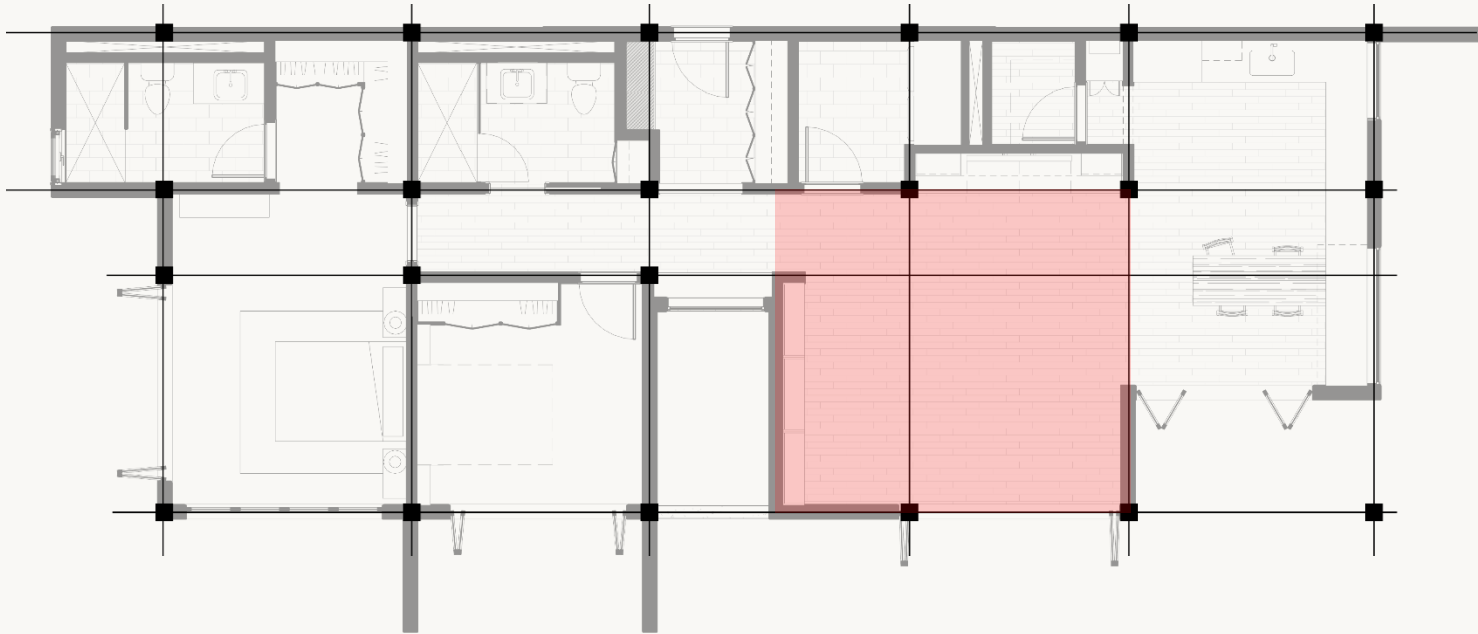
DESIGN IDEA



DESIGN IDEA





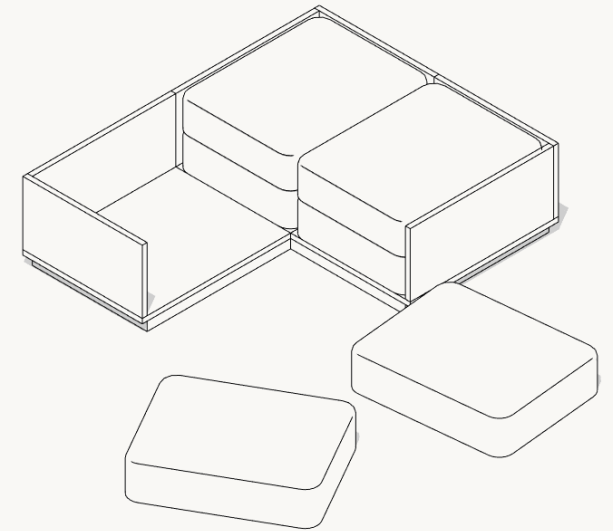
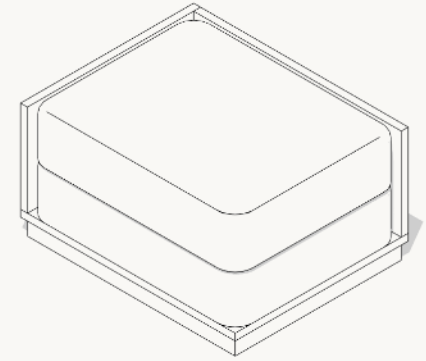


UNIT PLAN

Kan

Dae Cheong

Adaptability





THANK YOU

NDSU for giving me the tools and the confidence to tackle pretty much anything that comes my way.

DARRYL for mysteriously guiding me through this thesis process.

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