

# Urban Liminal Spaces: Busan

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## INTRODUCTION

Following a brainstorming session on definitions and keywords related to the concept of liminality, our team set out to find ‘liminal spaces’ in Busan city. Passing along the Pusan National University Station on Subway Line 1, we walked along the pedestrian corridor below the subway line alongside the Oncheoncheon stream. Observing the huge number of users, activities, and interactions within this passage, we traced the movement of the users to find answers for questions such as ‘why are people gathering in such spaces?’, ‘how do people engage, interact and use these spaces’, ‘what are the physical characteristics in these spaces that attract and engage people in various activities’ [1]. Tracing and tracking people’s movements along this passage we found 4 key sites defined by human and natural elements that blurred the variations in land use and topography of the surrounding urban fabric.

The first site is along the pedestrian passage below the Busan subway line 1 along the Oncheoncheon Stream that extends from north to south, towards the Oncheonjang Station. The area surrounding this pedestrian stretch is characterized by a dense residential fabric with a mix of new high-rise apartment blocks and old low-rise residential areas with a commercial front. Observing a strong sense of liminality created by this site, we explored the second site, the Green line park near the Old Dongrae Station connected to the intersection where Oncheoncheon Stream changes its direction towards the east-west direction and meets the Suyeong River. Considering the riverside passage as the third site, we traced our way towards our final and fourth site, the Gwangalli Beach. The selected 4 sites: 1) Oncheoncheon Stream, 2) Old Dongrae Station, 3) Suyeong River and 4) Gwangalli Beach have the character of a spatial boundary that intersects two areas or spaces with different functions and spatial textures. Based on the physical characteristics, activities and functions observed during site visits, the following section will explain the similarities and differences in each of these spaces to portray the liminality of spatial context in Busan.

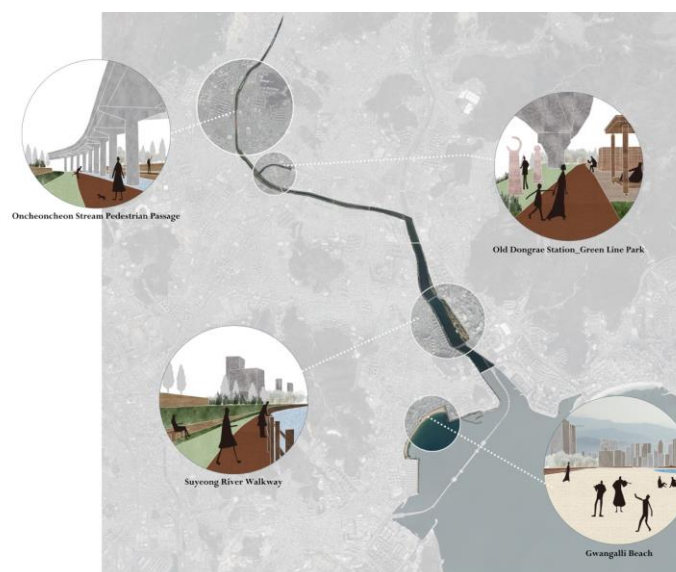


Figure 1: Map of Busan showing the location of the 4 selected sites

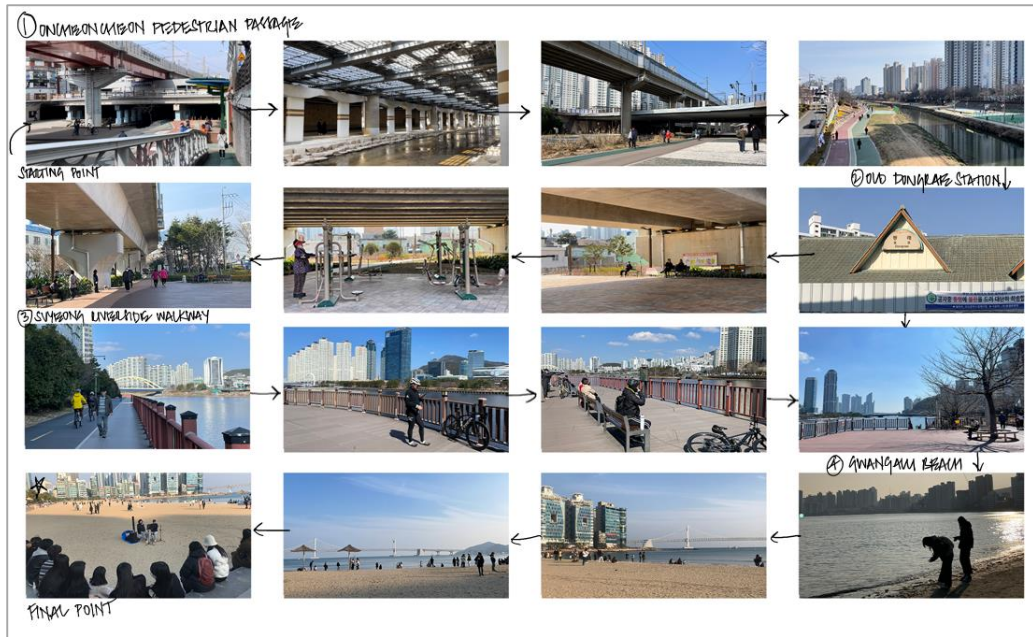


Figure 2: Route traced during the Site visit

### BACKGROUND OF URBAN SPACE IN BUSAN

Busan is a city of mountains and seas. Characterized by mountainous terrain, the city has a small percentage of flatland and various rivers and streams flowing towards the sea. Consequently, these topographical features highly influenced the urban structure and settlement pattern in Busan. The city's first urban plan, established in the Japanese colonial era, failed as the city population surpassed the demographic prediction considered. The plan was prepared for an estimated population of 400,000, however, by the early 1960s, the city population exceeded 1 million as refugees from all over the Korean peninsula migrated to Busan during the Korean War in 1950s [2]. This resulted in the formation of small villages along the mountain slopes due to lack of flatland in the city. Ironically, these unique urban geographies have become attraction points, increasing the tourism potential of Busan in recent decades. Most of the areas in Busan have the advantage of enjoying the natural landscape due to the proximity of the sea. Waterfront parks and walking trails are mainly built around rivers and seas. Famous beaches such as Gwangalli, Haeundae, Songjeong attract visitors through beach activities, shopping, eateries etc. Despite the topographical concerns, the physical background allows the city of Busan to continue to develop dynamically.

Much like the settlement structure, the transportation infrastructure in Busan is also defined by the rugged natural characteristics. For instance, in the case of Busan Metro Line 1, due to the lack of technology and the topographic restrictions, in the 1970s an elevated railroad passing over the Oncheoncheon Stream was constructed. However, such elevated metro lines, roads, overpasses, bridges connecting the uneven urban fabric of the city created empty and unused spaces in the bottom that were later transformed into public places (pedestrian corridors, linear parks etc.) in recent years (as seen in Figure 3). These public places have helped in stitching the discontinuity created by the transportation lines, reconnecting the adjacent urban areas. Considering the significance of such public places that blur the boundaries between different land uses and urban contexts, our team investigated the physical features, activities and interactions in these 'transition spaces' that reflect the liminality of the urban fabric of Busan.

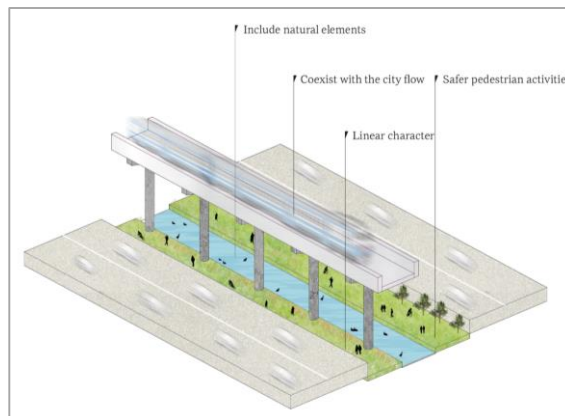


Figure 3: Public spaces created in the empty and unused spaces under elevated transportation lines

## CASE STUDIES: URBAN LIMINAL SPACES IN BUSAN

Based on site investigation and photo documentation, our team has selected 4 sites that characterise the phenomenon of liminality in Busan. Following the pedestrian passage along the Oncheoncheon Stream from the Pusan National University Metro Station, the 4 sites namely, Oncheoncheon Stream, Old Dongrae Station, Suyeong River and Gwangalli Beach that are interconnected through a pattern of pedestrian and cycle friendly spaces within varied urban contexts were researched. The following section will explain the location, urban context, activity pattern and spatial characteristics of the selected sites:

### [Liminal Space\_01: Oncheoncheon Stream Pedestrian Passage]

#### Location / Type

Pedestrian and Cycle Passage along the Oncheoncheon Stream, between Oncheon Bridge and Anrak Bridge, Busan, Korea / Linear

#### Context

The Oncheoncheon Stream flows from Geumjeong-gu through Yeonje-gu and Dongrae-gu towards the Suyeong River. The stream runs 15 kilometres with a width ranging from 60-90 metres. A 5 kilometre pedestrian passage for walking and cycling stretches on both sides of Oncheoncheon Stream between Oncheon Bridge and Anrak Bridge. The passage is characterized by residential areas on both sides with a commercial front. Since the late 1990s, city and local government officials have been working to restore the Oncheoncheon Stream by removing concrete covers along certain portions as well as cleaning the stream. In 2003, a pedestrian passage with bike lanes were created along with additional recreational facilities such as basketball courts. This pedestrian passage has transformed into a public place for various activities attracting local residents. This space is constantly used by the local residents from morning to night.

#### Activity

A large proportion of local residents use the passage along the Oncheoncheon stream for walking, jogging, running, and exercising on a daily basis, while few use it as a shortcut for commuting to work or school. Residents enjoy cycling along the bike lanes, having conversations sitting along the stream, exercising using the provided facilities and activity spaces. Based on the time of the day, the activity pattern differs. In the early hours of the day, a large proportion of elderly residents use the space for walking and exercising. During the daytime, people of all ages stroll with pets, cycle, gather with friends, talk or have lunch. Benches and other small seating spaces are used for reading, relaxing or interacting. In the evening hours, a large proportion of users are youngsters who use the space for jogging or running while a small percentage of elderly population can be seen exercising using public fitness equipment.

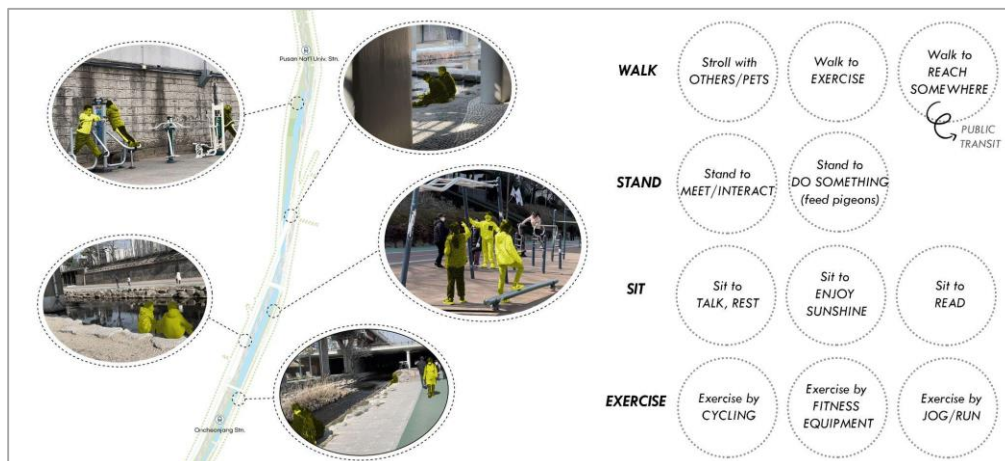


Figure 4: Activities along the Oncheoncheon Pedestrian Passage

#### Spatial Characteristics

The pedestrian passage is located at a lower level than the adjacent roads below the subway line 1. Within the passage, pedestrian paths, bike lanes and other activity spaces are separated on either side of the Oncheoncheon stream. Users can enjoy

sunlight and shade along the passage and under the elevated roads and bridges. The trees and green landscaping along the stream create a visually appealing view especially during the spring season, when residents can also experience the cherry blossoms. Exercise equipment and basketball courts are also provided in selected portions of the passage. Considering the proximity of residential areas and subway stations, this space transforms into a ‘daily space’ for the nearby residents. During the night time, the lights from the surrounding buildings and also within the passage create a sense of security that encourages users of all age groups and gender to use the space irrespective of time.

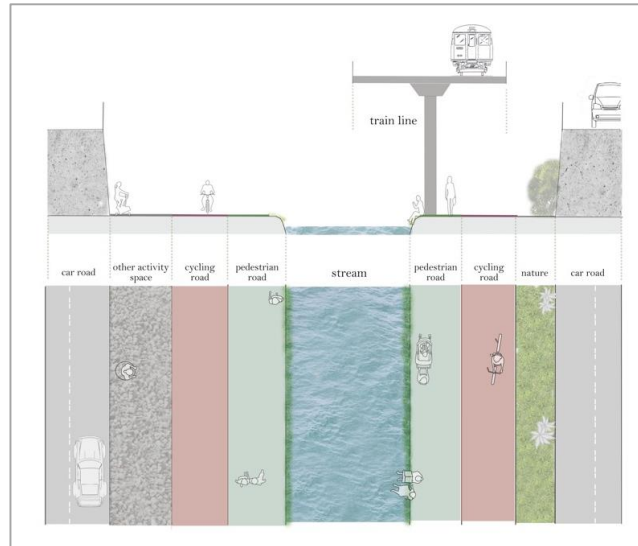


Figure 5: Site section of Oncheoncheon Pedestrian Passage

**[Liminal Space\_02: Old Dongrae Station\_Green Line Park]**

**Location / Type**

Under the railway line, from Dongrae Station to Gyodae Station, Donghae Nambu(south) Line / linear, network

**Context**

Walking along Oncheoncheon Stream, passing away from the subway line 1, the passage continues along the Dongrae elevated railway line. At the point of intersection of both transport lines, the passage splits in two directions with one leading to the ‘Green Line Park’. The Old Dongrae Station was closed after the creation of a new station and is located at the end of the Line Park. The old railroad built during the 1930s played a major role in defining the residential fabric of the surrounding area. The abandoned old railway line was transformed as the line type park from Gyodae Station to Dongrae Station and connected to the walkway of the Oncheoncheon Stream. The park is easily accessible as multiple entrances are provided along walkable distances from the surrounding areas. The park also includes smaller spaces to accommodate pavilions, sports equipment, benches, viewing decks etc., for the users across the Green Line Park.

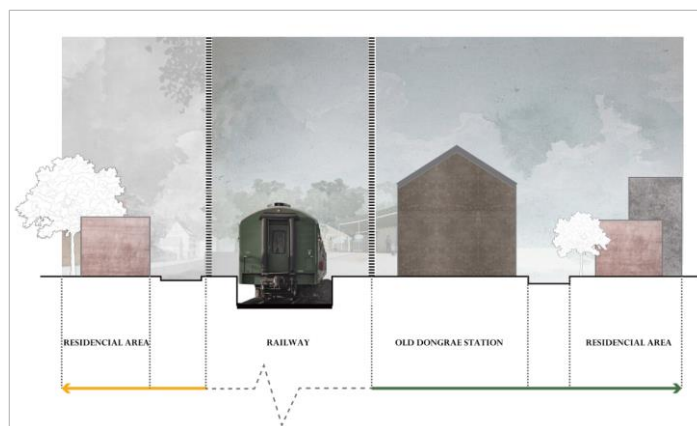


Figure 6: Influence of the Old Dongrae Railway Line on the surrounding residential development



### Activity

The long stretches of empty spaces along the park are used by children to ride bicycles and elderly residents sit and talk. People enjoy light exercises using the public exercise equipment provided. Compared to Oncheoncheon Pedestrian Passage, a large proportion of elderly population can be observed in Dongrae. Accordingly, the line park includes a large number of benches, pavilions and small seating spaces where elderly residents are seen interacting and resting after a walk or exercise.

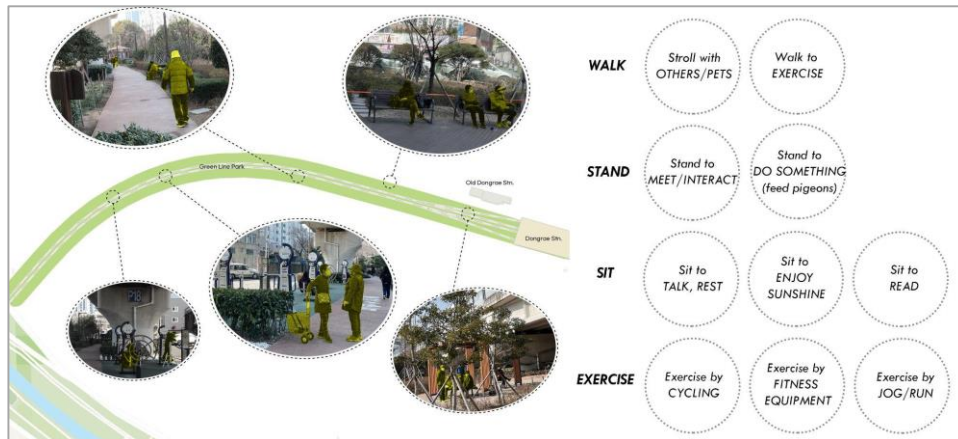


Figure 7: Activities in the Green Line Park (Old Dongrae Railroad)

### Spatial Characteristics

Green line park stretches from Dongrae Station to Gyodae Station following the abandoned old railroad and includes the old railway station building, adding historic significance to this newly developed public place. The area surrounding the park is predominantly residential, with a unique mix of old detached housing and new high-rise apartment complexes (as shown in figure). The grey area created by the railroad and a concrete road was transformed into a nature-friendly space by landscaping and creation of pedestrian friendly spaces. The space acts as a transition space, similar to the Oncheoncheon passage, by reconnecting the detached residential areas on either side of the old railroad. The interconnected pedestrian route from Oncheonjang towards Dongrae using the pedestrian passage followed by the green line park encourages people to walk or cycle and avoid the use of vehicles. Most of the users are local residents who use the space on a daily basis.

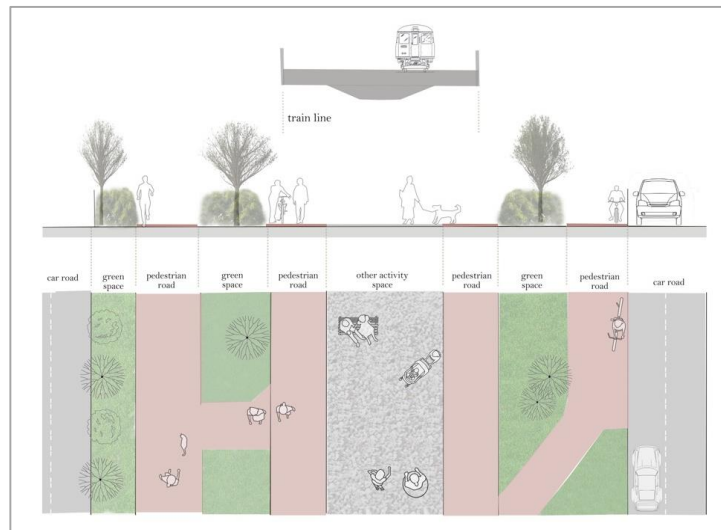


Figure 8: Site section of Green Line Park

### [Liminal Space\_03: Suyeong River Walkway]

#### Location / Type

Suyeong Riverside Walkway, Gijang-gun (Haeundae-gu, Suyeong-gu), Busan, Korea / Linear

**Context**

The Suyeong River, flowing towards east of Busan, connects two central areas of Haeundae and Suyeong through 10 bridges along the midstream and downstream. To the west of the river is Gwangalli, the representative beach of Busan, and to the east are Centum City and Marine City. Centum City is a relatively recently developed large-scale commercial and service area, and Marine City is a new residential area characterized by high-rise apartments with 70 to 80 floors. The Suyeong River acts as a connection between the two varied urban contexts on either side through the elevated bridges and a looped walkway.

The walkway along the midstream of the Suyeong River is connected to our first site, Oncheoncheon pedestrian passage, and along the downstream to the fourth site, Gwangalli Beach. Specifically, the riverside walkway and adjoining spaces on the downstream of the Suyeong River connected to Gwangalli Beach are popular among young people.

**Activity**

Similar to Oncheoncheon pedestrian passage, the Suyeong riverside walkway is also used by people of various ages for walking, running, cycling and exercising. In contrast to the first two sites, a large proportion of users are seen cycling along the bike lanes within the walkway. Due to the proximity of the river, bike riders seem to wear warmer clothing compared to Oncheoncheon during winters. Residents from surrounding areas also use the walkway on a daily basis as few of the apartments provide an entrance to the walkway. In contrast to the first two sites which mostly attract local residents, the Suyeong riverside walkway attracts outsiders with the riverscape and the skyline view of Haeundae especially during night time.

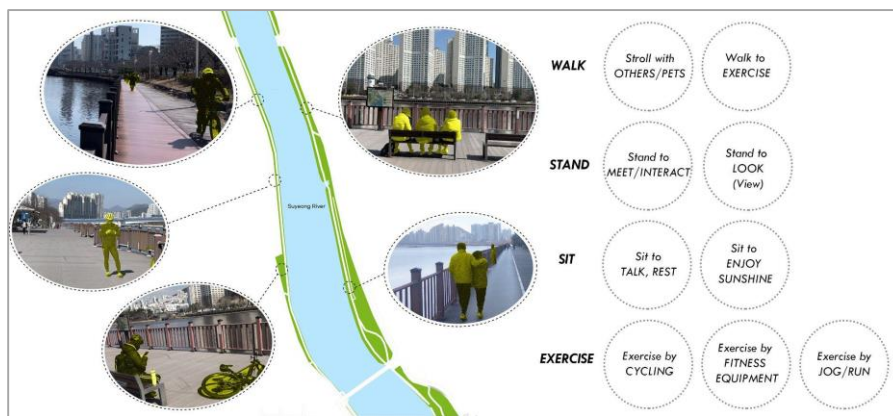


Figure 9: Activities along the Suyeong Riverside Walkway

**Spatial Characteristics**

The surrounding residential areas are visually oriented in the direction of the river providing a scenic view for the local residents. Except for stretches where apartments are directly linked to the walkway, the remaining areas of the walkway have lower percentage of users due to the long distance between residential buildings and the provided entrances. Additionally, due to the lack of accessibility and connectivity with subways lines and bus routes, most of the users are local residents who use the walkway for exercising rather than using it as a shortcut for moving across the river. The difference of levels between the roads, walkway and the river and the wooden fence along the riverside help in creating a sense of safety for the users.

In the downstream section of the Suyeong River, users can see a variety of birds such as seagulls and ducks while walking and cycling. The riverscape and the skyline view of Centum city and Marine city create a picturesque view for the users moving along the looped walkway.

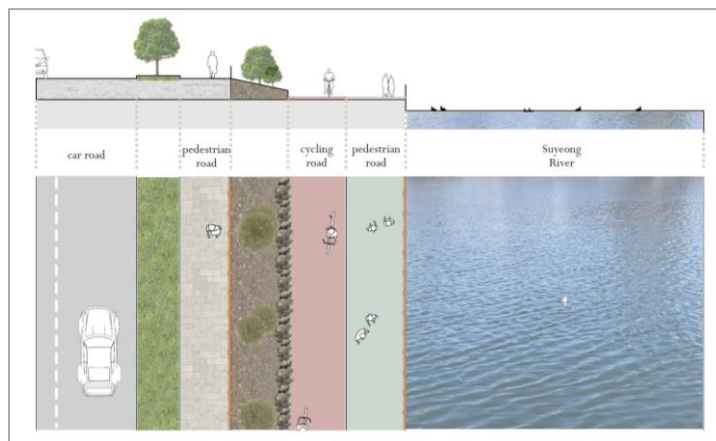


Figure 10: Site section of Suyeong Riverside Walkway

## [Liminal Space\_04: Gwangalli Beach]

### Location / Type

Suyeong-gu, Busan / Linear

### Context

The Gwangalli beach covers a 1.4 km stretch with views of the Gwangan bridge and a skyline created by the high-rise towers along the coast. The beachfront accommodates many cafes, restaurants, bars, and other stores while the surrounding area is characterized by high-rise apartment buildings. Identified as a signature landmark of Busan, the Gwangalli beach is a highly accessible recreational space with the proximity of public transit stops and residential areas.

### Activity

The natural landscape and the commercial front offer various activities, attracting a high proportion of young people in the city. Along with water sports, people use the beach for sun basking, flying kites, picnics, photography, small gatherings, meetings etc. Few singers attract small groups of visitors along the paved entrance steps. Apart from beach activities, local people use the beachfront for strolling with pets, walking, running, and cycling on a daily basis.

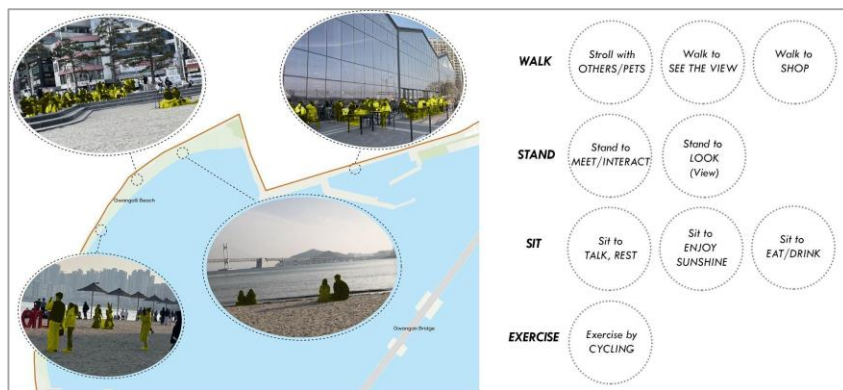


Figure 11: Activities on Gwangalli Beach

### Spatial Characteristics

The surrounding residential areas are visually oriented in the direction of the river providing a scenic view for the local residents. Except for stretches where apartments are directly linked to the walkway, the remaining areas of the walkway have lower percentage of users due to the long distance between residential buildings and the provided entrances. Additionally, due to the lack of accessibility and connectivity with subway lines and bus routes, most of the users are local residents who use the walkway for exercising rather than using it as a shortcut for moving across the river. The difference of levels between the roads, walkway and the river and the wooden fence along the riverside help in creating a sense of safety for the users.

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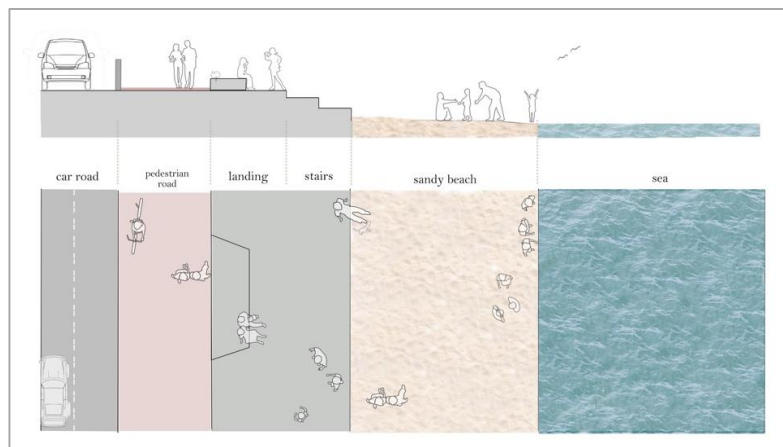


Figure 12: Site section of Gwangalli Beach

The Gwangalli beach is well-connected to the other parts of the city through the Gwangan Station on Busan Subway Line 2 and public bus routes. The beach area is completely open and can be accessed through the staircases connected to the sidewalks. The level difference between the road, sidewalk, and the beach area helps in separating different activities in Gwangalli. Separate lanes are also provided for walking and cycling creating a safe pedestrian environment.

**DISCUSSION**

To find the definition of liminality within the urban fabric of Busan, our team considered 4 sites as mentioned in the above section. Despite differences in the urban contexts, the selected sites act as ‘transition spaces’ that reconnect the discontinuous city fabric. The disconnections created either due to topographical conditions or transportation lines are blurred to integrate boundaries of areas with differing uses and functions through a pedestrian-friendly public space. In order to understand the ‘in-betweenness’ or ‘transitional nature’ of such spaces, we surveyed the sites during different hours and days (weekday/weekend) to find the interaction between open/closed, public/semi-public/private, natural/man-made landscapes through the spatial characteristics, and movements and activities of users.

As a result, we established the following ‘visual vocabulary’ that defines the liminal space of Busan:

**1) Linearity**

The topographical orientation of settlement structures with mountains, streams, rivers and the sea front have resulted in creating linear urban patterns across Busan. Additionally, the development of elevated transportation lines to connect the discontinuous city fabric has further enhanced the principle of linearity. The settlement pattern and environmental processes in the 4 selected sites are strongly influenced by the underlying topographical and transportation lines.

*Site 1: Natural Axis - Oncheoncheon Stream + Transport Axis - Subway Line 1*

The Oncheonjang semi-residential area surrounding the first site, the Oncheoncheon Pedestrian Passage, was developed along the Oncheoncheon stream and Busan Subway Line 1.

*Site 2: Transport Axis - Old Dongrae Railroad*

In the case of the Green Line Park, the surrounding dense residential context evolved along the Old Dongrae Railroad that was considered as one of the major local transportation lines. The stripped grey area of the abandoned railroad was developed as a public space for the local residents and connected to the Oncheoncheon pedestrian passage passing through the New Dongrae Railroad (Subway line 1).

*Site 3: Natural Axis - Suyeong River*

The Suyeong riverside walkway runs across the Suyeong river connecting the residential fabric of Suyeong-dong with the business district of Haeundae. The spatial structure of the surrounding area follows the edge of the Suyeong river providing a riverscape view for the local residents as well as the commercial district.

*Site 4: Natural Axis - Gwangalli Beach*

The crescent shape of the Gwangalli Beach has influenced the alignment of urban form across the adjacent high-rise residential areas. This has helped in shaping a curved yet linear settlement orientation defined by enclosure and continuity along the seafront.

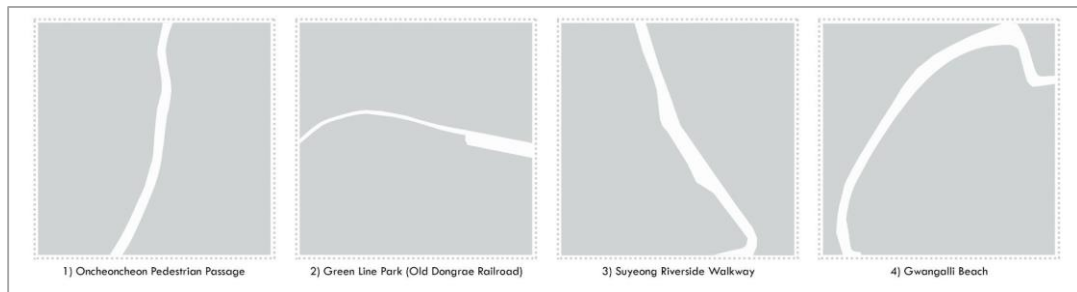


Figure 13: Linear character of the 4 sites

Such linear patterns create ‘fluid open spaces’ that integrate various urban situations and topographies in Busan. In contrast to centred and constrained space, these linear public spaces organically extend through the city fabric resulting in new forms of mobilities, rhythms and networks. Fluidity, flexibility and openness of these spaces allows for a diverse organization of space, time and communication. Thus, the principle of linearity helps in creating public spaces that stitch the disconnections within the city structure of Busan through a looped network that brings together natural assets, built environment and people.



## 2) *Overlapping Boundaries*

The dichotomous urban patches on either side of a transportation or topographical line within the 4 sites merge through the porous and blending structure of these public spaces. The Oncheoncheon pedestrian passage and the Green Line Park blend the surrounding residential areas, while Suyeong Riverside Walkway connects residential areas with a business district separated by the river. In the case of Gwangalli, the beach integrates recreational, commercial and residential uses in the adjacent areas through an ‘enclosed fluidity’ (see figure 11). Thus, these 4 sites transform segregated urban structures to everyday landscapes and addressing the functional concerns of the place by establishing necessary infrastructure has unpacked ways for easily performing daily activities.



Figure 14: Land use of areas surrounding each site

## 3) *Nature + Urban*

The 4 sites merge through dichotomous urban patches on either side of a transportation or topographical lines through a porous and open structure that combines the natural landscape and built environment. This helps in creating a naturescape within the densely built urban structure of Busan. Such combinations help in reactivating the urban landscape through natural elements and attract people to gather and use the created public space. Rather than separating the areas on either side, the nature-based elements connect them through a looped network. The natural landscape also creates a sense of vitality and livability, improving the quality of life in an otherwise concrete urban fabric.



Figure 15: Relationship between Natural Landscape and Built Environment in the 4 selected sites

## 4) *Looped and Spread-out (Movement Patterns)*

Unlike the usual scenario where linear corridors are one-dimensional, the linearity in the selected cases is looped as the pedestrian passages and walkways in the 4 sites have multiple openings and form a circular network. This helps in encouraging a spread-out movement pattern allowing various activities to take place in the same space without any hindrances.

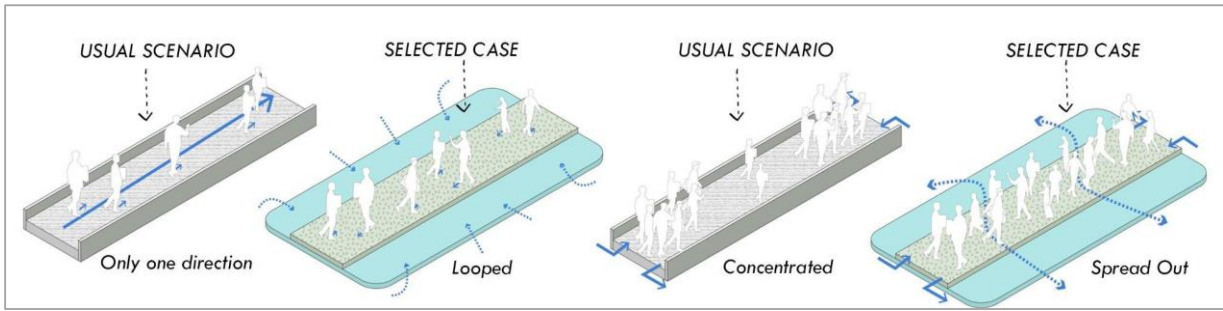


Figure 16: Movement Pattern in the selected cases

**5) Activation and Personalization (People + Activities)**

As mentioned in the case study section, each site has common as well as site specific activities [3].

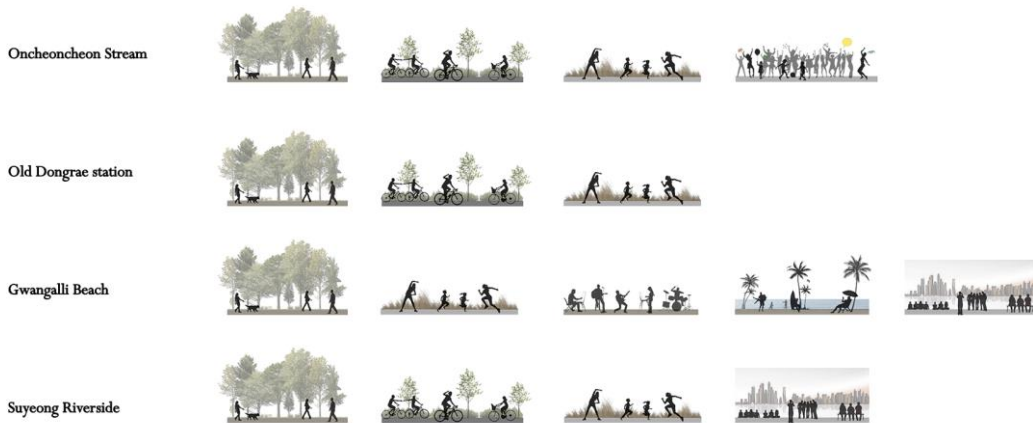
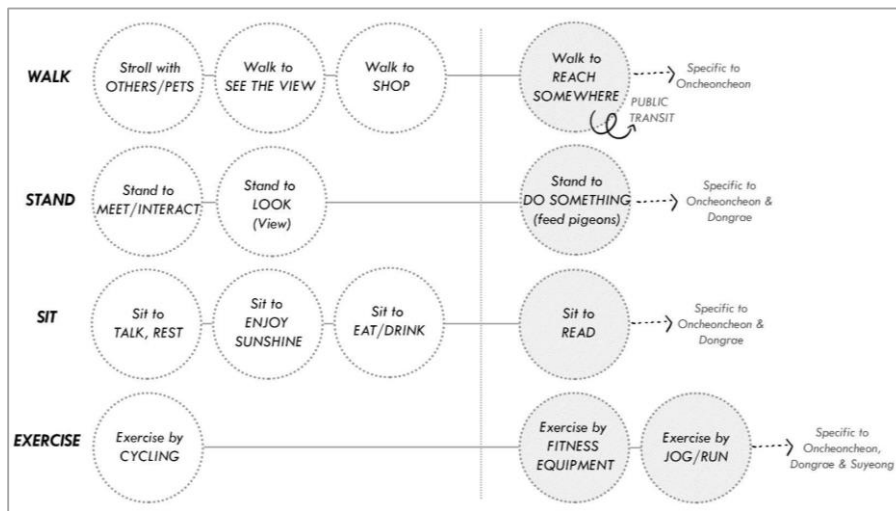


Figure 17: Activities observed in the selected sites

However, the residents personalize these public spaces blurring the boundaries between public and private spaces. The empty chairs along the walkways used by the residents to gather and talk explain the ‘liminality’ of these sites through a smaller urban lens. People sitting, chatting, and resting on their own chairs and having kitchen conversations along the walkways defines the way residents territorialize and impose their personality within the public sphere.



Figure 18: Personalization of Public Space

### Conclusion

The 4 sites selected for this research portray the essence of liminal space in Busan in terms of linearity, blurred boundaries, coexistence of natural landscape and built environment, looped and spread-out movement patterns and activation and personalization of public realm. Thus, formulating future plans and designs based on this liminal space vocabulary can help in creating harmonious, open, integrated and people-friendly public spaces in Busan.

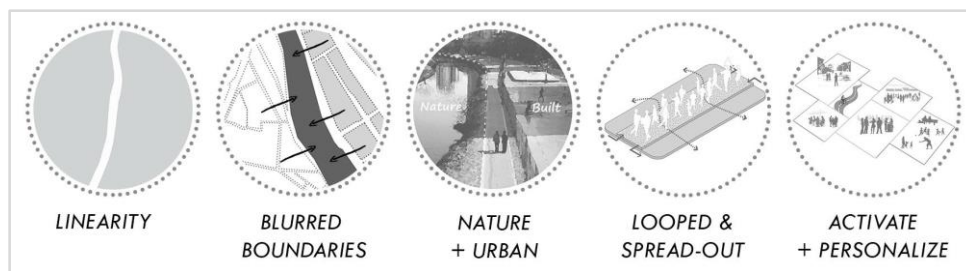


Figure 19: Visual Vocabulary of Liminal Spaces in Busan

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- [3] Jan Gehl and Birgitte Svarre. *How to Study Public Life*. Island Press, 2013.