Holes & Notches

Creating a Framework to Promote Agency for the Elderly in Baeksa Village

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presented to the University of Waterloo
in fulfillment of the
thesis requirement for the degree of
Master of Architecture

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AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

ABSTRACT

The demographic landscape of developed countries around the world is rapidly shifting. Populations are increasingly aging yet birthrates are declining. These changes are particularly pronounced in South Korea, where by 2050 the old-age dependency ratio, a ratio between those over 65 and those under 65, will increase from 20% to 70% which is 20% higher than the projected rate of other developed countries.¹ Given the ratio of those retiring and those working in South Korea, the question of how to link productivity with the elderly is becoming an urgent issue. The liabilities of the nursing homes are also increasing. There has been a decrease in intergenerational support, low funding in the long-term care insurance policy and qualitative issues with elderly housing.² Therefore, a long-term reliance on institutional care and pension systems is not a sustainable solution. The question of self-sufficiency in a time of rapid change is not new: the same question occurred in the 1970's during a socioeconomic shift of similar scale. Rapid urbanization brought modern amenities that vastly improved living standards in South Korea. Apartments, institutionalized education and white-collar jobs became the cornerstone of a modernized Korea.

However, during urbanization there were many who did not fit the new status quo of modern living. Those who were poor, elderly or not in positions of power lacked social mobility to adapt to a rapidly changing Korea. In order to adapt, these groups built impromptu settlements, markets and structures to create for themselves jobs, food and homes to remedy a disconnect between their own skills and the changing

- 1 OECD, Working Better with Age: Korea, Ageing and Employment Policies. OECD Publishing, Paris. 2018.. 11
- 2 Chang, Soo Jung. Lived Experiences of Nursing Home Residents in Korea. Asian Nursing Research. Vol 7. 83

socioeconomic landscape. Qualitative issues with institutional care combined with the unsustainability of welfare programs calls for a solution that relies on a similar approach of self-governance. This thesis seeks to create opportunities for the elderly to regain autonomy and gain agency in the community through a building framework that negotiates the traditions of Baeksa Village and the new residential development.

This project is situated in Baeksa Village, which is located in Seoul, South Korea. One of the last village communities in Seoul, it is a site with a primarily elderly population and unique village characteristics. It was built in the 1970's by inhabitants whose homes were expropriated to build new infrastructure. It was originally created as an illegal settlement and the village itself is a collection of self-made housing. Currently the site is under redevelopment plans to build new housing units. However, only two thirds are to be redeveloped as apartment complexes while one third of the site is to be renovated with village characteristics to remember the history of the village, protect its unique settlement patterns and to provide social housing to its inhabitants. Baeksa Village offers a potent site that intersects with both historical and contemporary socioeconomic landscapes. This thesis explores the spatial relationships between the new and the old, the apartment and the village, the working and the retired, the institutional and the impromptu to create a mutually productive and evolving dialogue between education, housing, and self-made structures.

This project proposes for a new type of low assistance elderly housing that can encourage the creation of self-made structures. A series of columns, screens and beams acts as a framework to encourage and organize the building of impromptu structures. The project anticipates that impromptu structures will develop over time and is designed in phases. A geriatric care school is integrated in the design to provide mutually beneficial communal support between students and the elderly. Students in training provide low-cost help, facilitate a hub for student community and create shared public spaces as a way to combat loneliness and social isolation experienced by the elderly. A constant flow of students works in tandem with the needs of the elderly while training geriatric professionals to gain real life practical experience. The two programs feed into the impromptu structural framework creating a dynamic and self-sufficient community.

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Lastly, I thank my God, Jesus Christ, who has saved me from my sin and has given me life in the full.

This thesis is dedicated to my wife Janet who reminds me the importance of compassion in everyday actions -

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Figure 10 Baeksa Village Circled in Red

PROLOGUE: BAEKSA VILLAGE

A Brief History and Background of a Contested Site

Baeksa Village is a small village in Seoul, South Korea, located at the edges of the city in the Nowon District. It is a small, old and dilapidated village surrounded by newer building developments. The village is half-empty, mostly because of its dilapidation and is currently being redeveloped into new housing. It is because of the undesirable physical qualities of the site that there is a great deal of interest in redeveloping the village. However, there are those advocating to have the village preserved as well, and the two interests have frequently come in opposition to one another. The village is one of many other village types unique to Korea called Daldongnaes, which literally translates to 'Moon Villages'. The villages were historically formed during the late 1960's to the early 1970's by urban populations who were displaced from their homes to build newer modernized apartment units. 1 Since those who were displaced were usually poor and those with low social mobility they had no choice but to build their own housing. The housing was built at the fringes of the city, where the land was heavily sloped and less desirable for developers to build upon, this way they were less likely to be evicted again.² Similar to other Daldongnae's Baeksa Village was made in the 1970's by people who had their housing expropriated to make way for new more

¹ Seoul Museum of History, Baeksa Village. Seoul: Seoul Museum of History Research Department, 2012., 25

² Ibid., 51

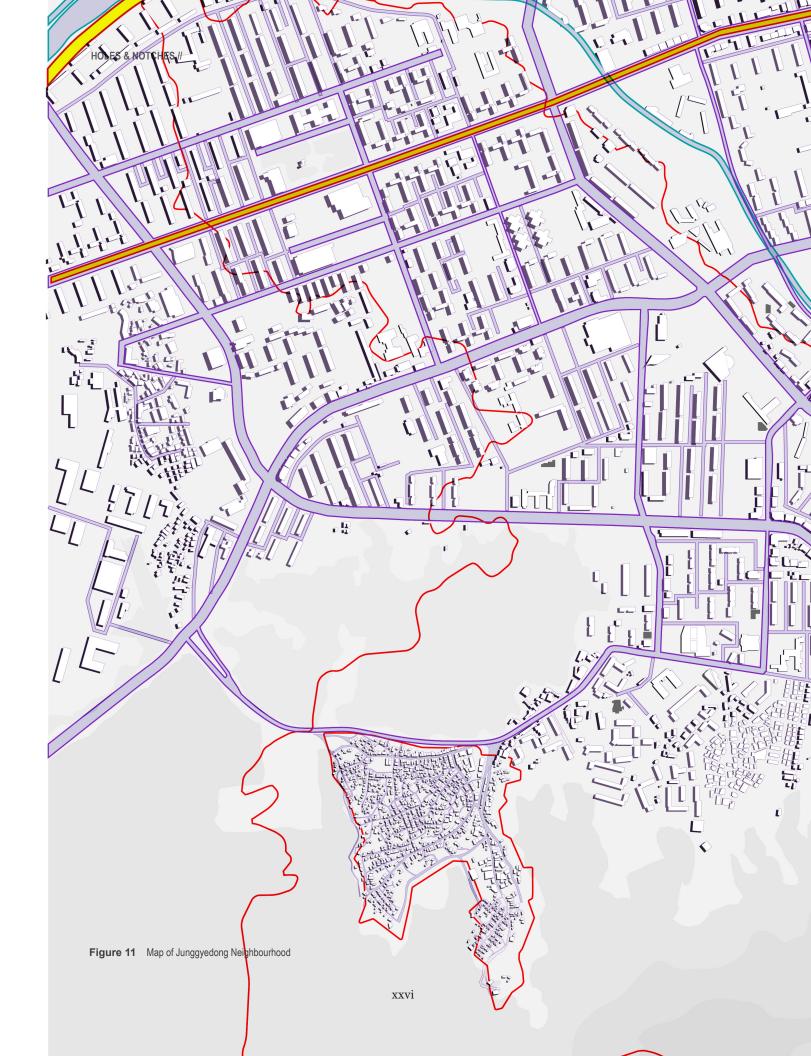






Figure 12 Proposal from 2008 from the Land and Housing Corporation to Redevelop Baeksa Village



Figure 13 A Proposal to Renew Baeksa Village by City Planners

modern housing. The village is the last of its kind in Seoul. It was an unplanned and illegal settlement and because of its age and the lack of expertise that went into its construction Baeksa Village is bordering unlivable conditions. In response to a need to redevelop the village, the Land and Housing Corporation of Korea put in a proposal in 2008 to redevelop the village into new modern housing units. Their masterplan was composed of mostly 20 storey apartment complexes, a typical housing development project in Seoul.³ However, there was great resistance to redeveloping Baeksa Village into new apartment units. Groups were interested in preserving the village layout in order to maintain the historical integrity of the place.⁴ A new plan to preserve a portion of the site while redeveloping the rest was drawn up as a compromise.

The sympathy to preserve Baeksa Village seems to be a repeating theme not only amongst news outlets but also for architects, political leaders as well as regular citizens. Baeksa Village is valued in the modernized city of Seoul because it acts like a monument to the past. New Korean apartments are filled with top of the line amenities. Gyms, pools, retail space, elevators, mechanical systems and new shiny materials. They also are well designed and meet the status quo of modern housing layouts. They have become wildly successful and apartment complexes have become the primary source of housing in Korea today. So for many, Baeksa Village stands as a vestige of a past generation and a representation of traditional architecture.

But Baeksa Village is not more authentically Korean than its modernized high-rise counterparts, or Daldongnaes in general. Baeksa Village was actually constructed out of necessity, around the same time that new apartments were being built, in order that people may continue to live in some sort of home.⁵ So any ideas that these were communities of a deeper history, therefore more authentic, than the rest of Seoul is not true. Daldongnaes are a product of a modernized Korea and themselves modern settlements. Korean apartments are reflective of their own

³ Daum. "The Redevelopment of 2891 household in Baeksa Village". Accessed December 13 2018. http://m.blog.daum.net/sckyg/17954024

⁴ The Economist. "Seoul's Shanty-towns, Moonrise Kingdoms". Accessed October 16 2018. https://www.economist.com/asia/2015/11/21/moonrise-kingdoms

⁵ Seoul Museum of History, Baeksa Village. Seoul: Seoul Museum of History Research Department, 2012., 53



Figure 14 Compromised Preservation-Redevelopment Scheme for Baeksa Village



Figure 15 The Winning Scheme of a competition held in 2018 to imagine how the new development would co-exist with the village



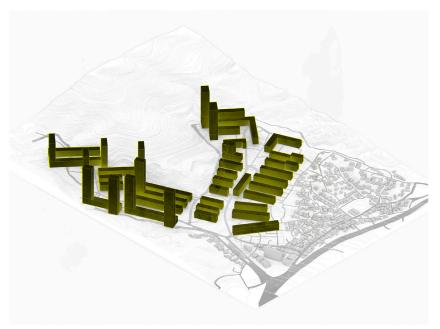


Figure 16 Diagram of old village layout (Top), Diagram of new redevelopment (Bottom)

culture and in their own right authentically Korean. Though Daldongnaes have historically been unwanted developments for many city builders and political leaders, all that shifted when questions of authenticity and Korean city identity came into the conversation. And so when the city pushed to have the village preserved, city planners and developers reached a compromise and decided to develop new condominiums while preserving a portion of the site.

This thesis explores Baeksa Village as a remnant of a past socioeconomic landscape. One that was informed by rapid urbanization and population growth. A new socioeconomic landscape is projected to take place in South Korea. It is one of rapid aging and declining birthrates. Here I explore the difficult redevelopment of Baeksa Village as a representation of South Korea in transition into a new socioeconomic landscape. The juxtaposition of new and old is seen as an analogy to Korea's past as well as the country's future. This thesis explores several spatial relationships between the new and the old some of which include: the apartment and the village, the working and the retired, the institutional and self-governance to create a mutually productive and evolving dialogue between Baeksa Village and the existing fabric of Seoul.

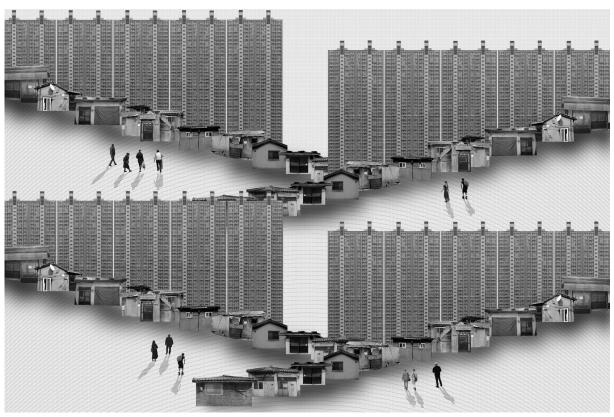


Figure 17 The new development and the old village is a site of converging housing types

INTRODUCTION

A New Socioeconomic Landscape

This thesis begins with a story with one of my site visits to Baeksa Village. It was a Tuesday Morning, around 9:30 in the morning. It is mostly empty but as I pass through one of the many small roads in the village I run into a elderly lady, maybe in her late 70's or early 80's cutting vegetables in front of her house. This was not something I was used to seeing so I asked her why she was cutting vegetables outside at 9:30 in the morning. She replied in a tone that implied that it was obvious: "Because I have to eat."



Figure 18 A resident of Baeksa Village cutting vegetables early in the morning

This leads to the question of work, productivity and its relationship to the elderly. Currently the retirement age in Korea is set at 60 years however many corporations and workplaces are reluctant to keep their employees even till 60 and encourage them to leave as early as 55. This is important because the projected old age dependency ratio, which is a ratio between those aged over 65 and those aged under 65, from 2015 to 2050 is set to almost quintuple in South Korea. This is a trend that is common in economically developed countries however it is more pronounced in South Korea, which has a rate of aging 20% greater than other developed countries.⁶ The implications to the national health expenditure is enormous. According to the Korean Statistical Bureau, the health expenditure per capita between different age groups increases exponentially as age increases. Apart from the birth costs that inflate ages 0-4, costs across ages till 59 are relatively stable. Critical are those who belong to ages above 60 where costs are the highest.⁷ Given the rate of aging, the high costs of geriatric care and the projected decrease in the future work force, this suggests that institutional care will be over-burdened.

⁶ OECD, Working Better with Age: Korea, Ageing and Employment Policies. OECD Publishing, Paris., 27

⁷ Korean Statistical Information Service. Current Health Expenditure by Provider and Financing Scheme. https://kosis.kr/eng/statisticsList/statisticsListIndex.do?menuId=M_01_01&vwcd=MT_ETITLE&parmTabId=M_01_01&statId=1994044&themaId=#SelectStatsBoxDiv

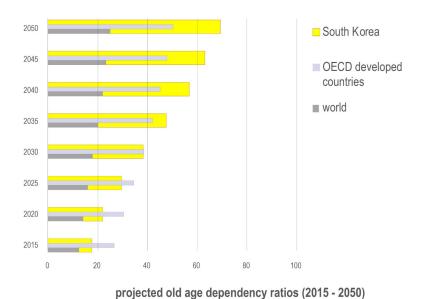
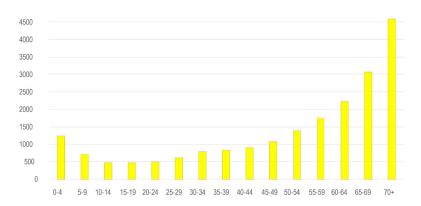


Figure 19 According to KOSIS (Korean Statistical Information Service) the Projected Old Age Dependancy Ratios (working population versus retired population) in South Korea as Compared to Rest of Developed World



health expenditure per capita between different age groups (2017)

Figure 20 According to KOSIS the cost of healthcare per age group in South Korea

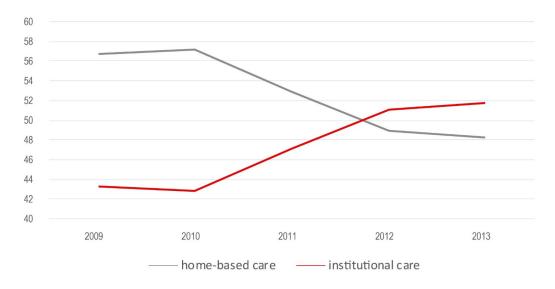
South Korea, which comes from a traditionally Confucianist background used to hold up the value of taking care of your elderly. However, recent surveys from the OECD indicate that the expectation for the family to take care of their elderly is decreasing.⁸ There is a greater expectation for institutions to fulfill the duties of caring for the elderly.

8 United Nations Economic and Social Commision for Asia and the Pacific. Long-term Care for Older Persons in the Republic of Korea. Development, Challenges and Recommendations. Long-Term Care for Older Persons in Asia and the Pacific. 2018., 8 & 13

	family
1998	90%
2002	75%
2012	36%

respondents to a survey that answered the family should take care of their elderly

Figure 21 According to a series of surveys conducted by the OECD there is a decreasing expectation for children to take care of their elderly



home based care vs institutional care

Figure 22 According to the same report published by the OECD Institutional Care is on the rise while home based care is decreasing

This is at the forefront of South Korea's problems. President Moon Jae In is aiming to increase pensions⁹ in order to alleviate widespread poverty amongst the elderly which can provide short term relief but given the increase of retirees versus the

decrease in the working population, this becomes an unsustainable solution. Angel Gurria, the secretary general of the OECD is strongly recommending for the country to invest in flexibility in the labour market.¹⁰ Kim Jaewon, "No Country for Old Koreans: Moon faces senior poverty crisis". Nikkei Asian Review., 3 Yoo, Choonsik. "Labor Productivity, Reforms Top Task for South Korea: OECD Chief". Reuters., 2 **"WE NEED BETTER** SAFETY NETS TO SUPPORT OUR **ELDERLY**"

Figure 23 President Moon Jae In and Angelo Gurreria recognize the importance of the rapidly aging population



Given the rate of aging South Korea finds itself in imminent crisis with the upcoming aging population set to destabilize the economy and set questions of how to provide in pensions. However, I found that this wise old lady has questioned the nature of the workplace and the role of the institution in a time of crisis.

The elderly, those who are still physically capable, should be viewed not as liabilities but agents of productivity. This is in line with one of the most common wishes amongst Korean elderly. They want to be viewed as independent and not a liability and not left alone in an instituition.

This isn't a call to deny institutional help but a pairing of self-governance with public help. The concept of self-governance is not new in South Korea. The image at the top is a slum village in the late 1960's near Cheonggyecheon River. Through expropriation the houses were demolished and modernized into a highway. Though this brought new modern amenities and better infrastructure, those who lived in the village were displaced and placed into villages located at the fringes of city. Those who were displaced formed the village which would become Baeksa Village.¹¹

¹¹ Ryu, Chehyun. Kwon Youngsan. "How Do Mega Projects Alter the City to Be More Sustainable? Spatial Changes Following the Seoul Cheonggyecheon Restoration Project in South Korea". Sustainability. MDPI. Vol 8. 2016., 3.



Figure 24 Cheonggyecheon River before it was redeveloped



Figure 25 Cheonggyecheon River after it was redeveloped



Figure 26 Satellite Imagery of Baeksa Village in the 1970's

Even today, forms of self-governance appear to exist at street level. Boxes and street carts invade the main streets of Seoul which suggests that there is zoning with some allowances for semi-self-governed commercial activities at street level.

Whether it is the placement of shipping crates which act as offices, or a flower market in the middle of a commercial district or a tented café in the alleys of apartments, there are forms of impromptu constructions that are in between the more rigorously designed and implemented housing and office towers.

Self-governance has been a way for South Korea to self-solve some of the challenges posed by the socioeconomic challenges in the past and there is evidence that self-governing activities are an active part of life within the streets of Seoul. Can activities of self-governance also provide relief to the challenges posed by the new socioeconomic landscape of South Korea by encouraging a culture of self-solving problems?



Figure 27 Tented Shops close to Namdaemun Gate selling various merchandise

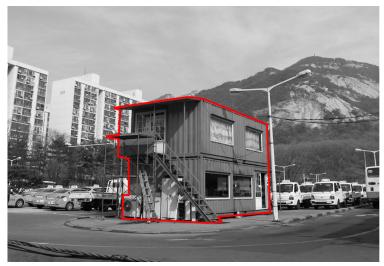


Figure 28 Shipping Crates as Office workspaces for a taxi business



Figure 29 An ad hoc tented café in the middle of the marketplace



Figure 30 A flower and plant business at street level in the middle of a busy commercial district



Figure 31 Four of Baeksa's Residents sitting on a bench at 10:00am



Figure 32 A couple who lives in Baeksa Village walking up the hilly terrain of the village

Baeksa Village is a site where the issues of the elderly and self-governance converge. The village is primarily composed of the elderly, those who either built the village or are too poor to live elsewhere. The village was also built by laypeople, and built because they needed a home. Defining Baeksa village are the informal building processes that make up their buildings. Many of the built structures employ ad hoc methods of construction. Evidence of self-governance, the buildings are built according to the immediate needs of their residents.

This thesis aims to design a place that may serve as a mode for other developments, as it responds to larger socioeconomic problems in South Korea. The development of Baeksa Village is a representation of South Korea in transition into a new socioeconomic landscape. In order to address the challenges outlined this thesis examines Baeksa Village and its relationship to Seoul. This is explored in four parts. The first is a journal of observations, a subjective understanding of various urban conditions and Baeksa Village from the author. This chapter is to lay out a groundwork to understand Seoul. The second chapter examines urban conditions. This chapter primarily deals with urban planning and the housing vernacular of Seoul in order to understand the new redevelopment plans and typical housing built in South Korea. The third chapter deals with the existing fabric of Baeksa Village. The final chapter aims to design a community area that is informed by all the findings in the research.



Figure 33 The redevelopment of Baeksa Village has two radically different vernaculars and histories intersecting one another.



A JOURNAL OF OBSERVATIONS IN BAEKSA VILLAGE AND SEOUL

Understanding the Differences Between Seoul's Urban Fabric and Baeksa Village

As an outsider looking in I went to Seoul, as well as my site, to get a better understanding of architecture, urban design and social values in the city. The following observations are meant to observe parts of Korean culture as seen by a raised Canadian-Korean and as it was my first trip to Seoul I found and felt the cultural differences almost immediately, especially since I am unable to speak Korean and was treated as an east-Asian foreigner. My visit to Seoul was limited to several locations which include: Hapjeong, Dongdaemun, Gangnam, Nowon and Songdo City in Incheon. I found that this was a wide selection of areas to draw from but I acknowledge that there are discrepancies and unknowns between different parts of the city that I have overlooked. This study is mainly to have a cursory understanding of Seoul as it relates with the case of Baeksa Village and to draw out certain principles that we can apply when designing in Seoul.

I stayed at a unit in the Hapjeong Apartments, located in Hapjeong, which is in the Mapo District near the heart of Seoul, it was a major junction of Seoul's massive public transport system. The apartment was near a major street intersection, about 2 minutes away from the subway station. The intersection was full of people, busily moving to where they needed to go. The area itself was large but not dense. There are large office and residential towers that are carving the sky but they were spaced apart enough that another building of similar size could easily be built between

them. To the south of the Apartment were villas that were 3-5 story's high. With no elevator the building, which was 5 floors, was served entirely by stairs. The building itself was old and not out of the ordinary. Each floor had a double loaded corridor with anywhere from 3-5 units on either side depending on the floor, all covered with slightly stained white paint and exposed piping that would run along the hall. My unit was on the fifth floor and was hosted by Hyeyeol, a thoughtful artist, who lives in his nicely renovated 2 bedroom apartment with his girlfriend. The apartment was not so different than one in Toronto. As I entered the unit there was a white curtain draped over the entrance. Past the draping is a room that looked as though it would be at least 500 square feet. A small kitchen is to my left and a living room is ahead of me. The kitchen with a stovetop with 2 burners, a small sink, cabinets that were above and a countertop large enough to hold a medium sized cutting board. The living room was filled with oil paintings of different portraits all skillfully rendered in a Gauguin-esque style. On either side of the living room were bedrooms, of which the right one, standing by the entrance, was mine. The room I stayed in had slightly more than all the essential furniture: a double sized bed, several small MDF boxes filled with books, a cabinet, a small dresser, a small table, 2 small stools and a small foldable futon. As I turned the lights to go to sleep I notice that there are heavy large curtains at one end of my room that covered the entire face. There were soft glows that seemed like they were from several sources. They would occasionally change in hue and brightness in soothing rhythmic motions. It was strangely comforting and I briefly thought about my itinerary for tomorrow before lulling into sleep.

1 Seoul's Public Transport Infrastructure is massive, affordable and a huge driver in the city's success. On the first day of my trip I planned to visit 3 parts of the city, first visiting Dongdaemun District, then exploring Nowon District and finally walking through Baeksa Village after viewing the first two. Since Baeksa Village's existential dilemma is two-fold, bifurcating into the introduction of elements of modern life and maintaining historical appearance, I wanted to investigate these districts in order to understand, in part, how these questions first arose.

Day 1

It was easy for me to spot the subway station. The station had a green, transparent, ribbed plastic shell that curled upwards from the ground the same way a baby carriage's top would. I went down the steps and entered into a large underground station that had a long hall into an open space that people were walking towards. I walked in the same direction and as I did I noticed that there were shops, 2 of them, serving fish cakes in a soup broth, various fried dishes and an assortment of Korean sushi called Kim-Bap. The smell of the food is noticeable as I walk by. Several

people are standing as they eat in front of the small food shop, about a foot away from the shop, as others move hurriedly towards their destination. I reached the open space to see automated entrances that led to another pair of stairs which had signs hovering over it that read "Line 2", the one I needed to take. As I went into the lower tunnel through another pair of stairs, which my best guess would be that it ran 15 meters below the street surface. I noticed that there were two glass screens that separated the train tracks on either side of the platfrom. I made my way to one of the 2 maps mounted on one of the screens, the one that showed the subway system of Seoul. I checked the map to look for the "Dongdaemun Cultural Centre". I found the task of finding one stop amongst 9 criss-crossing lines, each one with dots that seemed to form constellations, a very difficult task. It became apparent that Seoul's subway system was enormous and with the help of a local was I able to find my stop without spending too much time on it myself. When entering the subway I found it packed. Demographically, the elderly were dominant – but only marginally. There were business people, young students, college students, stayat-home mothers (if I had to guess) and those with more of a scraggly appearance where it was hard to tell where they come from. Seoul's subway system is a massive and essential piece of infrastructure that allows for affordable and easy travel within the city.

I planned to first go to Dongdaemun Design Plaza, a building designed by Zaha Hadid, and controversial in its construction because of two main reasons. The first being that the design uprooted an unused sports stadium, which some believed had historical value, as well as a large informal market that had found its home there. Second that the design did not fit the existing site context in a formally apparent way, it looked as though it would be a preface to the greater gentrification of the Dongdaemun area. The sport stadium held national sports events that included regular soccer matches but after the construction of the Seoul Sports Complex in 1988 for the Olympic games, the stadium ended up as a place for small tented stands to sell goods and merchandise. 12 The announcement that the Dongdaemun Stadium would be demolished in order to provide a park space, Hadid's Design already selected, faced opposition from those who wanted a more site sensitive solution, arguing that the selected design ignored existing site conditions. Since its execution was a top-down approach there was little deliberation or resistance, outside of a selected panel of judges, before its construction. After its realization the design faced the same criticism that the building did before it was built, the main

Park, Michael. "Deconstructing the Dongdaemun Design Plaza. Jun Michael Park Reportage. 2015. https://junmichaelpark.com/deconstructing-dongdaemun-design-plaza/

complaint being that it looked like "a UFO" landed in the middle of Dongdaemun district.

As I got off the Dongdaemun Cultural Station I followed the signs that led to the DDP. When exiting the automated subway turnstiles I noticed that the exit outdoors had a soft and rounded appearance around the windows, as if pliable or malleable, which seamlessly rolled into the ceiling, a complete difference from the industrial and efficient appearance of the subway systems across it. All the walls, columns and structures had the same plastic formal language that curved and flowed into each other. Beyond the doors the first thing that one notices is an enormous concrete truss structure supporting to what seemed like an overhead path. But immediately one notices an impressively large metallic structure, not really a building but more like a futuristic man-made landscape. It was a blob-like metallic structure which had a large opening in the middle where the large trussed concrete pathway entered in, appearing like a cavernous entry with a bulbous overhang that reflected the light bouncing off the path below. The scale of the entire structure was large, almost mountainous, as it stood below an almost empty plaza.

The metal and concrete park of Dongdaemun was an impressive thing when first seen, extraordinary if not awe-inspiring, however it was unclear if the structure can provide enduring systemic value to the existing city fabric. The design argues that plasticity as a formal language could provide new avenues in which Seoulites could enjoy public space. It seems that even though the argument is clear and successful, the decision to not synthesize the design with the existing day to day schedules of Seoulites and in particular those who visit and live in Dongdaemun hinder the full activation of the space. After repeated site visits I found that the large plazas and walkways emptier than not during the middle of the day as well as the evening, with the exception of young adults coming to take selfies with their friends. The structure and museum seem to attract more photos than people, and there still seemed to be general confusion amongst some people as to the purpose of the building and why it looks the way it does. The idea of transforming an underutilized sports arena into a chic urban park/cultural hub is achieved but the design chooses not to incorporate into itself the existing vital operations of Dongdaemun. For now, the concrete park as conceived by Zaha Hadid remains a wide open urban park. The fact that a flea market naturalized itself within the walls of the sports arena shows that leisure in Dongdaemun was not spent in parks but in between the narrow alleys and paths of cramped shops. Though the design is provocative in its reimagining of leisure-space, there could have been more markets included in the design to bring reason, at least with the logic that the Dongdaemun fabric was providing, for locals and travelers to come and stay within the space.



Figure 34 Exiting the Dongdaemun Design Plaza subway entrance reveals a large open plaza.



Figure 35 A Large amorphous blob looms over the plaza space. The plaza tends to be empty for the majority of the day.



Figure 36 In Dongdaemun's alleys are many marketplaces that sell all manner of goods. These spaces tend to be highly active.



Figure 37 These marketplaces are connected to the main streets through small corridors.

I made my way north towards Dongdaemun Market. After passing by a commercial district that mostly had malls and large retail stores, I approached the reclaimed Cheonggyecheong stream, which originally had an overpass over it but then was rebuilt into a stream in 2005. The stream was lower than the street level with bushes and greenery on one side and a pathway on the other, which had people, both old and young, jogging and walking along it. There were several bridges that connected the two sides between the low-leveled stream. As I crossed it I found that along the higher pathway above the stream were many small shops, most of them didn't look larger than anywhere from 30 – 50 square feet and half of the shops merchandise was spilling towards the street with shoes displayed on stepped pedestals and clothes that were hung on hangers. There was food cooked in stoves with the smell of fried fish, spicy rice cakes, fried mung bean pancakes and udon broth that would fill the air as one walked by. I found an alley but instead of finding garbage cans and rot I found shops lining the side walls. Above the alley was an overhead arced covering supported by small steel truss beams over dirty fabric canopies that lined the stores on either side. Each shop had more of their merchandise spilling into the alley, with bright lit-up signage above the store. There were dirty pipes and electrical fixtures that hung from the steel trusses above. Inside the stores were highly polished interiors with fine finished walls, floors and ceilings. It was odd to see such finely crafted stores nested into an old market supporting structure. But the market did work with intense and charming efficiency: the walkway (about 3 feet in width) was walkable and was surrounded by colorful merchandise and the structure looked rustic but also provided covering against the elements. As I exited the canopied alley I found a busy sight: a narrow street, about 6 meters wide, with buildings that were anywhere from 3-5 storeys, commercial buildings with signage along the street. The streets had lots of electric wiring that hung from concrete poles, criss-crossing in every which way and dragged down by their own weight. Small trucks would honk at pedestrians to move through the street to unload their cargo at a store. It was busy and full of life.

Walking past the small and busy alleys of Dongdaemun I hit one of the main streets of Jong-ro which opened up considerably. I was in a commercial district that had anywhere from 5-7 lane roads, the number of lanes varied. The sidewalks themselves had lots of activity having plenty of tented small shops which sold all types of goods. Many of them sold different Korean street food, some sold flowers and others sold fruits and vegetables. I wondered if they had grown it themselves or if they had bought them from a farm but it was hard to tell. Nearby I saw that those that had bought food from the street vendors had planted themselves in a small makeshift shelter with a curved clear plastic roof fastened unto another cart

New structures 2 in Seoul can read more cohesively with the existing city fabric if they respond to its vital operations.

3 There exists a granular city fabric in parts of Seoul interspersed between the streets of larger buildings and activated by a large volume of people.

and a city pole. There were transparent plastic sheets that separated the space from the street, any sense of privacy given only by the folding of the sheets which obscured the view by reflecting and refracting the light. The combination of office towers with a livelier market on street level proved itself a real condition in Seoul and one that thrives strongly in the Dongdaemun area. I was looking for a place to sit to eat what I had bought, some Bindaeduk from a food cart, and decided that I would go to the Namdaemun gate which was only a block away to eat my food. To my disappointment, the entire area was fenced off to the public. It was a monument to the old gates and walls of Seoul and not to be entered. There were multiple signs that indicated to not touch various parts of the gate nor to enter through its doors. A monument to be seen but not walked through is not as effective in acting as a monument should, that is, to excite curiosity as to why it is there and to remember what it represents. Walking away, I wondered if the preservation of Baeksa Village was an act to preserve history or a more pragmatic approach, the sustaining of a more granular city fabric, which is proven to be effective as a public space when there are large volumes of people moving in and out of it.

As the subway train raised above ground light filled the nearly empty car. There were 2 others with me, different than the packed stations of Hapjeong and Dongdaemun. I got unto the platform, around 2:00pm, I spotted stairs and escalators that led down to the lower street level. Getting out of the station I saw just how large the overpass was. There were large concrete columns which raised up 3 storeys to support a floor slab on top of a massive grid of concrete beams. The entire pass rose up 5 storeys high, another testament to the dedication of public transport infrastructure. Nowon district was quieter and had less traffic, both cars and people. The streets were emptier and also much wider than most of the streets of Dongdaemun. Though there were still a fair number of tented shops along the main streets, the alley markets of Dongdaemun were not there. Instead there were more apartment complexes than stores. The complexes were arranged in rows, all aligned in the same axis, spaced apart enough to allow for large parking lots to be placed between them. In front of the apartment complexes were small convenience stores and small empty playgrounds. The parking lots had a lot of trees, about 10 on the face of each apartment and 10 in the center, and were filled with empty cars. Because of all the trees the parking lots didn't feel as desolate as I expected. Also to my surprise I found that the distances between the apartments in the complex were larger than I thought they would be. They are staggered in such a way to allow for daylight penetration. As I entered the apartments the ground floors were empty and open and unenclosed save for a single security guards office room. There is a single elevator as well as 2 sets of open stairs that services these apartments which had 17 storeys and 4 units per floor. I have heard mixed thoughts on the apartments of Korea but have found them to be pleasant and can see that they provide convenient and decent housing. Though they are old there was access to plenty of daylight, a lot of greenery, close to shopping districts and large central

parking lots that were quiet.

I continued on southeast towards Baeksa Village. There were many schools on my way there, about 4 blocks from each other. All at different levels from elementary to secondary. I found that there each school had either walls or large fences that secured the school property from the street. With the exception of security gates there was no way to enter the school. I found the extra level of security and privacy odd in such a safe city. Slowly, the density of the city started to thin out. To my left are several small shops and restaurants that were no taller than a storey. On my right are dilapidated structures and it was unclear if they were occupied. Ahead of me I see a fork in the road which had between it a large old building with a great number of dilapidated houses behind it, enough to form a village. I was at Baeksa Village.

It was difficult for me to trace the charm at Baeksa Village. The air at Baeksa Village was different than my visits at Dongdaemun and Nowon districts. It was very quiet with no sign of people anywhere and there is no doubt that everything needs to be rebuilt. The buildings were old and run down and varied from one another in character and degree of dilapidation.

The buildings used a number of different materials, very often it looked as if they were assembled from scraps with an occasional renovated appearance. There were glass screens, rusted metal, splotched and cracked concrete, chipped and rotting wood, tattered fabrics, new ceramic tiles, concrete block and plastic tarps. One building had a large tarp with bricks and concrete block fragments weighing it down on a slightly sloped roof. Below the roof was a small and dirty green canopy. with large tears puncturing holes through it, semi-covering bins of briquettes, a block of compressed charcoal, used to fuel old-fashioned furnaces for heat. A boarded up door and large window indicated that it was a closed down shop. Another house had a similarly tarped roof but weighed down with tires instead. It was made of concrete with a small door and small windows, one at each of its side. The concrete was streaked and patchy with darker greys and had a door with police tape over it and a sign that read "Warning, this building has collapsed and it is dangerous to enter". The street had small cars and trucks parked along it, all of them looking much newer than the buildings, which was odd since there was nobody there. Between each building were narrow gaps that ranged from slits to narrow dark walkways in which one can side-step through. There were also plenty of small slightly wider pathways in between every 3 to 5 buildings which would lead upwards, sometimes with uneven stone stairs, to more houses. As I walked deeper into the village I noticed that there was plenty of plastic bins, glass plates, garbage bags full of unknown stuff and all other matter of waste was strewn all over the site.

It was difficult to identify which buildings were occupied and which were not. The

Nowon District is primarily a residential district filled with copy-paste apartment complexes. There are many elementary and secondary level schools and small commerical areas.



Figure 38 Baeksa Village's buildings are very close to one another, creating small enclosed paths.



Figure 39 A overview of a part of the village.



Figure 40 Entrance into Baeksa Village. There are abandoned markets along the roadside.



Figure 41 Many of the markets have a large number of miscellaneous objects sitting at the porch.

streets were empty, save for a rare elderly woman walking up the sloped streets, which made the atmosphere eerily quiet. The only signs of life came from house fans that were turned on and quiet muffled sounds that came from television sets from inside certain buildings. Though the reasons for the little traffic in streets in Baeksa Village, and the story of its unkempt appearance, would become more apparent on my trip the next day.

Day 2

5 Baeksa Village is characteracterized by its small scale, meandering streets, steep slope and its dilapidated buildings. I arrived at Baeksa Village around 9:00am to find out if there was anything different than yesterday. As I entered the village from the north, which forked into two paths forming a Y shape, I noticed that one of the buildings to my right had sounds of a running sink and dishes clattering. As I pass by I notice that the door is open and there is an older woman, maybe older 50's, preparing a meal. Up ahead of the forked road is an old man, certainly a senior, walking downwards towards me. To my left is the other road, and there are 2 old ladies, also seniors, sitting on some crates staring at me. Surprised by the number of people that have appeared I take out my camera getting ready to take photos worried slightly that it may seem intrusive. As I started snapping shots (away from the people for now) I heard from behind me a question in an innocent and playful tone: "Why're you taking photos here? I'm sure there's many places more interesting than here". I let her know why I'm here and what I'm here to do to which she nods appreciatively and points out that I should walk towards the convenience store. She says it's the only convenience store here and points east. After thanking her I start walking towards the store. But about halfway there I see a young man, around my age, walking towards me. Surprised to see the first younger person in Baeksa I stop him to ask him if he speaks English as we cross paths. To my relief he did, explaining that he learned English while volunteering in the Philippines for two years, and introduced himself as Bosco. Bosco explains that he is one of the managers of the Urban Renewal Support Center for Baeksa Village, a government funded organization to connect communications between residents and administrations as well as acting as a help center for the residents on-site.

He said I should meet another man before he would tell me about the renewal project in Baeksa Village. We entered into one of the buildings in Baeksa Village, near the northwest main entrance of the site. The door opened to a narrow corridor into a small room to which another man, middle-aged, was sitting in the middle. The room had filled bookshelves at every side of it as well as framed awards and diplomas, though it was unclear if they belonged to this man. His name was Byung-



Figure 42 Entrance into Baeksa Village. There are abandoned markets along the roadside.



Figure 43 Ad hoc construction methods define the environment of Baeksa Village



Figure 44 In the distance are apartments contrasting the village-like conditions of Baeksa Village



Figure 45 The convenience store worker in Baeksa Village shows me his camera collection

Yul a worker from the Junggye-Bon District Volunteer Center. Bosco explains to Byung-Yul the reason for my trip to Seoul which prompts Byung-Yul to explain, in part, the history of Baeksa Village and where they are at now, he explains:

"In the 1960s there was massive urban growth in Seoul, particularly near Seoul Station and in Namdaemun, where many who lived in the area were evicted and moved to other areas. The government had given them small plots of land as well as small tents and some bricks and other building materials. With their limited resources the evictees constructed their own homes, not guided by formal planning or design, and as a result have created their own roads and homes. Korean architects admire Baeksa Village because it is the result of a bottom-up approach, arguing that the city should preserve the physical characteristics of the village, such as the road layout and building scale, because they were generated by the people at the time and not the government. This made possible a new plan for Baeksa Village one that proposes to rebuild the Village. Though the plan is not identical with the original layout of the village, it replicates the physical characteristics that the original had. I believe that the village has historic value and it should be remembered because of its distinct origins and physical appearance."

A lot of what Byung-Yul mentioned seemed to deal a lot with how power, or lack thereof, played a role in the making of Baeksa Village. Equally, things he did not mention, like the fact that much of the city was developed by Chaebols, large government instituted corporations responsible for most of the commercial activity in Seoul, also played into what he described about the village. Baeksa Village represents a part of the city fabric with those with no power and stands out in a city where most of the city fabric was established by autocratic or technocratic powers. It stands as an apolitical piece of the city, at least in its form, which was built out of necessity. In this way, Baeksa Village works more as a collection of art pieces rather than a functional living system because it makes more of a statement on the production of space from a place of no power. I think if there is a sense of admiration that comes from Baeksa Village its through the idea that the production of space did not come from an excess of power rather it's production was channeled from the poor.

A modern day equivalent, since Korea is much richer, can be found in the unplanned spaces in the smaller grained markets of Dongdaemun has the potential to integrate the smaller grained morphologies in Baeksa Village could provide a space in which to exercise different lifestyles and social groups.

Baeksa Village 8
works better as a
collection of art pieces
than a functional living
system because it makes
a statement on space
production from a place
of no power. We should
examine and integrate
smaller morphologies to
provide a space that can
inspire the same logic of
'We are free to build and
design our own cities'.

After the meeting with Byung-Yul, I met with Bosco in his office which was only a couple minutes away. We went upstairs to an empty nicely furnished large room with about 6 workstations. There were photos of Baeksa Village posted all over the wall as well several large maps which outlined the location of the buildings on site. As we sat down and conversed I learned a few things about the current state of affairs between the building developers, investors, architects and the government. In 2018 there was a competition held to develop a strategy in approaching the re-design of the Baeksa Village area. Bosco explains that the parameters for the competition would be that 30% of the village would be maintained as low density social housing, deemed as a preservation zone, and the other 70% would be redeveloped as new higher rise construction. When a winner was announced it was thought that there would be a start on the demolition and construction of the proposal, however the project stalled since investors did not like the design's proposal to create lower density areas. He continues to explain that the competition proposed that there be zones of medium height (5 storeys) and those that would be taller (10-15 storeys) but according to Bosco investors preferred to increase the medium density to building of higher density since there was more profit to be made. The disagreement in the number of units that would be produced has further stalled development and has delayed the project for 2 more years bringing the projected date of the project's completion to 2021. There is friction between the architect Seung Hyo Sang and investors as well. Since Seung Hyo Sang's approach was to maintain lower densities in Baeksa Village, many of those who invest into redeveloping Baeksa Village want to kick him out of the redevelopment plans for Baeksa Village. With so much pushback from the business front of the redevelopment plans there is uncertainty in the final form that a new Baeksa Village would take on. While there are disagreements on the design strategy Baeksa village as it exists is quickly fading into obsolescence as over 50% of the buildings are abandoned and not taken care of. It is clear that the struggle to imagine Baeksa village is stuck between competing definitions of what is valuable and what is not and this has delayed the project for over a decade.

7 Baeksa Village primarily houses an elderly and probably poor demographic.

After thanking Bosco for extra insight into Baeksa Village's re-design issues I decided to follow-up on the earlier recommendation to visit the convenience store. On my way there I was greeted with four senior ladies sitting on several seats conversing with one another, all of them asking me if I was lost. Another lady, who was also a senior, was chopping green onions had greeted me as well. There certainly was more life in the village than I had encountered the day before. The convenience store was cramped with plenty of snacks, drinks and some household items, not unlike any other convenience store I visited in Seoul. At the counter

was a middle-aged man who quietly welcomed me into the store. He was eating a plate of rice, kimchi and dumplings. I bought a can of iced coffee and as I was paying for it he saw the camera I had around my neck and enthusiastically started talking about his own camera collection and then offered to show me a part of his collection which he keeps in the store with him. After leaving the store I found 5 more people, all elderly women except for one elderly man, walking around Baeksa Village. Most of the people I've encountered in Baeksa Village are the elderly, with the occasionally middle-aged person walking around.

After my site visit in Baeksa Village I left for Gangnam to check out the city fabric of the famous commercial district as well as a building called Boutique Monaco, an officetel designed by Mass Studies. My intentions were two-fold. The first was to gauge first how Gangnam contributed to the city of Seoul, if there were any systems at work that could inform design at Baeksa Village and how it compared to the quieter residential district of Nowon. The second goal was to understand the officetel, which is a housing-hotel-office type targeted for working professionals that require temporary living space near their offices, as a housing and office typology. This would be done through the lens of Boutique Monaco and how it succeeds compared to other officetels in Seoul.

Gangnam itself was a typical commercial district. Wide streets with large sidewalks surround by various mid to high rise offices and retail at the lower floors. The streets had 6 lanes, 3 for each direction, while the sidewalks were filled with people yet managed to still feel spacious. Buildings ranged in aesthetic appearance, though they were not beyond any building in Toronto, except for maybe the Urban Hive by ARCHIUM Architects which uses a unique structural steel and concrete diagrid system to support the building and articulate its outer appearance. The city blocks were much larger than Toronto's Bay Street and as a result walking down the streets of Gangnam feel like a massive corridor at times. All in all, the Gangnam district exists as a regular commercial district and is vastly different than the Nowon districts quiet, mostly residential and more dispersed urban fabric.

The more interesting study was on Boutique Monaco. The problem with studying Boutique Monaco is that the building comes from a very different city fabric than Baeksa Village but my intention is to study the idea of designing a matrix that responds to site conditions as a design methodology. This could provide a systemic framework that proposes a new way to imagine a part of Baeksa Village by examining existing site as well as capitalizing on existing cultural systems that are relevant to the design program and work in other parts of Seoul. Mass Studies had

8 A Matrix can be used as a design tool to account for competing values and to derive a building form in Baeksa Village

produced Boutique Monaco using the plan as a matrix to create inhabitable voids between the living spaces and the office spaces. When examining the building up close there were a couple of things I noticed about the building. The first is the building takes on a C shape morphology as opposed to the regular rectangular shape of officetels and apartments. This allows for greater penetration of light into the building and, according to the architects, by designing the building at the maximum allowable height they achieve a FAR (Floor Area Ratio) of 9.7 times the property area.¹³ Furthermore the building has several voids in the C shape that create courtyards by keeping the corridors in a much smaller width than the overall width of the building 3 levels at a time. In doing so they have created moments of pubic space embedded into the deeper private mass of residential units while minimizing area loss. The voids point to a matrix guiding the morphology of the building but it really becomes apparent when studying the plans of each floor. Living units with different layouts are organized efficiently to produce a high-rise that provides deeper access to daylight, public and outdoor space and livable units. The Boutique Monaco utilizes a matrix to create patterns of space, like void and mass, that can be exploited to create new ways to engage with existing typologies. The living conditions and the success of this building, especially in the land-limited Seoul, was dependent on the limiting factor of height.

As part of the design methodology, a matrix will help produce a framework to derive a building form in the final proposition. Since there are competing values in Baeksa Village, none of which are bad, I chose to deploy a matrix to account for the competing value factors that will act to derive will be the main method which will guide the design (pages 126-129). It rejects the idea that economy is the end all goal nor does it romanticize the state of Baeksa Village.

Day 3

Today my goal in Baeksa Village was to develop an index of morphological characteristics as a well as record the materials used on each building. The purpose of the study is to partially capture the existing physical conditions of Baeksa Village to compare with the areas I've studied in Seoul. Combined with site data compiled from different sources and satellite imagery I've produced a list of physical characteristics that indicate and represent an idea of what is on site (Refer to the 'Indexical Investigation of Morphological Characteristics' portion of the book) .

From there I went to Songdo City, a business district in Incheon known for its topdown approach and the fact that it was city built from scratch. I went there to catch up with an old friend who teaches at an international school there called Chadwick

¹³ Architizer. "Missing Matrix Building: Boutique Monaco". Architizer. https://architizer.com/projects/missing-matrix-building-boutique-monaco/



Figure 46 Gangnam District is not unlike any other commercial district in any major city.



Figure 47 The outdoor garden space in Boutique Monaco, an officetel in Gangnam district

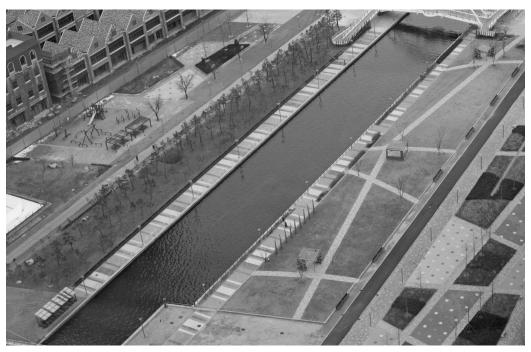


Figure 48 Songdo City resembles a ghosttown; an overview of 'Central Park' at 6:00pm.



Figure 49 New apartments are being built in Songdo City despite the emptiness of streets

International but was also curious about Songdo City since it was a controversial case due to its low population and empty streets. The city was designed as a smart city meant to be an international business hub and attract foreign investment.

The project was designed by Kohn Pedersen Fox who are architects from the US. Funded with the joint effort of North American real-estate firms and Incheon City the entire project costed over 40 billion dollars to complete. ¹⁴ Though the emergence of China as an international power is a probable answer as to why the city cannot compete as a business district, I wanted to investigate the city conditions of Songdo to understand if it's a factor on why they cannot attract more people to come.

When I first arrived I found that the streets of Songdo City were relatively empty. Though there were lots of apartments and office towers it was rare to spot another person walking along the wide sidewalks. There were maybe a maximum of 10 cars on the 6-10 lane streets at once. It was eerily quiet and empty. The city itself had a great deal of amenities, museums, concert halls, residential towers, coffee shops and many other buildings that are found in a city. There were large streets, neatly curated parks, replica hanok villages, and rivers that ran through the urban space. The only thing that was missing was people.

According to Korean and North American Real-Estate companies Songdo City was deliberately designed as an "American City", 15 having all the offerings of a high-class American city in hopes to attracting foreigners as well as Koreans who immigrated to North America. the future success of Songdo City seems to be hedged with foreigners being attracted to American Cities. The situation is probably politically and economically far more complex than I knew but the problem, at a design level, seems clear when adding the developers comments. Why wouldn't one just go to North America instead where the cities are full of North American people? If a city that cannot achieve its business goals hedges its success by offering a built environment that already exist elsewhere then it will fail because theres no incentive for people to move there.

My experience at Songdo City offered a tenuous connection to Baeksa Village in the form of a placemaking lesson, as well as affirming what was learnt from DDP. Baeksa Village as a place needs a reason to exist that is *relevant to its greater socio-economic* context in order to thrive. It's possible to replicate the conditions that work within Baeksa Village's immediate site context in the Junggyebon neighbourgood since it has been proven to work (given that nothing on site changes) or one can introduce programmatic elements that work with the socio-economic landscape of South Korea. The socio-economic analysis will be

Baeksa Village as 9 a place needs a reason to exist that is *relevant* to its greater socio-economic context in order to thrive.

¹⁴ Poon, Linda. "Sleepy in Seoul, Korea's Smartest City". Citylab. 2018. https://www.citylab.com/life/2018/06/sleepy-in-songdo-koreas-smartest-city/561374/

¹⁵ Ibid.

addressed in the design portion of the thesis to determine a program that can work alongside with a new housing proposal.

Day 4

I was making my last routine morning walk around the site in Baeksa Village in hopes to focus on details I may have missed when I noticed that there was a black luxury sedan parked along one of the streets. Behind the sedan were two more cars, one just like it and a white SUV. Curious by the out-of-place cars I looked towards the building it was parked by. The building was two storeys with a gabled bright blue roof, beige siding and barred windows. There were large open gates that led into an open space full of creates. I notice then that a man was entering that gate and stopped him to ask what the purpose of this building was. He replied that it was a packaging factory for Cass, a Korean beer company. The revelation caught me by surprise and I remembered that I encountered an architecture firm a couple of days ago by the village entrance. There were business and community programs in Baeksa Village that brought others unto the site who otherwise don't live in the area, activating an otherwise empty village.

I searched the village for others and found 1 more business and 3 more community programs. The business was a taxi company and close to the beer packaging plant. The company's property had a lot, half full with taxi's, and a couple of 2 story stacked corrugated metal box offices that had windows and doors cut into them. The first community program was a tennis club, which was housed in a very large green domed tent. There were loud heaving grunts and competitive yelling coming from it. As I approach it I meet a group of men coming out, all of them sporting tennis gear and large duffle bags. They were heading to their cars before I stopped them to introduce myself. After introducing myself as well as the reason I am here I asked them about the site and what they thought about the redevelopment plans. They admitted they do not know the specifics of the plans but there were general sentiments that Baeksa Village needs major development. The second community program was a large arts and community center. It is clad in white ceramic tile, two story high and has a large pitched skylight cutting through the middle of it. I walked inside and found an office with 2 workers inside as well as nicely furnished and clean community rooms complete with a kitchenette. On the walls there were photos of many people gathered at the community center for different reasons. There were traditional Korean drum rallies, music performances, community lunches and art exhibitions. There is an active and supportive community in the greater Nowon area that gather in spaces made in Baeksa Village. The last community program is the Church, which are dispersed across the site as there are



Figure 50 A tennis club in Baeksa Village



Figure 51 A community center in Baeksa Village



Figure 52 An existing packaging company packages beer



Figure 53 Ewha Womens University uses the topography to carve a valley like walkway

multiple of them. Church life is significant in the daily life of village inhabitants due to the number of them on site and the vocal support that I've heard as well. I've been asked multiple times in Baeksa Village if I knew where a certain church was. I also heard collective voices singing hymns coming from what I thought was a regular home a few times as I walked around site. Baeksa Village has a community life that involves and invites others in the district through businesses and small community gathering spaces that activates the site and brings life to the usually quiet and empty streets of Baeksa Village.

As I was heading home to get ready to leave for the airport the subway stopped at Ewha Women's University subway stop. I had heard that the University was well designed and provocative. I also knew that a technical school would be integrated into my final housing proposal for Baeksa Village due to several converging reasons. The first is the importance of education in Seoul. Students often study in dedicated tutor schools after regular school sessions are over in order to secure highly competitive spots at top universities. Nowon District itself has education as a top priority and has earned itself a reputation for being an educational district as well as a residential district. Second, the social housing proposed at Baeksa Village doesn't target specific people and so the design doesn't account for specific needs. The problem of a rapidly aging population would warrant the integration of a Geriatric school with housing dedicated to seniors and students, who both usually require low-rent subsidized housing. Third, A technical school is more appropriate because despite all the offerings of different programs at universities technical skills are overlooked, even though they can address real socio-economic problems. Professions that require more academic training are more highly regarded and are already provided. A new school would be active since geriatric care will be at the forefront of Korea's imminent needs.

So I decided that I would check out the Ewha Women's University to gather some lessons.

One of the more provocative university buildings in Seoul, Ewha Women's University cuts into large sloped landscape to carve out a large trenched walkway. The whole design, which embeds itself into the landscape, wants people to come and explore the building. At one end is a gentle enough slope to walk comfortably downwards to the trough of the trench. The other end has large set of stone stairs that work themselves up all the way to the upper dormitories. Larger benches are set inside the stone stairs for people to sit and gather. At the sides are transparent and reflective glass which are framed with repeating vertical metal fins that stretch

from the downward slope of the ground to the upward slope of the roof. Between each vertical metal fin are sets of horizontal metal bracing – though they are staggered playfully working with the widening and contracting slopes of the glass face. The glass is reflective so those who occupy the trenched walkway are mirrored back to them. The glass is also transparent enough so that one can see the students and faculty walk in the inner atrium that is on the other side of the see-through surface. This creates a blurring effect between the outdoor and indoor public spaces that engages people both from the inside and the outside. During the daylight the more reflective properties of the glass make the glass seem more solid when looking from the outside-in, however when standing from the atrium the effect is the opposite, with the transparency becoming clear. One can see the other side of the chasm and one is either invited to come out into the open space or to enter into the other side of the embedded building. I would imagine the effect is the opposite at night, where the interior lights would create large glowing spaces embedded in the landscape inviting people from the outside to come in. Large doors are set regular intervals along the glass walls. Inside there are 4 levels that all have access to the daylighting that the trench provides. On the other side of the glass there is a large atrium with open hovering pathways at each level that connects outdoor with indoor at all levels. As far as I could tell the classrooms, which I did not have access to, did not access that same light as the public atrium space did.

Ewha Women's University's entire approach is one of invitation. By employing different light effects and using the chasm at the center the design creates tension between three options: to enter into the landscape embedded building, to go out and play in the public realm or to go to the other side, also embedded in landscape, of the chasm and to remain there. It is a provocative and complex experiment that links education with deeply inter-connected spaces through the use of a landscape, layered transparencies and a deep void that mediates the different outdoor and indoor spaces.

The strategy of creating inter-connected spaces and provoking invitation for others to enter can help activate public space in Baeksa Village, especially when worked with education programs. This problem will be used as a vehicle to develop a housing design proposal that incorporates a geriatric care school. This will be discussed further in the design portion of the thesis.



Figure 54 Transparencies is a tool utilized in this project to provoke invitation.



URBANIZATION, HOUSING AND ARCHITECTURE

A Brief History and Analysis on Housing and Urbanization in Seoul

The growth and reconstruction of South Korea started after a ceasefire was signed in 1953 after a civil war that cemented the divide in Korea. ¹⁶ The war had significantly destroyed the nation's cities and were in dire need of repair and construction. Often dubbed as the "Miracle on the Han River", was a product of successive autocratic republics. It was in 1961 when massive reconstruction of Korea's cities occurred due to the establishment of a military goverment under the rule of Park Chung-Hee. ¹⁷ The government's goals were to establish a export-based industrial economy that would put into place top down policies in order to ensure consistent growth. ¹⁸ This was the start of unprecedented growth in Korea. The large expansion of urban space that ensued with the growth of the country's economy had led to unilateral decision making by government established corporations called Chaebols. Chaebols were largely responsible for the construction of a great deal of Korea's Housing as well as the construction of many houses. ¹⁹

¹⁶ Graham, Edward. "Reforming Korea's Industrial Conglomerates". Institute for International

Economics. 2013., 13.

¹⁷ Ibid., 15.

¹⁸ Ibid., 17.

¹⁹ Ibid., 24.

The Establishment of Daldongnaes , Baeksa Village and over a Decade of Deliberation

After the Korean War, a new authoritarian military regime reshaped the trajectory of city building for the last half of the 20th century. The armistice between the two Koreas helped provide a time in which South Korea's population exploded. With the aid of the government-instituted policies and top-down control of major corporations, also government-instituted, a massive number of building developments arose, primarily apartments, in order to provide housing for the massive influx of people being born into the country. To deploy a massive and coordinated effort of housing redevelopment, the government seized large swathes of land that were already occupied by residents.²⁰ Those who occupied lands planned for redevelopment were evicted and with no alternative for housing, the evictees occupied lands of lower value, typically hilly areas which were around the fringes of the city. Here they made their homes out of scavenged material: Rubble, Bricks, metal scrap and sheets, plastic ribbed panels, tires, polyethylene tarps and wood boards, crystalizing a vibrant and disorderly set of communities. Different than the rational and massive developments provided by institutionalized building developers, these were modern urban slums that concentrated the poor and those with low social status and were seen as undesirable community settlements by government and citizen alike.

These hillside settlements were called Daldongnaes which literally translated means "Moon Village" in Korean. In 1967, the contructing of Cheonggye Highway had demolished large swaths of shanty towns that were previously established there. Many of those who lived there were displaced to several other districts. The government gave those who were displaced a small lot of land of 25m2 as well as 200 concrete blocks to start their new life in their districts. One of these districts was Nowon (known as Yongsan at the time). The village was established in a subdivision of the district known as area 104. This is where the village gets its name, 104 translates to 'Baek-sa' in Korean. Since urbanization was occurring at such a rapid rate development restriction zones were made in 1971 in order to control the urban sprawl including Nowon District, limiting the development that could occur there. In 1999, these restrictions were removed allowing Baeksa Village to be redeveloped. The first development plans for Baeksa Village were discussed in 2008 being proposed as a regular apartment complex development

²⁰ Mobrand, Erik. "Struggles over Unlicensed Housing in Seoul, 1960-80". Urban Studies. Vol. 45. 2008.. 368

²¹ Seoul Museum of History, Baeksa Village. Seoul: Seoul Museum of History Research Department, 2012., 106

²² Ibid., 74

which sparked disagreement with the approach. There were discussions of preserving the fabric of Baeksa Village instead. A new plan was drawn up to preserve the village and disagreement in approach had delayed the project for 2 years. In 2011, the preservationist approach had a new ally in Seoul's new mayor Park Won-Soon who approved the plan to preserve part of Baeksa Villages small scale units. This cause deep conflict between the constructors, investors, residents and administrations in charge, unable to agree on a single approach which led to a 10 years of indecision and litigation.

The Mission of the Chief Architect

In 2014 Mayor Park Soon-Won appointed Seung-H Sang as the Chief Architect of Seoul, South Korea's largest and densest city. This appointment was owed to Sang's reputation as a world class architect as well as his desire to make Seoul a better city. His primary goal was to 'find the identity' of Seoul which was an objective shared by the mayor.²³ Once established, Sang made clear that the agenda of the Chief Architect and his office would design public buildings that would involve a sensitivity to the site, be of lower density and advocate preservation of historic areas of Seoul. One of these areas is Baeksa Village.

Seung-H Sang, openly expressed his desire to create public buildings that would "harmonize with the existing mountains". As well as stopping "inappropriate developments such as tall buildings". These His goal is made clear in the creation of a garden bridge called The Sky garden. Launched as a competition commissioned by Sang and won by MVRDV, the project reuses existing highway infrastructure to create an elevated garden. It is likened to New York's High Line, however it acts as an essential part of city fabric, connecting commuters between streets and giving a leisure space for passersby. It is clear that his goal, and that of the City's architecture team, is to help create an array of buildings within the city that are sensitive to the site in which they are situated. The Sky garden reveals what Seung-H Sang meant in his mission to re-invent the identity of the city. For a long time the strategy for the majority of Seoul's building development was to, and to some extent still is, replicate buildings that have been successfully completed in the past. In doing so buildings become replicated rather than thoughtfully built. The Chief Architects office aimed to ally with pre-existing site conditions, as did the

- 23 Murphy, Simon. "Seoul's official architect Seung H-Sang on his capital vision". Financial Times. 2014.
- 24 Hurst, Will. "Seung H-Sang: 'As city architect I have the power to stop tall buildings".
 Architects Journal. 2015.
- 25 Ibid.

Sky garden by repurposing infrastructure, in order to re-invent what exists on site and become more vital to the city. In this way the city better engages by working together with what exists, while attempting to create a city with more diverse experiences.

The Chief Architects office views established tradition and pre-existing culture as valuable and necessary to keep. Korean Housing Developers have re-created the same housing model for several redevelopment projects. The concern of the city's chief architect is that new development proposals don't take into consideration the existing vitality which is created from preexisting social forces.

Nowon District

Baeksa Village is located in a subdivision of Nowon District one of Seouls largest residential districts and located in the north-east edge of the city. With the size of 35.44km2, the district has has a total of 19 subdivisions with Baeksa Village being located in Junggyebon subdivision. The population is the third largest amongst the districts in Seoul having a population of 543,499 people or 15,355 people per square kilometer which is lower than Seoul's density average of 17,000 people per square kilometer.²⁶ In terms of housing 86.5% of Nowon Districts population occupy apartments ahead of Detached Homes, Row Housing and Villas. Apartments are dominant across the district with 71% of Nowon's buildings dedicated to residential use. Nowon District has access to 4 different subway lines with the Dobong-Gu line being the closest to Baeksa Village.

The Junggyebon subdivision has various street conditions that make up its area. There are four major characteristics that work in Junggyebon subdivision: a stream on-site, a large near-by subway overpass, remote conditions near Mount Bulam and repeating apartment blocks. The stream has multi-leveled paths which work to create two pedestrian pathways. The first is at the stream level and has plenty of greenery and occasional exercise equipment along the sides or under the bridges. The second is at the higher level which works as a dedicated walkway and bike path for circulation. The stream provides a pedestrian walkway that connects the subdivision to adjacent regions by foot. The near-by subway overpass is a part of a subway line that is supported by a large piece of infrastructure that hovers over the main streets of Nowon district. The subway line remains a vital piece of infrastructure and connects to Baeksa Village via a 10 minute bus ride. The remote

²⁶ Korean Statistical Information Service. Population & Housefolds by Administrative District. http://kosis.kr/eng/statisticsList/statisticsListIndex.do?menuId=M_01_01&vwcd=MT_ETITLE&parmTabId=M_01_01

condition near Mount Bulam are largely nature paths and hiking trails that can be accessed by near-by residents. The remote conditions are much closer to Baeksa Village and are a condition created mostly due to the area being a Restricted Development Zone until 1999. The repeating apartment blocks provide most of the housing in the area and are mostly characterized by rows of rectangular blocks. In between each block is usually a large parking lot, a small convenience store, green spaces and some playgrounds. The area has commercial areas but are smaller in size compared to other regions of Seoul. The area also has multiple elementary and secondary level schools. All of these characteristics point to site being a residential neighbourhood that demographically leans towards families and children.



Figure 55 Large repeating apartment blocks are a common sight in the Nowon District

KOREAN HOUSING VERNACULAR

Typical Characteristis of Existing Housing Typologies

Housing Typologies in Korea are often categorized in 4 types: Apartments, Officetels, Villas and Detached Housing. Circulation, Unit Layout and Amenity provisions are analyzed and compared.

Apartments often have dedicated vertical circulation that is shared between two units this type of apartment doesn't use corridors to provide access to multiple units, rather it maximizes living space in lieu of access to other units. There are no extra fire exists or other means of egress. These Apartments cater directly to families due to their relative affordability and large size. They often have exterior parking. There is little to no green space, extra amenities or dedicated recreational space.

Officetels typically cater to students and yong workig professionals. Typically they will have retail and lobby space at the ground level and anywhere from one to five floors of offices above. The residential units continue above and have many different types and spaces to accomodate for different needs. A common type of high density housing that has been effective in providinghousing for a rising young working class.

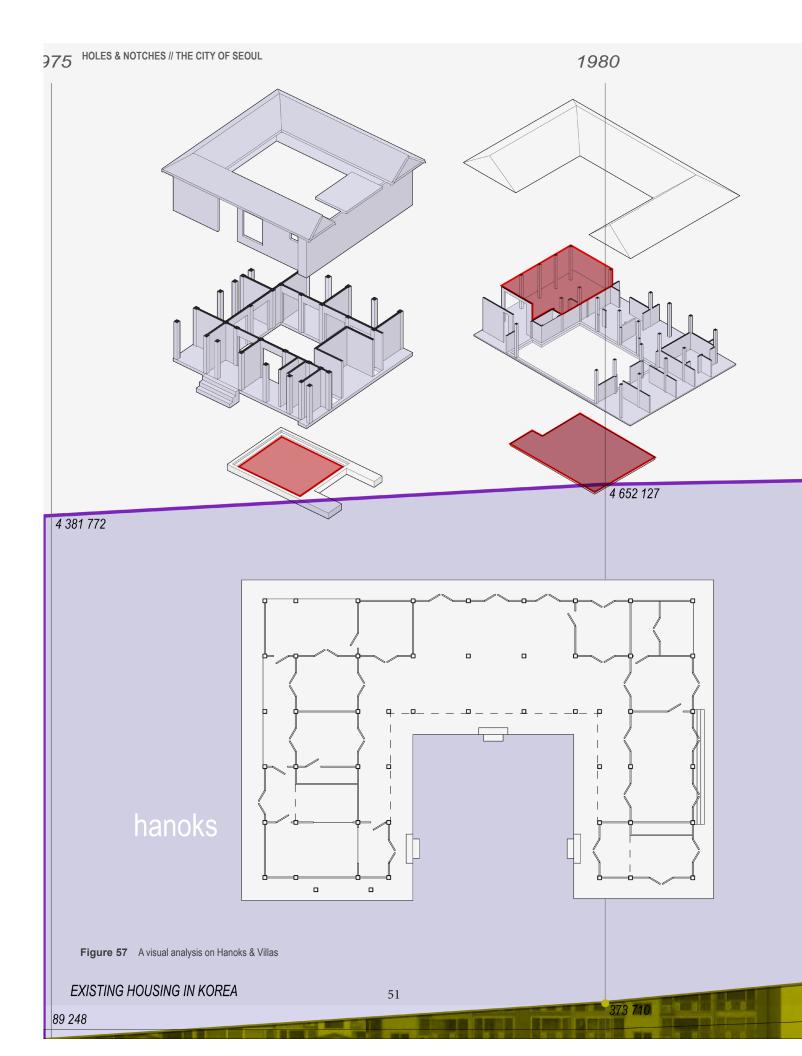
Villas are lower density apartments, anywhere from three to five floors with similar layouts to apartments. Each floor has approximately 2 units and They have

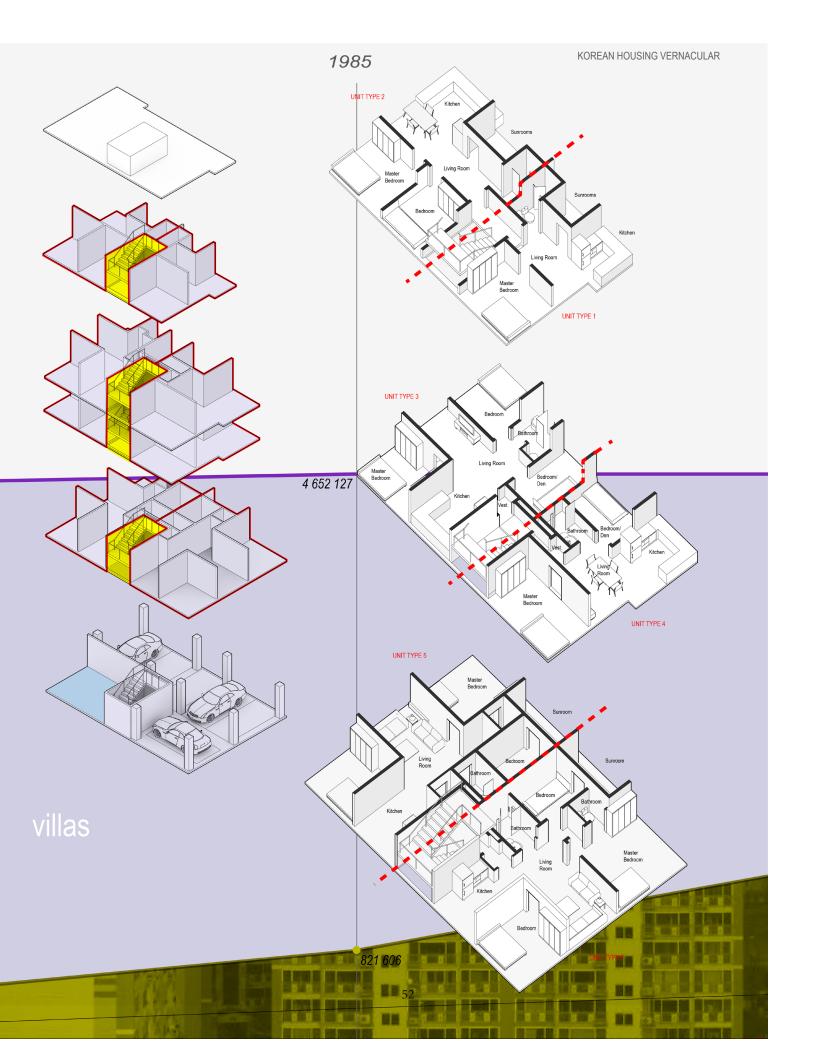
dedicated vertical core access to each of their units. These housing typologies are catered towards families but can also be small enough to be catered to students and young working professionals as well.

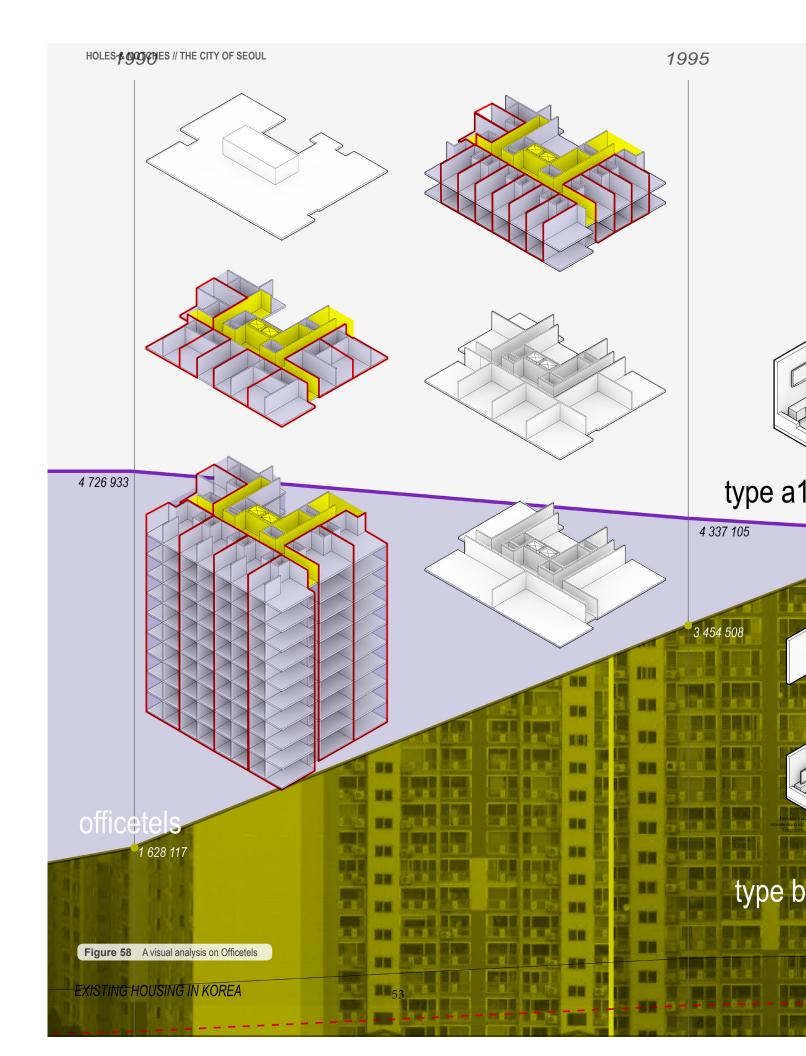
Hanoks are traditional detached housing typologies that are defined by a central courtyard. They have historically been the dominant housing typology until the urbanization of South Korea. They are large and are typically catered towards families as well.

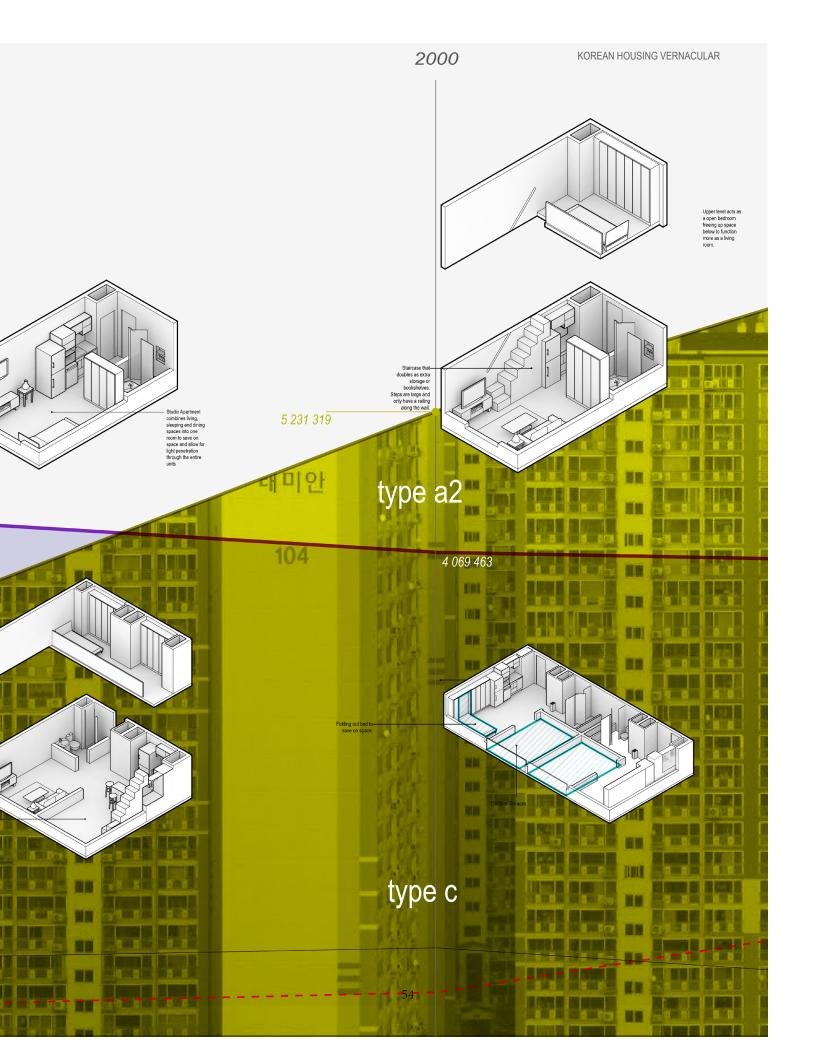
	APARTMENT	OFFICETEL	VILLA	DETACHED HOMES
CIRCULATION	A. DEDICATED VERTICAL CIRCULATION B. BOTH VERTICAL AND HORIZONTAL CIRCULATION	BOTH VERTICAL AND HORIZONTAL CIRCULATION	DEDICATED VERTICAL CIRCULATION	DEDICATED HORIZONTAL AND VERTICAL CIRCULATION
UNIT TYPE	FAMILIES	SINGLE, STUDENT, WORKING PROFESSIONALS	FAMILIES, WORKING PROFESSIONALS	FAMILIES
UNIT LAYOUT	LARGE, 2+ BEDROOMS, SHARED/DIVIDED KITCHEN AND LIVING ROOM	SMALL – MEDIUM, 1-2 BEDROOMS, LOFT/FLAT	MEDIUM – LARGE, 1 – 3 BEDROOMS, ARRANGEMENT SIMILAR TO APARTMENT	VARIED, 2+ BEDROOMS
PUBLIC SPACE AND AMENITIES	LITTLE TO NONE, MOSTLY EXTERNAL PARKING, COULD BE INTERNAL	AMENITIES PROVIDED, OPEN PARKING CAN BE EITHER INTERNAL OR EXTERNAL	NO AMENITIES, PARKING AT GROUND LEVEL AND UNENCLOSED	TYPICALLY DEDICATED AMENITIES AND/OR PARKING

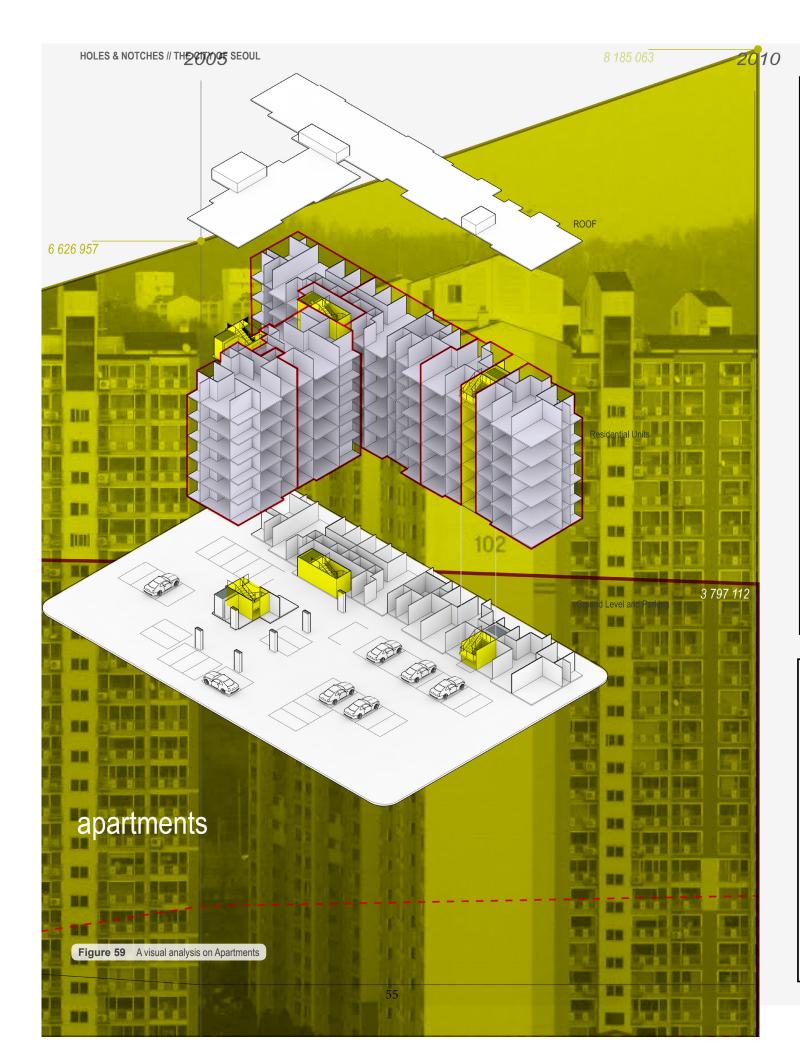
Figure 56 An overview of existing housing vernaculars in South Korea



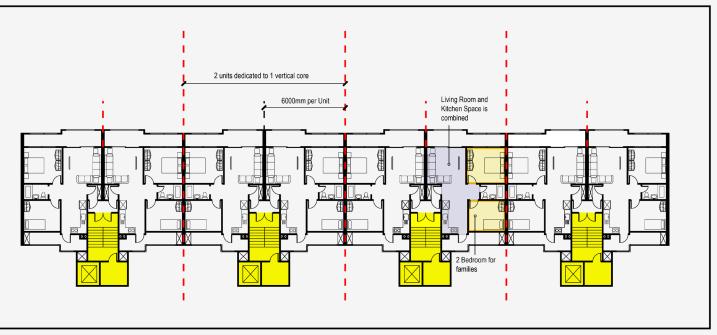












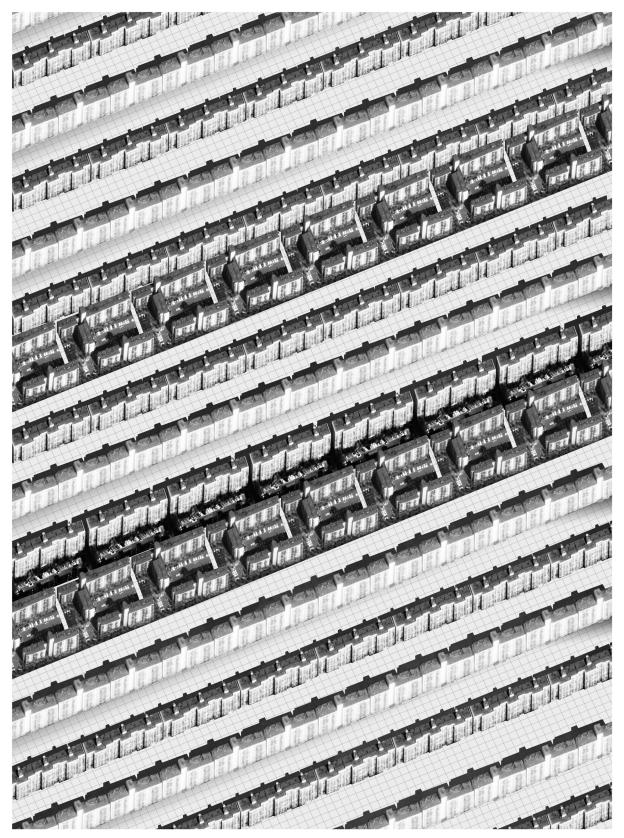


Figure 60 Large Apartments provide a matrix for smaller strucutres to be built between them

SEOULS URBAN MATRIX : THE APARTMENT VERNACULAR AS A BACKGROUND FOR INFRASTRUCTURES

Apartment blocks are South Korea's most common housing type with 81% of housing types belonging in the Apartment category.²⁷ A result of the socioeconomic landscape of the 1970's, rapid urbanization and population growth led to an acute housing shortage. As the apartment vernacular formed the alleys, parking lots and streets of Seoul, they set a stage for smaller structures to inhabit the interstitial spaces between large housing blocks. Marketplaces, offices, tented cafes, playgrounds and infrastructures aggregate around the large blocks that act as productive and public fabric around the peripheries of private apartments.

A lowering population decreases the need for a maximizing housing strategy, there is a deeper call to provide programs that can be flexible to absorb the changing demographics of Seoul. Smaller structures at street level become more potent in carrying out daily activities since they are more accessible to the public sphere and can adapt as public needs change. To inform the village vernacular the contextual urban conditions are examined and categorized as programmatic and spatial types.

27 Korean Statistical Information Service. Population & Households by Administrative District. Accessed October 15 2018. http://kosis.kr/eng/statisticsList/statisticsListIndex. do?menuld=M_01_01&vwcd=MT_ETITLE&parmTabId=M_01_01



Figure 61 Satellite Imagery of Seoul



BAEKSA VILLAGE

Existing Characteristics of Baeksa Village

In this chapter Baeksa Village is examined in two studies. The first is an analysis of existing and proposed site elements that can inform the future design. This is to have a deeper understand of site context in order to inform the design. The second is a morphological study examining the physical characteristics of the buildings on site. The purpose of this study is to parse the unique characteristics of Baeksa's buildings that differentiate it from villages across the globe. Both studies were used to gather information to design a proposal and aesthetic that could ally with the existing village rather than fight against it.

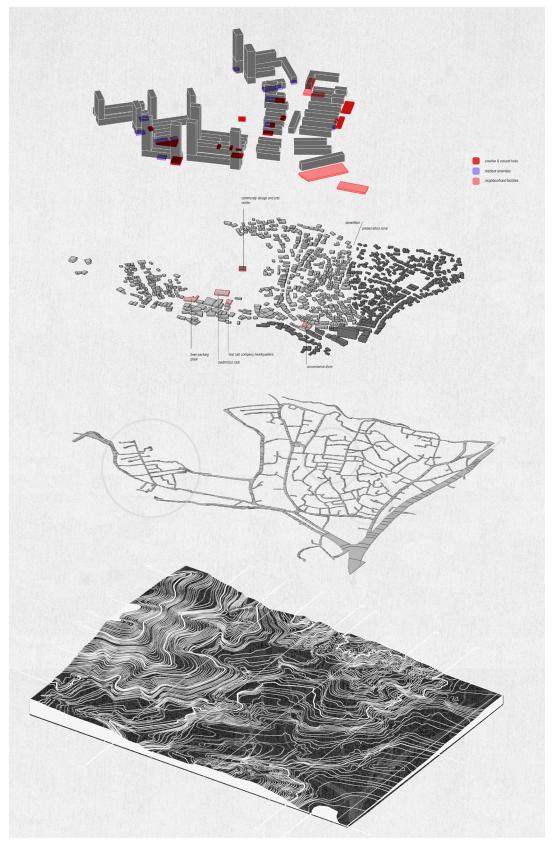


Figure 62 Axonometric of Baeksa Village: Topography, Circulation, Existing Buildings & New Proposal from the 2018 Competition Winner

The first layer we examine is the new proposal and the new community programs that are proposed. The second layer is the existing fabric of the village and the existing community programs on-site. The third layer is the circulation of the village. The final layer is an analysis on the site slopes of the village.

The new proposal and new community programs is a diagram that illustrates, in a simple way, the ratio between public program and house. There is a significant amount of public and community programs being proposed in the competition winner.

The existing village fabric shows the division of what will be demollished and what will be kept. Some programs that will be demolished include: a taxi cab company head-quarters, a convenience store, a badminton club, a beer packaging plant and a community design arts center.

The circulation diagram is illustrated to better understand circulation as it relates with topography. Grid-like circulation appears in sloped areas. Otherwise circulation tends to be random and informed by the existing building layer instead.

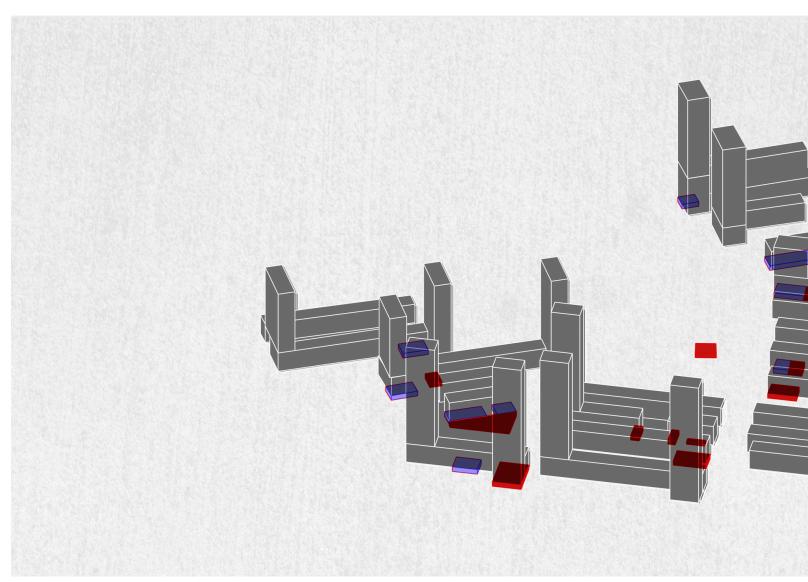
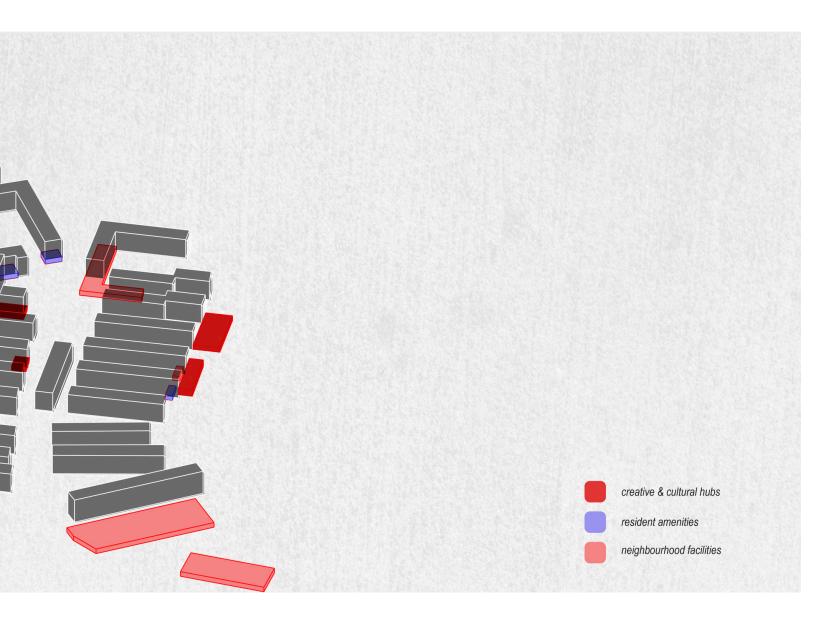


Figure 63 The 2018 Competition Winner proposes several public programs that aim to unify the community



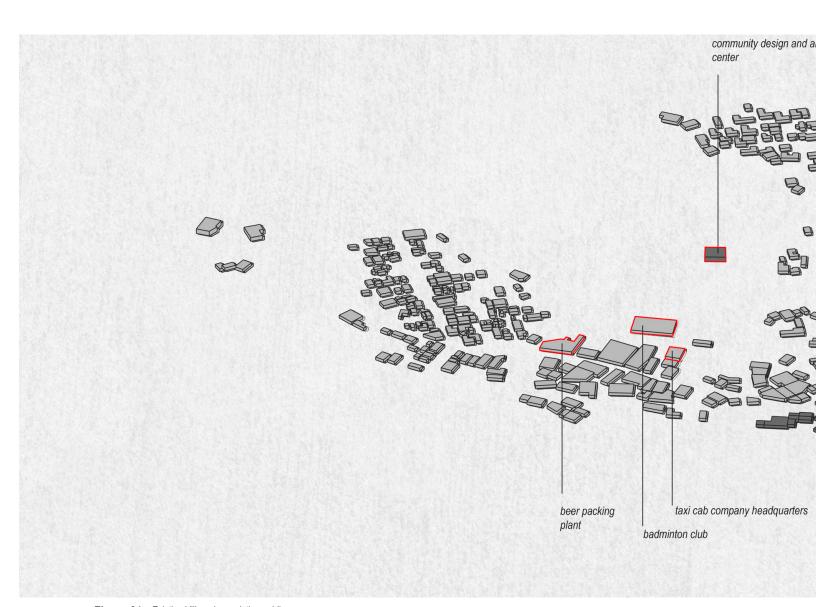
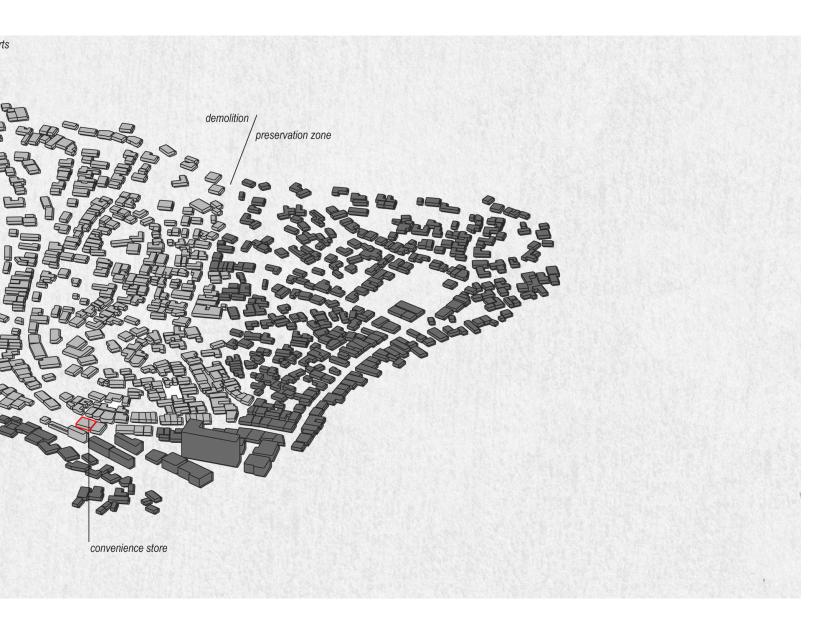


Figure 64 Existing Village has existing public programs



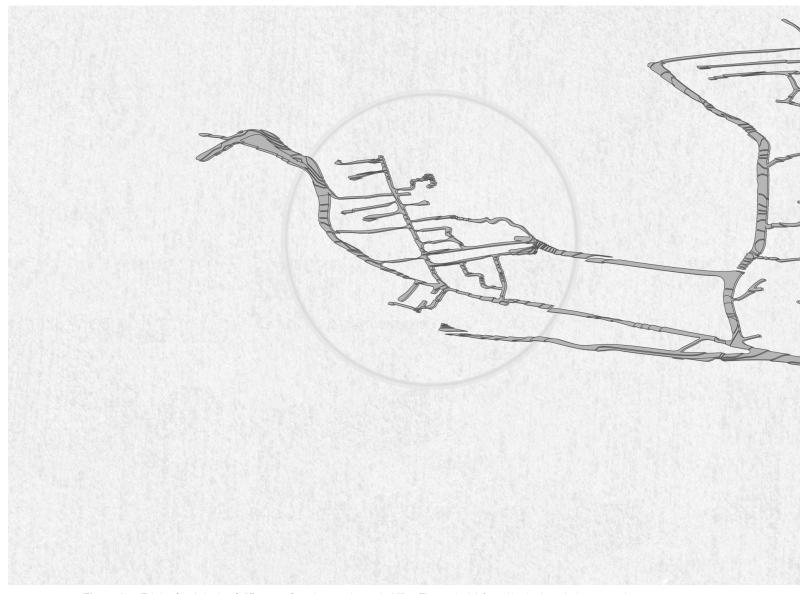


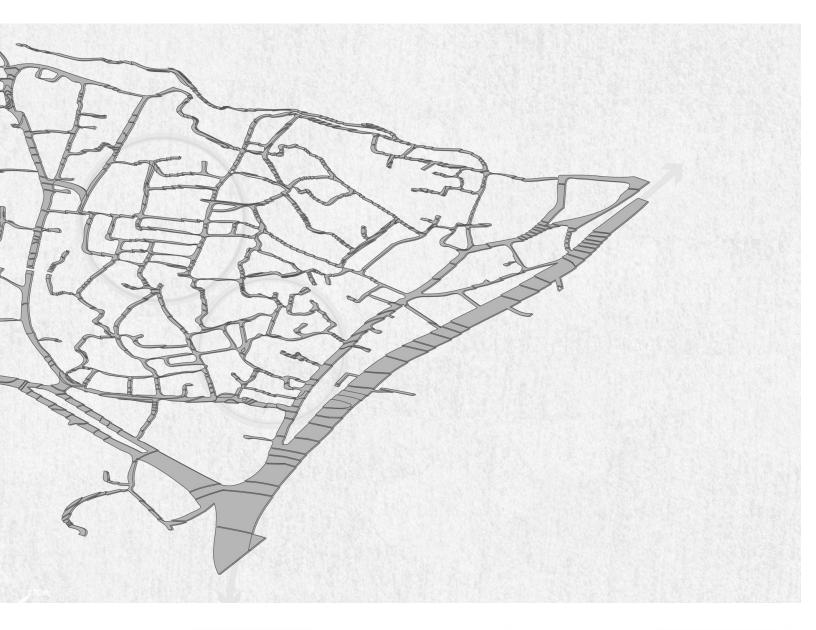
Figure 65 Existing Circulation has 2 different configurations: random and gridlike. They are both informed by the deep sloping topography.





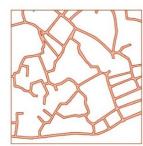














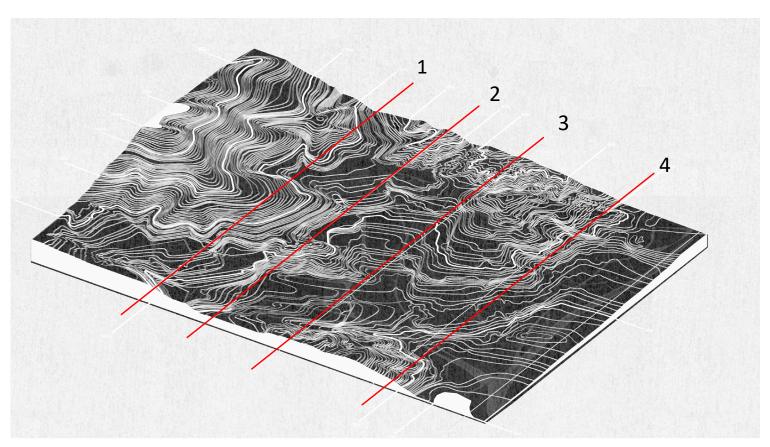
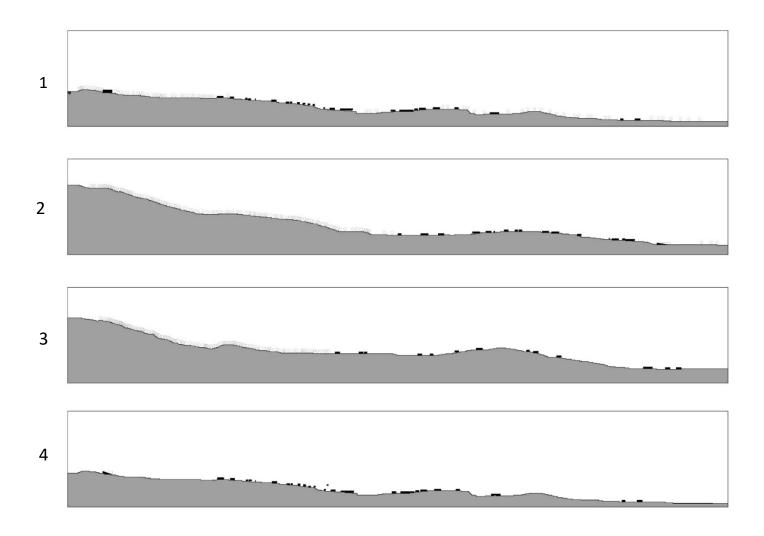


Figure 66 Topography of Baeksa Village



INDEXICAL INVESTIGATION OF MORPHOLOGICAL CHARACTERISTICS

An Analysis on the Physical Character of Baeksa Village

As part of site research, this project includes an analysis breaking down the typical physical characteristics of Baeksa Village. This index provides an understanding of patterns that reoccur on site. Can any of these patterns be used to inform the design of project built on-site?

The morphological studies reveal two reoccuring patterns: the first is the consistent use of internal voids to define private and public spheres. Walled porches separate the house from the pathway suggesting privacy as an important value in housing. Internal courtyards support this idea as family affairs seem to be an inward looking idea and not to be shared outside the house.

The second pattern is that there is a repeating house core, however the exterior conditions seem to have added on new parts unto it over time. The exterior appearance are redefined as time passes since residents add corridors, rooms and storage spaces.

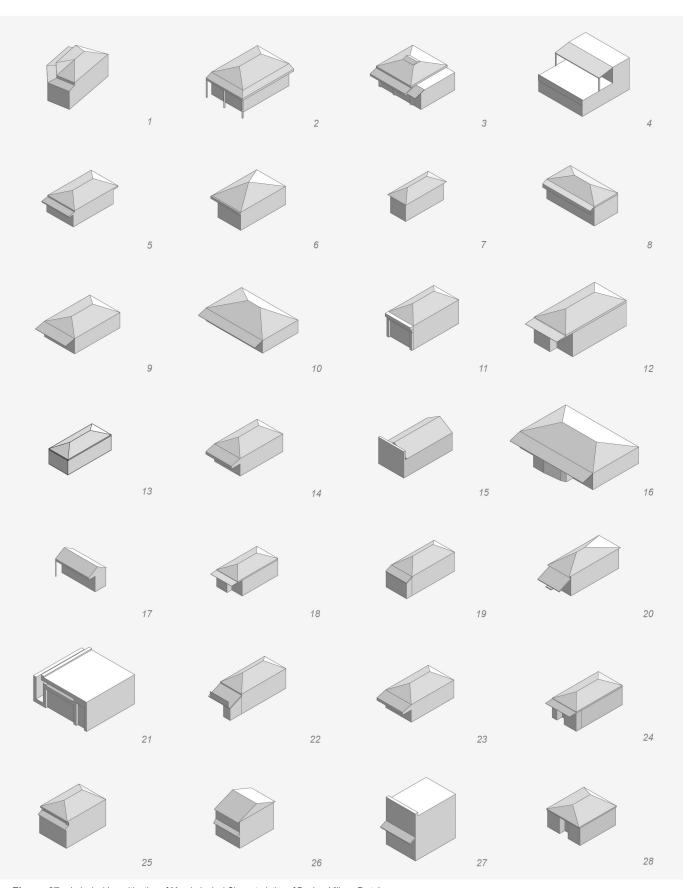


Figure 67 Indexical Invesitigation of Morphological Characteristics of Baeksa Village Part 1



Figure 68 Correlated Images to Investigation Part 1

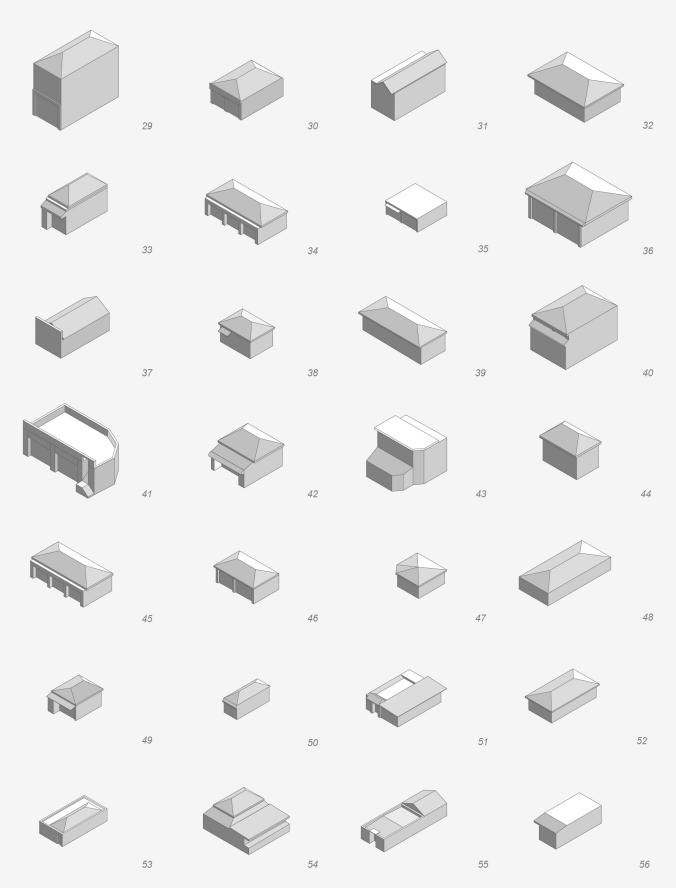


Figure 69 Indexical Invesitigation of Morphological Characteristics of Baeksa Village Part 2



Figure 70 Correlated Images to Investigation Part 2

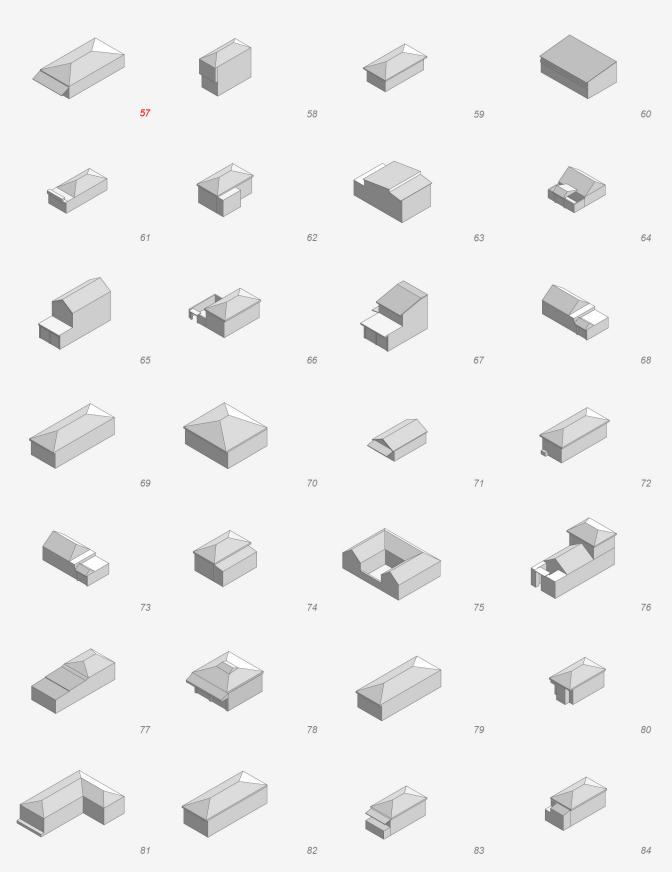


Figure 71 Indexical Invesitigation of Morphological Characteristics of Baeksa Village Part 3



Figure 72 Correlated Images to Investigation Part 3

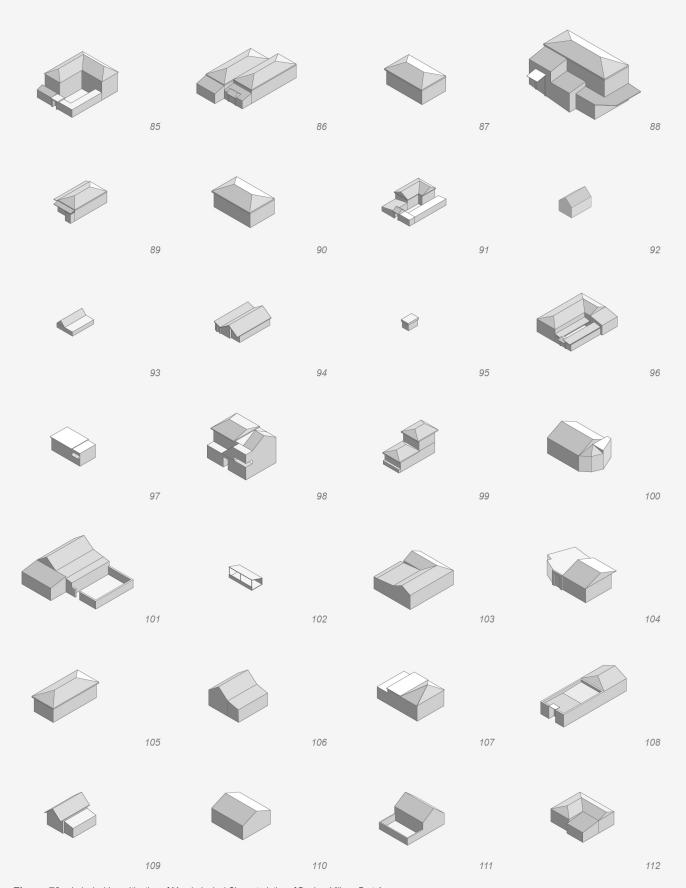


Figure 73 Indexical Invesitigation of Morphological Characteristics of Baeksa Village Part 4



Figure 74 Correlated Images to Investigation Part 4

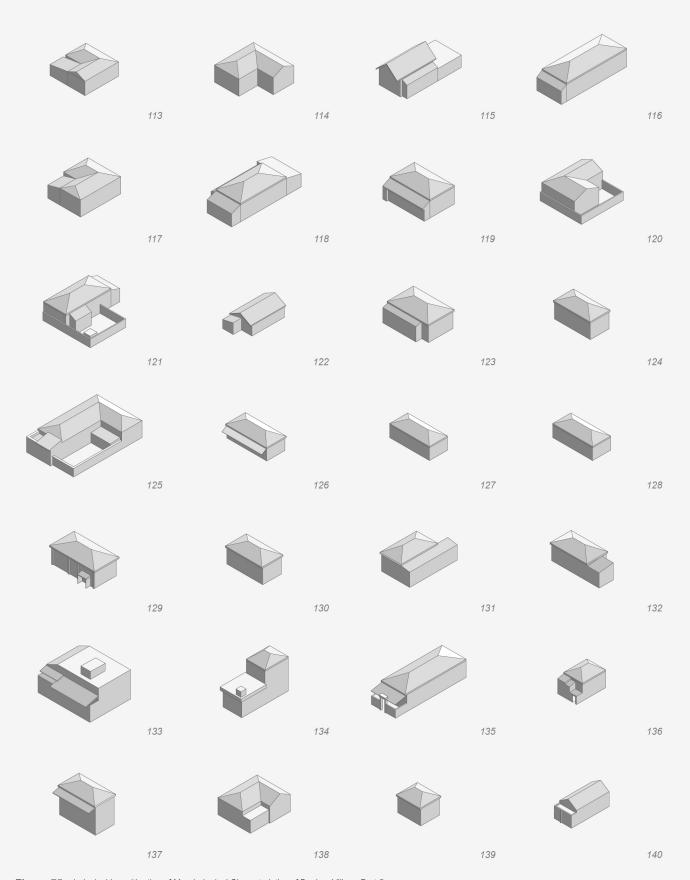


Figure 75 Indexical Invesitigation of Morphological Characteristics of Baeksa Village Part 5

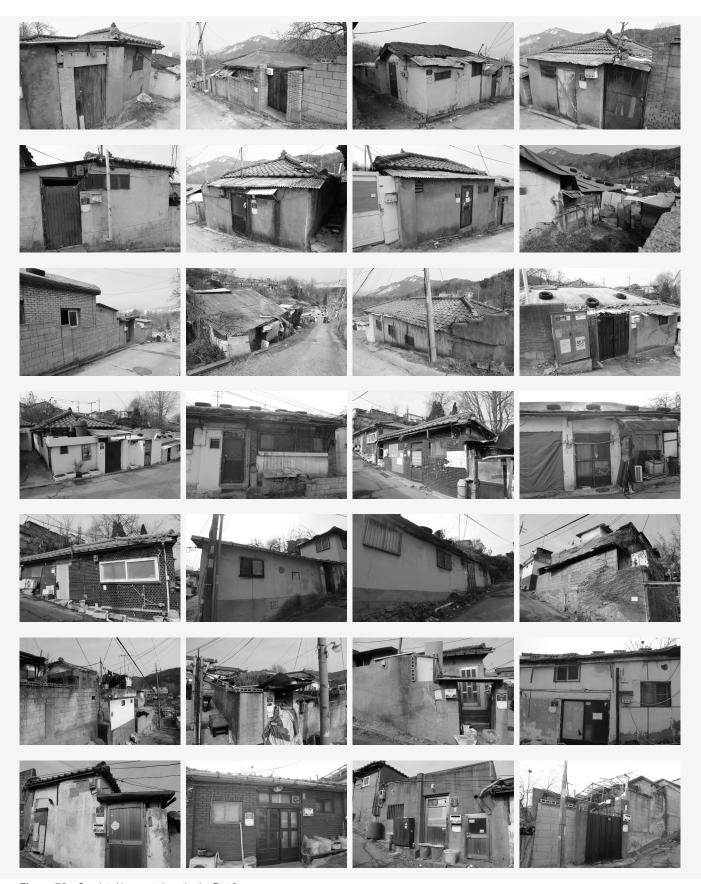


Figure 76 Correlated Images to Investigation Part 5

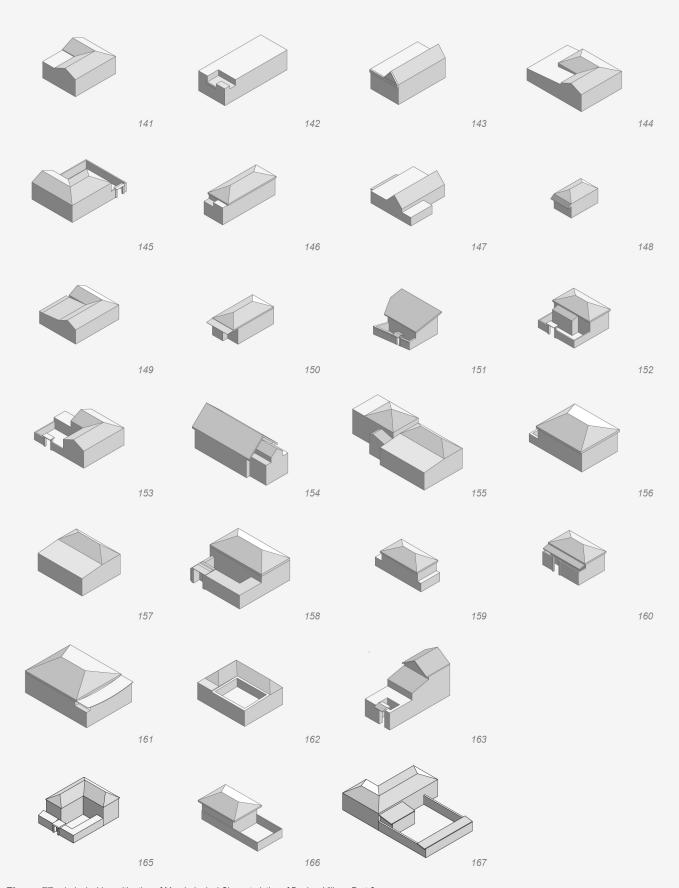


Figure 77 Indexical Invesitigation of Morphological Characteristics of Baeksa Village Part 6

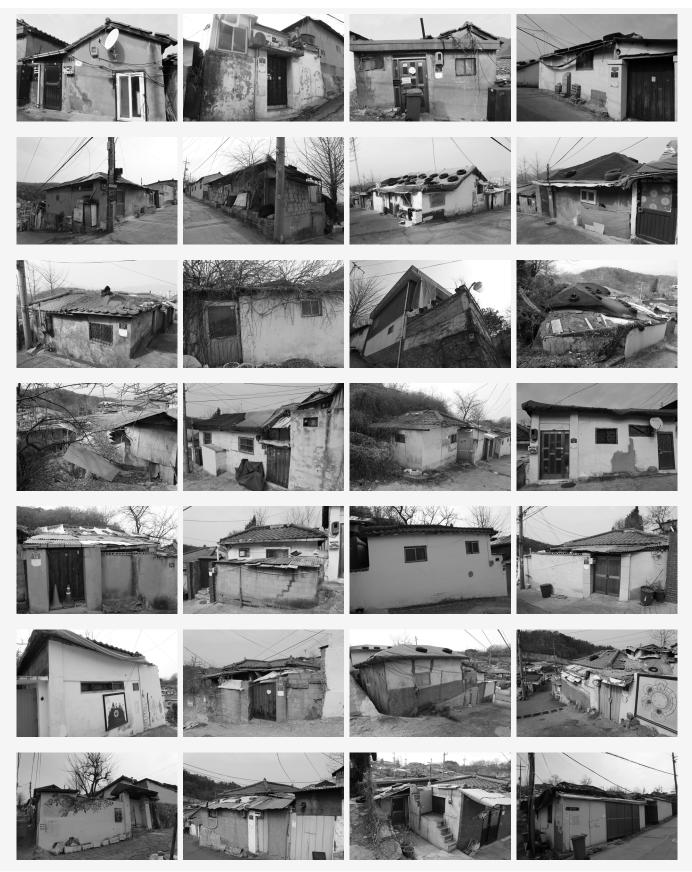


Figure 78 Correlated Images to Investigation Part 6

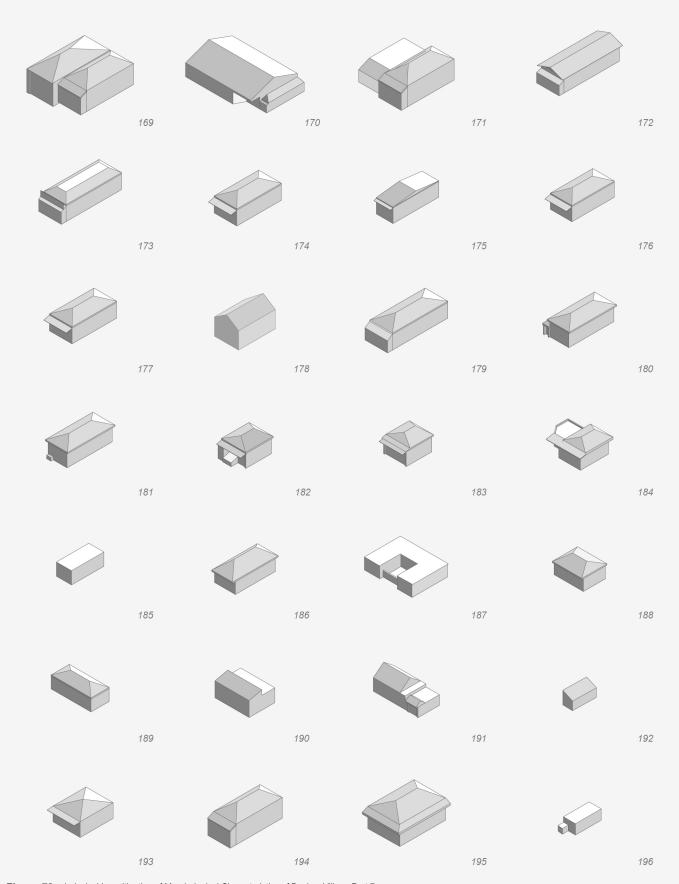


Figure 79 Indexical Invesitigation of Morphological Characteristics of Baeksa Village Part 7

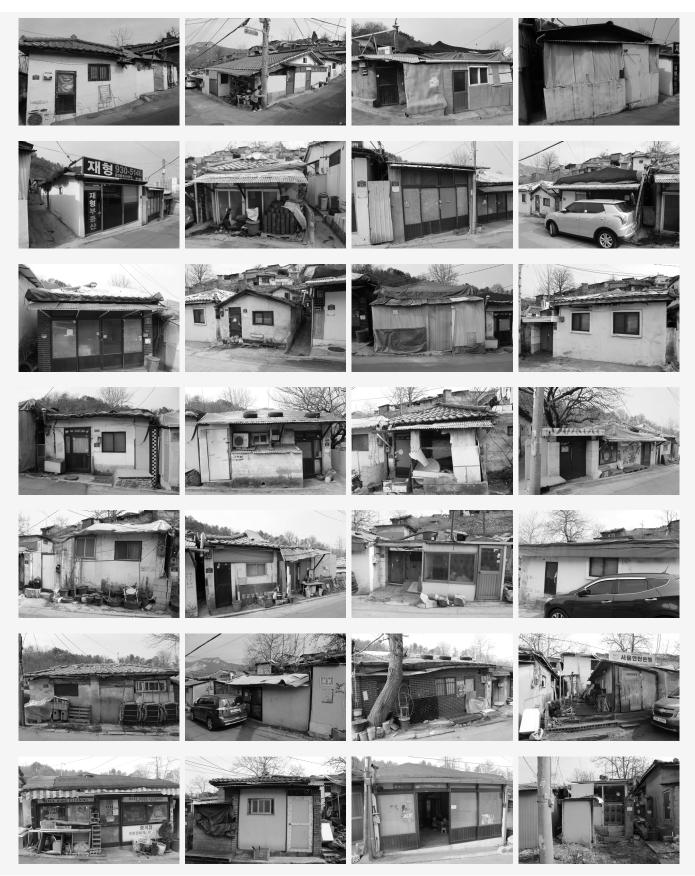


Figure 80 Correlated Images to Investigation Part 7

internal voids act as private spaces & entry points

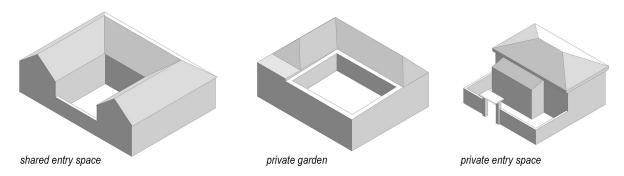


Figure 82 Typical Pattern of Internal Voids in Baeksa's Housing

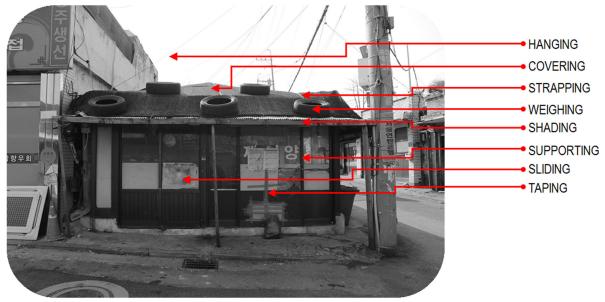


Figure 81 Ad Hoc Construction Methods are Evident

Defining Baeksa village are the informal building processes that make up their buildings. Many of the built structures employ ad hoc methods of construction. Evidence of self-governance, the buildings are built according to the immediate needs of their residents.

appendages define the outer layer while the core remains consistent



Figure 84 Typical Pattern of Exterior Volumes Aggregating around Housing Core

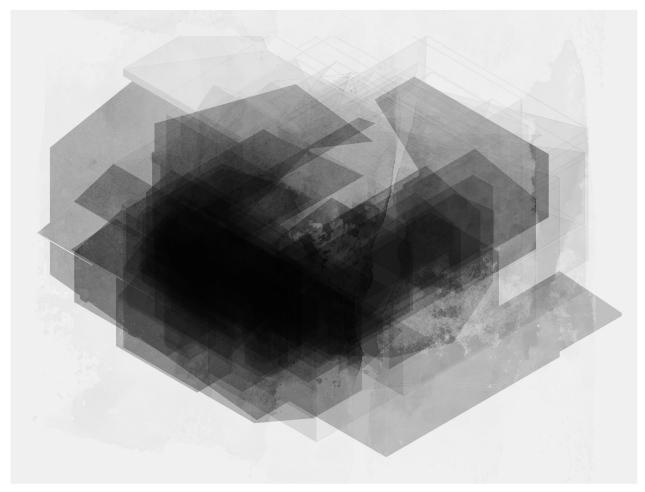


Figure 83 A Composite Image of all Exterior Aggregations Studied



HOLES & NOTCHES

A Design Proposal to Promote Agency in Baeksa Village

This project aims to learn from the city fabric of Seoul to propose for a new type of low assistance elderly housing that can encourage the creation of self-made structures.

A series of columns, screens and beams acts as a framework to encourage and organize the building of impromptu structures. The project anticipates that impromptu structures will develop over time and is designed in phases. A geriatric care school is integrated in the design to provide mutually beneficial communal support between students and the elderly. Students in training provide low-cost help, facilitate a hub for student community and create shared public spaces as a way to combat loneliness and social isolation experienced by the elderly. A constant flow of students works in tandem with the needs of the elderly while training geriatric professionals to gain real life practical experience. The two programs feed into the improv

Inspired by the ad hoc nature of the construction on Baeksa Village I thought of notches. Notches in the context of woodworking and metalworking often are gaps to be filled to support another structure. Lap joints, Japanese joinery and other joints use notches to unify two separate pieces and provide structural integrity by using each other. Intentionally made to make a material weaker, the purpose of the notch is to be strengthened by something else. Can the notch start to bridge a need for flexibility in productivity for a rapidly aging population? The office as a production area is less applicable for the elderly. This thesis seeks to create opportunities for the elderly to practice agency and productivity by building a framework that allows the building of self-made impromptu structures. This framework would act as a bridge between institution and self-governance

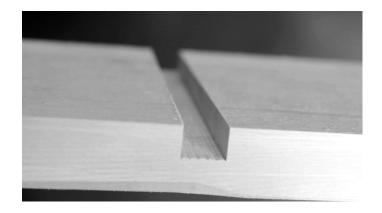






Figure 85 Conceptual Diagram of the Notch

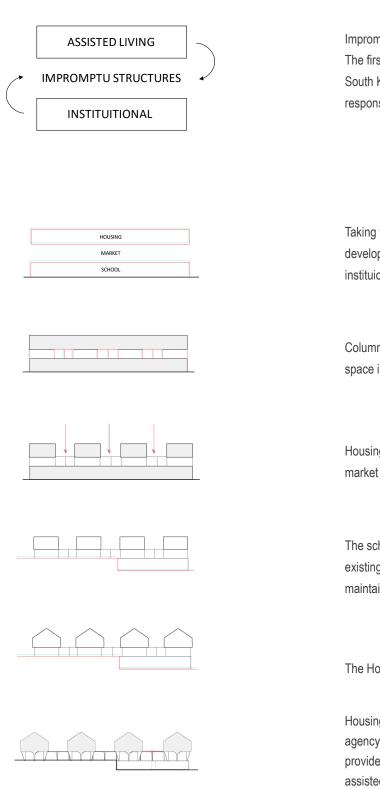


Figure 86 Conceptual Diagrams

Impromptu Structures are an intermediary between two programs. The first is assisted living, a housing type that is a response of South Korea's future. The second is an instituitional care which is a response to South Korea's past.

Taking the previous conceptual framework, a sectional parti is developed to mark the separation of different programs relating with instituional care and self governance: house, market and school.

Columns are placed to support the housing and the carve out a space in which market activites and structures can aggregate.

Housing Layer is punctured to allow light to filter into the lower market levels.

The school is embedded into the landscape according to the existing topography on site. Light access into the school is still maintained.

The Housing morphology takes on village characteristics.

Housing, market and school work as a system to promote agency amongst the elderly. The school has student aid to provide support for the elderly and is directly connected to the assisted living units above. The two programs feed directly into the middle market layer feeding into a dynamic and resilient system.

The project is located at the center of the site in order to negotiate the two different conditions of new and old. The site then extracts lines from the spatial organization of the new proposal, topography and existing circulation to derive a grid in which the design proposition can form. The grid acts as a matrix in which self-made structures can be built.

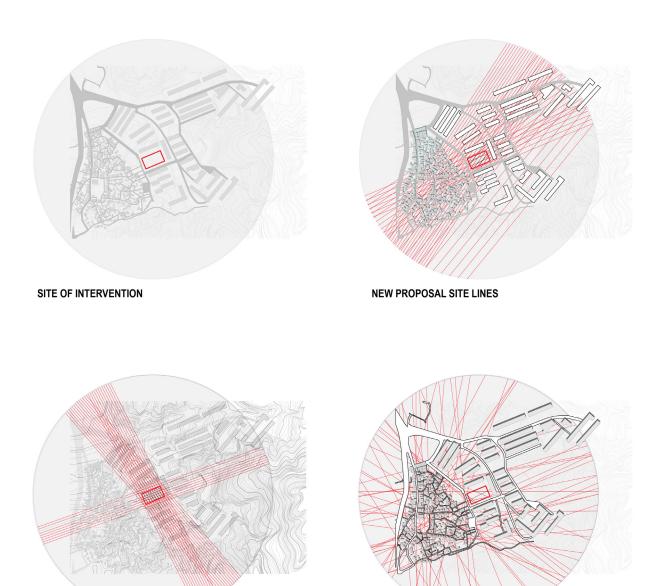


Figure 87 Site Line Extractions

TOPOGRAPHY SITE LINES

ROAD SITE LINES

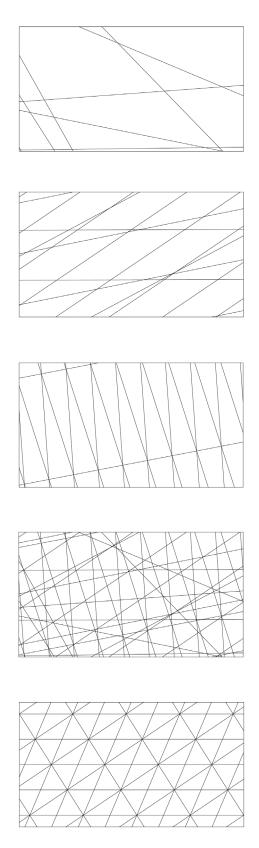


Figure 88 Site Line Extractions to Produce a Grid

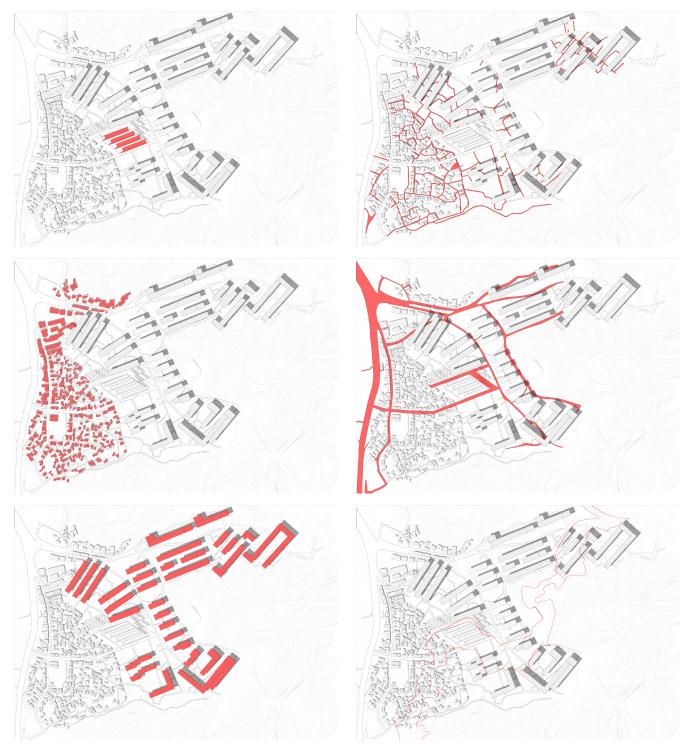


Figure 89 Site Plan; New Proposed Housing (Top Left), Small Existing Pathways to be Retained (Top Right), Existing Village (Middle Left), Major Roads (Middle Right), New Proposal (Bottom Left), Placement Along Topography (Bottom Right)

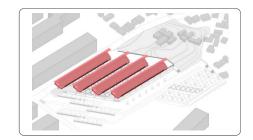
The project responds to the new redevelopment by acting as the notch-point between two radically different vernaculars. The center acts as an agora in which the community can gather. Disparate elements such as the village, major roads, minor pathways and topography surround the project site.

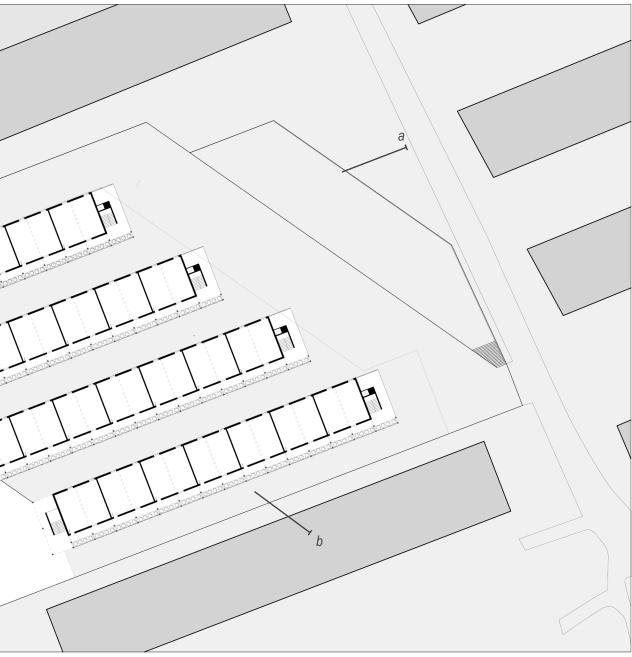


Figure 90 Site Plan of New Proposal



Figure 91 Housing Floor Plan





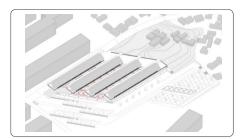
ASSISTED LIVING HOUSING

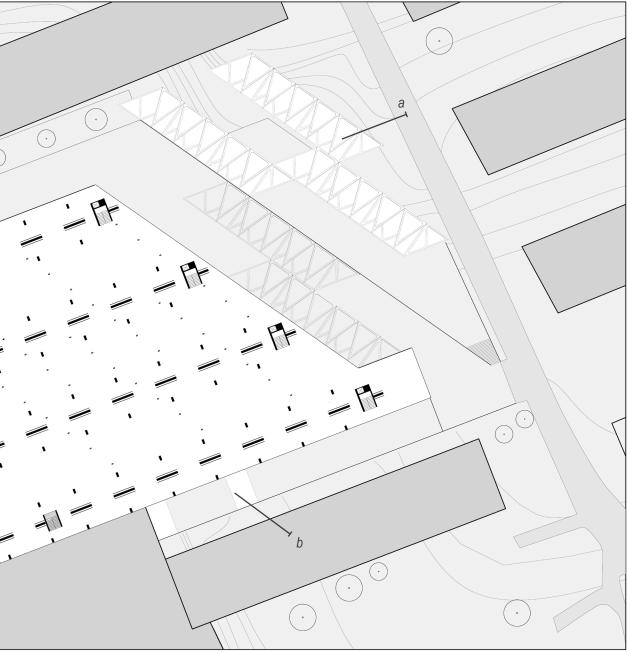
The assisted living housing floor has dedicated access at the west end and vertical cores that lead into the lower market and school floors. There are single loaded corridors with private garden spaces at one side and dedicated entrances into homes on the other.





Figure 92 Market Plinth Floor Plan





MARKET PLINTH

The market plinth is an open area that is articulated by the columns supporting the housing above. The columns are covered in perforated metal to encourage ad hoc attachments to them.



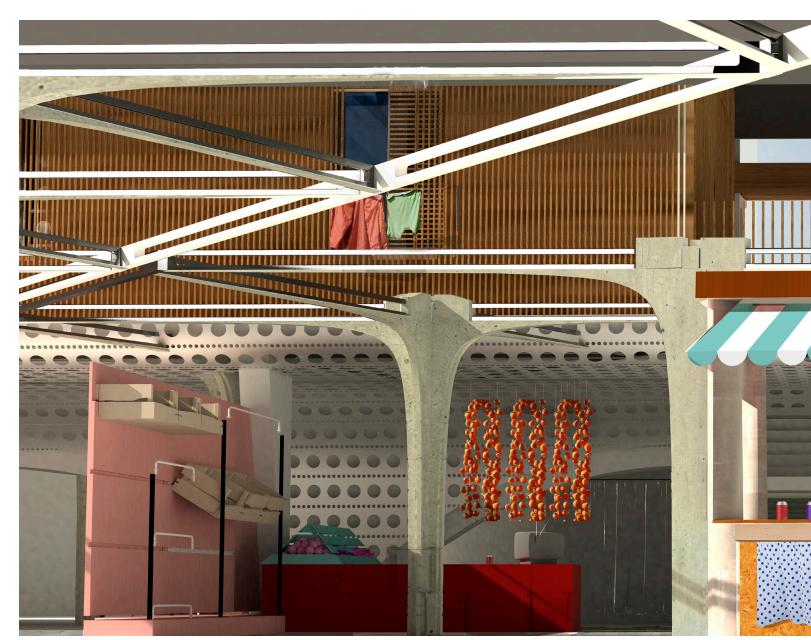


Figure 93 Render of Market Plinth



The Market Plinth is at the lower level while the housing is on the higher level.

This is the common retail and housing typology except that the retail is open to the exterior. The Market Plinth is articulated by the column structures and perforated metal screens at the lower level encourage ad hoc attachments and appendages.

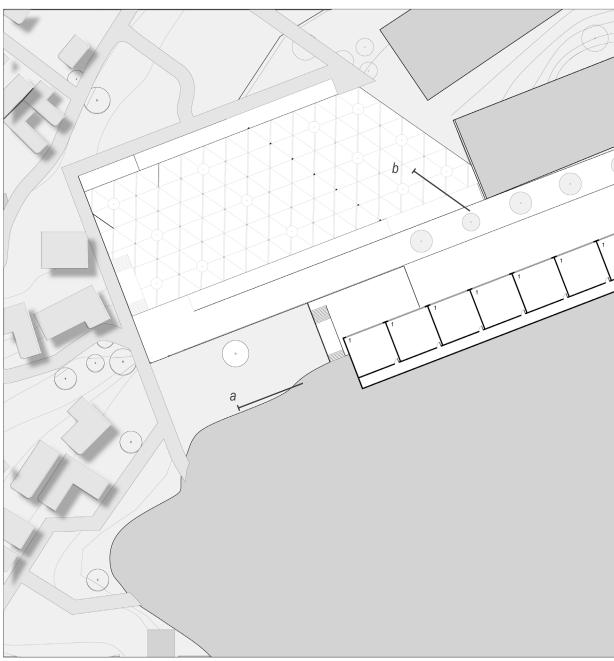
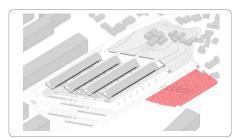
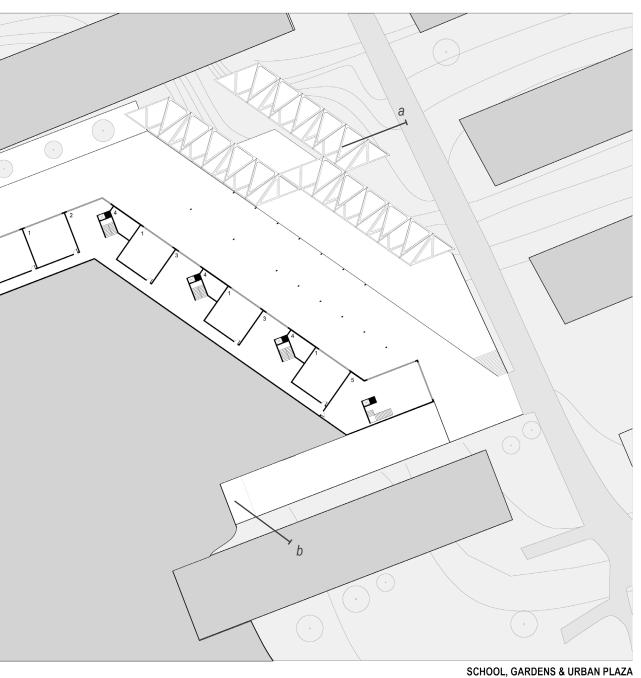


Figure 94 Geriatric Care School Floor Plan





- 1 CLASSROOMS 2 LOUNGE 3 PUBLIC ENTRANCE AND LOUNGE 4 NURSING STATIONS AND EQUIPMENT STORAGE 5 DESIGN AND MAKER LAB

The school level works synergistically with the market and assisted living by having students trained in geriatric care, learning and social care and to have them work on site. The students can provide help on-site as part of their practical training.



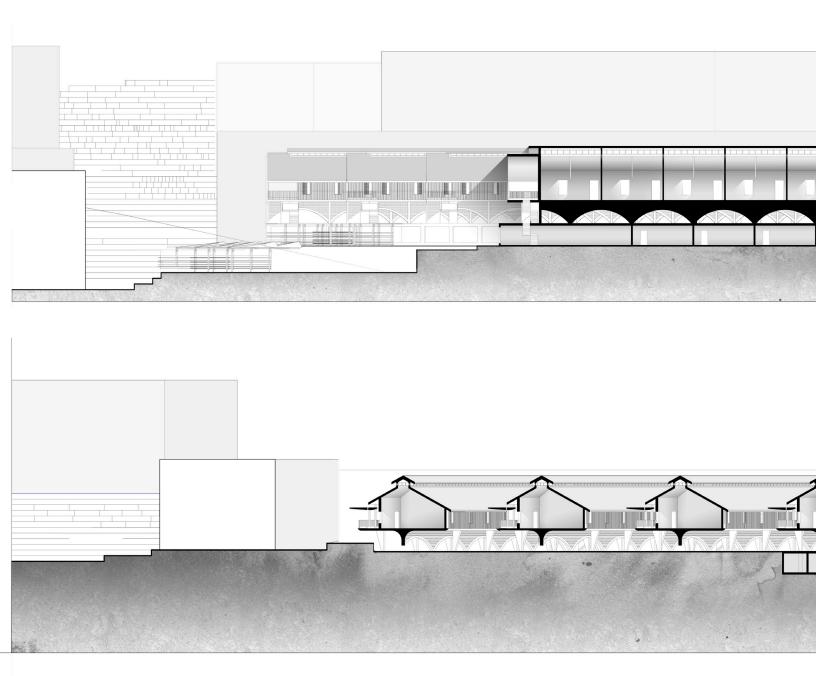
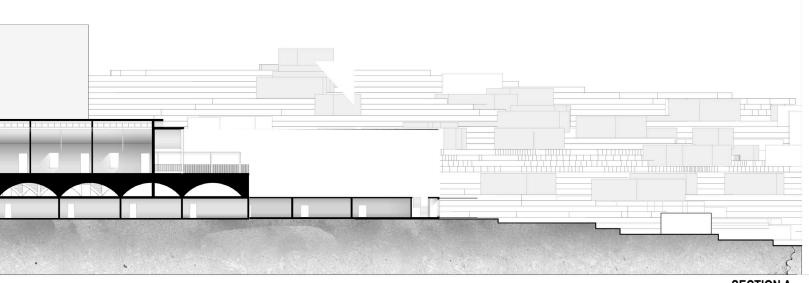
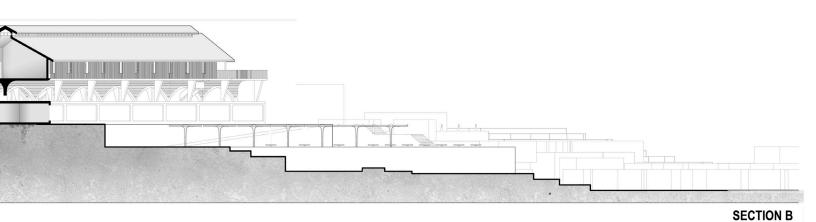


Figure 95 Sections of New Proposal



SECTION A 1:250



1:250



Figure 96 Sectional Perspective



The housing is not to work independantly but systematically with the market and school. The vertical cores become centerpieces and work to connect all three while simultaneously keeping them discrete.



Figure 97 Axonometric

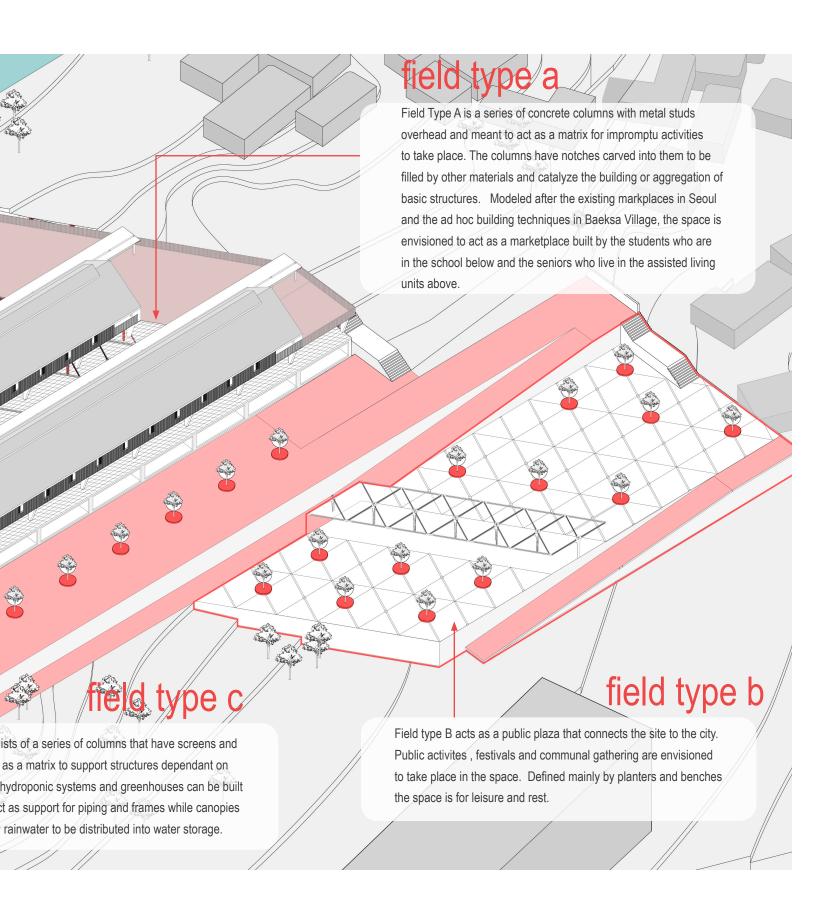
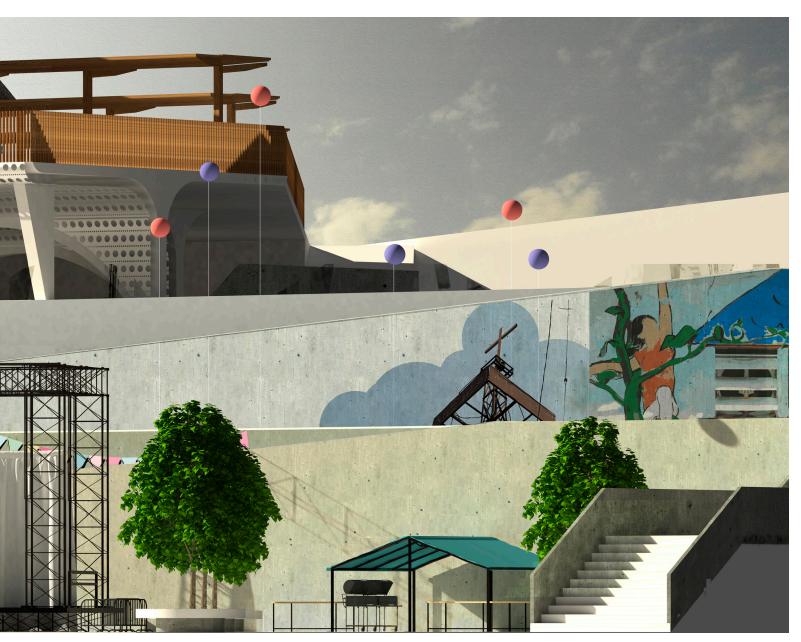




Figure 98 Field B Render; Connection to the City & Public Space



The public square connects the community to the city by allowing public activities to occur adjacent to the housing, market and school.

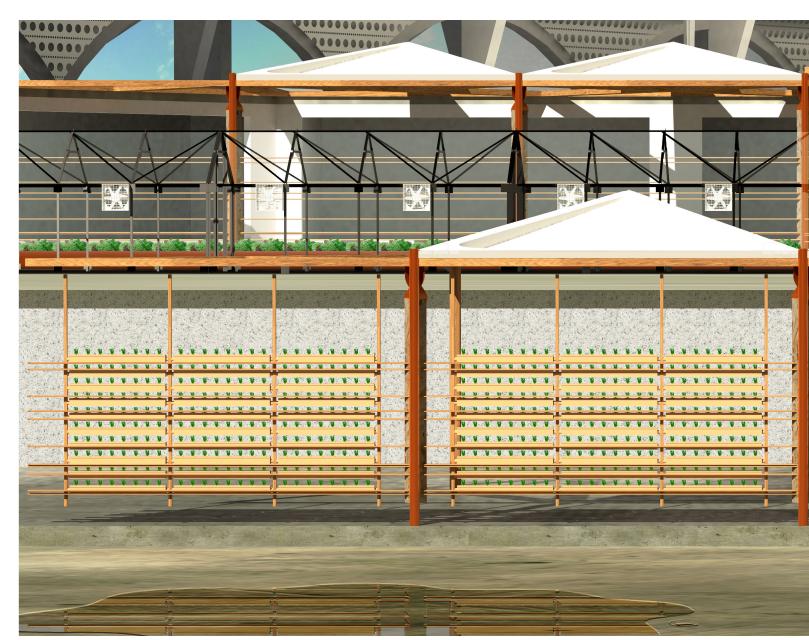


Figure 99 Field Type C Render; Public Gardens



The public gardens encourage all manner of gardening to occur near the housing and markets. They are imagined to be flexible and encourage hydroponics, greenhouse and informal gardening to occur.

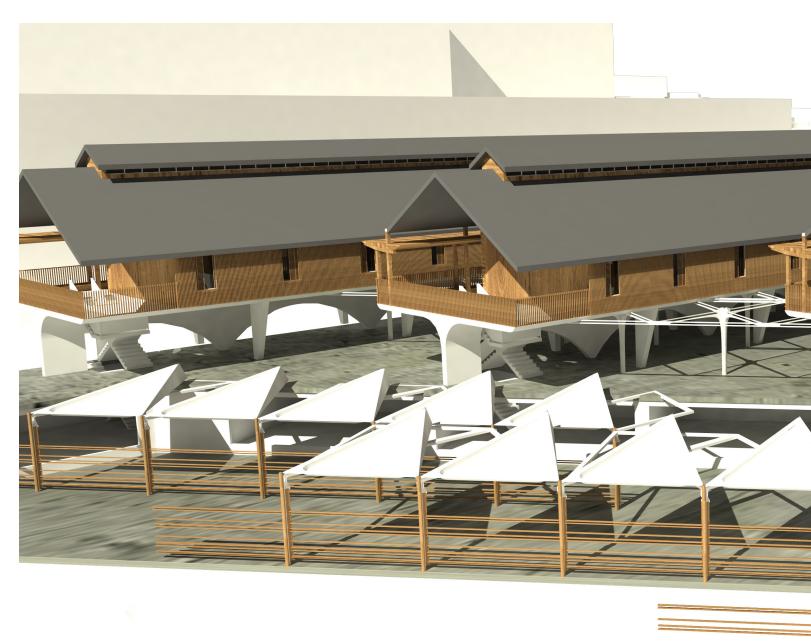


Figure 100 Render Perspective

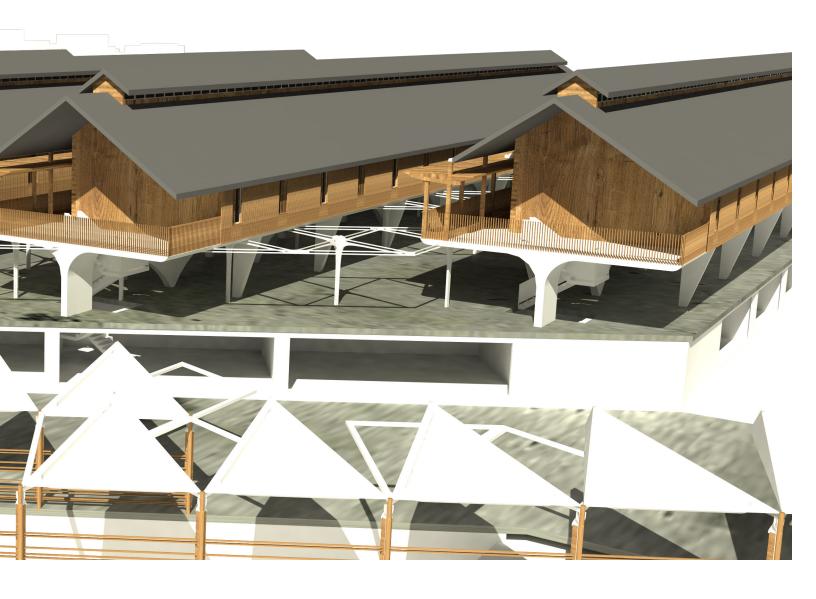




Figure 101 Render Perspective

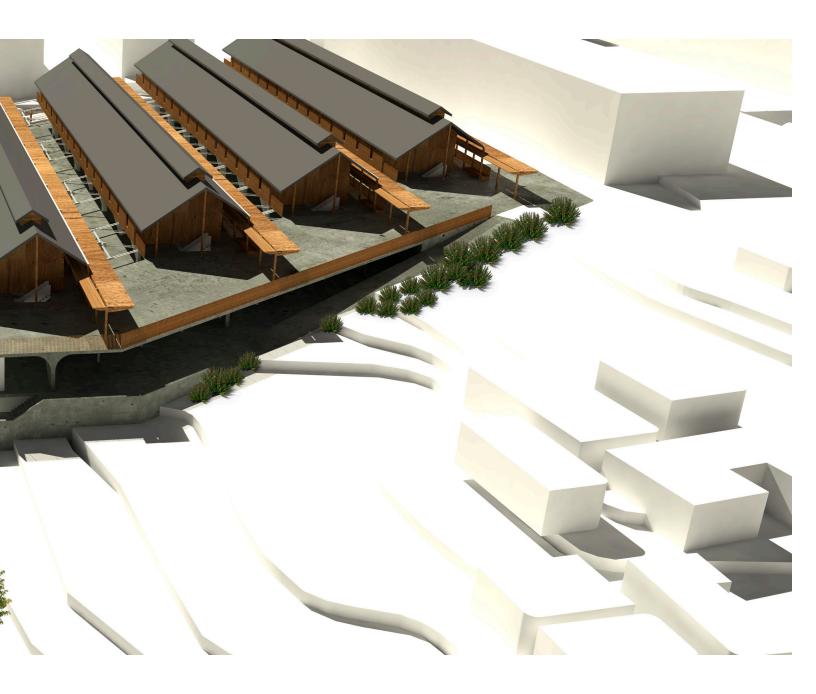




Figure 102 Revisiting the resident of Baeksa Village cutting vegetables early in the morning

CONCLUSION

Baeksa Village offers a potent site that intersects with both historical and contemporary socioeconomic landscapes. The project acts as an intersection point for several conflicts. The design provides a building framework where these conflicts can be worked through and tested as a site which empowers people. The 'Notch' connects both the new redevelopment and the existing village incorporating elements from both. The empty and wide plazas of Dongdaemun Design Plaza and eerily quiet streets of Songdo City suggest that new design can quickly become obsolete if they are not relevant to either their immediate or greater socioeconomic context. The imposition of sheer building development, if not aligned with the pre-existing social forces, will remain empty. Here the proposal is inspired instead by the vibrant and full markets of Seoul's streets and alleys in order to create an agora for Baeksa Village. Carts and merchandise spill onto the sidewalks to grab the attention of passerby's which actually enliven the street. The street-markets themselves do not guarantee a successful project, however they adopt an existing culture of free agency along Seoul's streets that draws people together and make unique and culturally significant spaces. The project capitalizes on this idea and presents an opportunity for the aging population of South Korea to maintain agency through environments that encourage the building of their own structures.

How would this project unfold for Baeksa Village residents and the larger

community? I imagine that Byung-Yul, who discussed the power dynamics at work during the redevelopment of Baeksa Village, would feel a sense of ownership and dignity over the community. By ensuring that people have freedom to create their own environments there would be a sense of empowerment as well. Bosco, who saw competing definitions of value as a crutch to the redevelopment of Baeksa Village, would now see it work in a productive way in the agora-like spaces of the markets and school of the proposal. There would be people of different life stages gathered in an area, including students, the middle-aged and the elderly, all working together to create a dynamic community. The convenience store owner who eagerly showed me his camera collection would have a community to show his camera collection to. Those that visit the existing community center in Baeksa Village would have a new place that integrates community in an impromptu way. The elderly lady who was cutting vegetables would have a platform and a volume of people to sell her goods.

Baeksa Village is caught between many different interests and histories. Borne from these interests and histories are several spatial relationships. These include the new and the old, the apartment and the village, the working and the retired, the institutional and the impromptu, all of which are connected, hidden and crystalized in the site of Baeksa Village. Here the proposal acts as a bridge between the past and future. The project is less about resolving retirement homes but imagining, conceptually, a systematic approach to unifying productive problems of the future with the historicity of the site. The notch aims not to resolve all of these relationships but acts as an admission to the many complexities of the site and surrenders to the natural agencies of people.

BIBLIOGRAPHY

Korean Statistical Information Service. Population & Housefolds by Administrative District. Accessed October 15 2018. http://kosis.kr/eng/statisticsList/statisticsListIndex.do?menuId=M_01_01&vwcd=MT_ETITLE&parmTabId=M 01 01

Korean Statistical Information Service. Population Projections for Korea. Accessed October 15 2018. http://kosis.kr/eng/statisticsList/statisticsListIndevx.do?menuId=M_01_01&vwcd=MT_ETITLE&parmTabId=M_01_01

Korean Statistical Information Service. Current Health Expenditure by Provider and Financing Scheme. Accessed October 15 2018. https://kosis.kr/eng/statisticsList/statisticsListIndex.do?menuId=M_01_01&vwcd=MT_ETITLE&parmTabId=M_01_01&statId=1994044&themaId=#SelectStatsBoxDiv

Kwak, Jeyup. "At Seoul Slum, a Struggle Over How to Rebuild". The Wall Street Journal. Feb 12, 2015.

The Economist. "Seoul's Shanty-towns, Moonrise Kingdoms". Accessed October 16 2018. https://www.economist.com/asia/2015/11/21/moonrise-kingdoms

Kwak, Seung-Hyeon. "Redevelopment Conflict at Baeksa Village". Chosun Weekly. December 24, 2017.

Choi, Jung-Hyeon. "Dangerous Conditions at Baeksa Village." ChojunHyeon News. March 04, 2019.

Silver Economy. "South Korea is Taking Steps to Improve Care and Support for Seniors Living at Home ." Accessed April 21, 2019. http://www.silvereco.org/en/s-korea-is-taking-steps-to-improve-care-and-support-for-seniors-living-at-home/

Buurtzorg International. "Developments in South Korea". Accessed March 15 2019. http://www.buurtzorg.com/developments-in-south-korea/

CNN. "Where the Elderly Take Care of the Elderly - by Necessity" Accessed March 15 2019. http://www.nn.com/2017/07/22/asia/apan-nursing-home-old-workers/index.html

Han-Kook Kyung Keh. "Baeksa Village Redevelopment". Accessed December 13 2018. https://www.hankyung.com/realestate/article/2018061732841

Han-Kook Kyung Keh. "Baeksa Village Redevelopment". Accessed December 13 2018. https://www.hankyung.com/realestate/article/2018061732841

Yoo, Choonsik. "Labor Productivity, Reforms Top Task for South Korea: OECD Chief". Accessed March 04, 2019. https://www.reuters.com/article/us-southkorea-economy/labor-productivity-reforms-top-tasks-for-south-korea-oecd-chief-idUSKBN1CO0QXv

Mobrand, Erik. "Struggles over Unlicensed Housing in Seoul, 1960-80". Urban Studies. Vol. 45. 2008., 367 - 389

Kim Jaewon, "No Country for Old Koreans: Moon faces senior poverty crisis". Nikkei Asian Review. https://asia.nikkei.com/Spotlight/Asia-Insight/No-country-for-old-Koreans-Moon-faces-senior-poverty-crisis

Ryu, Chehyun. Kwon Youngsan. "How Do Mega Projects Alter the City to Be More Sustainable? Spatial Changes Following the Seoul Cheonggyecheon Restoration Project in South Korea". Sustainability. MDPI. Vol 8. 2016., 3.

Park, Michael. "Deconstructing the Dongdaemun Design Plaza. Jun Michael Park Reportage. 2015. https://junmichaelpark.com/deconstructing-dongdaemun-design-plaza/

Poon, Linda. "Sleepy in Seoul, Korea's Smartest City". Citylab. 2018. https://www.citylab.com/life/2018/06/sleepy-in-songdo-koreas-smartest-city/561374/

Graham, Edward. "Reforming Korea's Industrial Conglomerates". Institute for International Economics. 2013.

Murphy, Simon. "Seoul's official architect Seung H-Sang on his capital vision". Financial Times. 2014.

Hurst, Will. "Seung H-Sang: 'As city architect I have the power to stop tall buildings". Architects Journal. 2015.

Daum. "The Redevelopment of 2891 household in Baeksa Village". Accessed December 13 2018. http://m. blog.daum.net/sckyg/17954024

Yahoo News. "The Demolition of Baeksa Village and its Legacy". Accessed December 13 2018. https://ca.news.yahoo.com/%EC%84%9C%EC%9A%B8-%EB%85%B8%EC%9B%90%EA%B5%AC-%EC%A4%91%EA%B3%84%EB%8F%99-%EB%B0%B1%EC%82%AC%EB%A7%88%EC%9D%84-%EB%8B%AC%EB%8F%99%EB%84%A4-%EC%97%86%EC%95%A0%EA%B3%A0-%ED%92%8D%EA%B2%BD-%EB%82%A8%EA%B8%B4%EB%8B%A4-084716731.html

Ahn, Jee Eun. Cities on the Edge: Significance and Preservation of Hillside Squatter Settlements in Korea. Columbia University, 2014.

Seoul Museum of History, Baeksa Village. Seoul: Seoul Museum of History Research Department, 2012.

Jang, Yong Hae and Lee, Young Han. "The Study on Street Facade Characteristics of Junggye-dong 104 Village in Seoul". Journal of the Korea Institute of Ecological Architecture and Environment. Vol. 13, No. 5. pp 5 - 15. 2013.

Kwon, Ohjung. Kim, Dongsook & Kim, Jinyoung. "An Exploratory Study for Improving the housing Situation of korean elderly Based on the Opinions of Housing Researchers and Welfare Facility Staff". Journal of Asian Architecture and Building Engineering, 471-477. 2017.

Won, Chang Won. "Elderly Long-Term Care in Korea". Journal of Clinical Gerontology & Geriatrics. Vol. 4. 4-6. 2013.

Chang, Soo Jung. "Lived Experiences of Nursing Home Residents in Korea". Asian Nursing Research. Vol. 7. 83-90. 2013

United Nations Economic and Social Commision for Asia and the Pacific. Long-term Care for Older Persons in the Republic of Korea. Development, Challenges and Recommendations. Long-Term Care for Older Persons in Asia and the Pacific. 2018

Kim, Ik Ki. "Population Aging in Korea: Social Problems and Solutions". The Journal of Socioogy & Social Welfare. Vol. 26. 1999.

Hoof, J. Van et. al. "Technological and Architectural Solutions for Dutch Nursing Homes: Results of a multidisciplinary Mind Mapping Session with Professional Stakeholders". Technology in Society. Vol 36. 1-2. 2014.

Kim, Kyung-Min., and Park, Jae Min. Rethinking Seoul: Cities, Speculations of Future from the Past. Pa Ju: Seo Hae Moon Publishing, 2013.

Jung, Inha. Architecture and Urbanism in Modern Korea. Honolulu: University of Hawaii Press, 2014.

Park, Jinhee, and John Hong. Convergent Flux Contemporary Architecture and Urbanism in Korea. Basel: Birkhäuser, 2012.