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Master's Thesis of Engineering

The Landscape Identifiability Analysis of
Daerim-dong Chinatown Commercial
Street in Seoul

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Abstract

Since the establishment of diplomatic relations between China and South Korea in 1992, a large number of Chinese have come to South Korea to look for work opportunities, and gradually formed a lot of Chinese inhabited settlements. Daerim-dong Chinatown commercial street has gradually developed from a Chinese food wholesale center to the largest settlements of Chinese people in Seoul. It not only provides a shopping commercial space for Chinese people in Korea, but also carries the recognition and sense of belonging of Chinese people. The unique cultural background of Daerim-dong Chinatown area has influenced and changed the original space landscape environment, presenting a unique landscape style. Therefore, it is of great significance to study the identifiability of this Chinatown commercial street.

Firstly, this paper uses the methods of field investigation and data analysis to analyze the status of Daerim-dong Chinatown street in terms of location, land use, population, block structure, street space and behavior interaction, and buildings, commercial facilities, billboards and public facilities etc. as landscape identifiability factors.

In the process of survey research, questionnaire survey and interview survey are carried out simultaneously. Three representative people are selected to have an interview for about 1 hour, and the record is recorded under the authorization of the interviewees. In order to investigate the landscape identifiability of the selected research area, a questionnaire survey was conducted on the users of Daerim-dong Chinatown commercial street. The content of the questionnaire is composed of three parts: responder's data, overall identifiability score and identifiability score of each element. The 'identifiability score of each element' is divided into architecture elevation/advertise board mixed Korean and Chinese/ stall space/green space and sculpture/trash can, street lamp, guide sign/street entrances and squares/Chinese cultural atmosphere/diet and entertainment/street space/traffic conditions. The result of questionnaire survey shows that advertise board mixed Korean and Chinese/ stall space /Chinese cultural atmosphere/diet and entertainment have the higher identifiability score in Daerim-dong Chinatown commercial street.

Based on two cases of Manhattan Chinatown and San Francisco Chinatown, this paper starts from the landscape elements of highly recognizable in the questionnaire, combining with the theoretical basis of Gestalt psychology, environmental behavior, and the current situation of commercial street space, landscape elements and scale of Daerim-dong Chinatown street. Through the comparative analysis of landscape elements with high identifiability in both horizontal and vertical directions, this paper explores the causes behind the highly recognizable landscape elements in the street, and summarizes the identifiability characteristics of Daerim-dong Chinatown street: 1. In terms of vision, on the one hand, the identifiability is related to the frequency of landscape elements appearing in the whole street, and confirms that there is a positive correlation between the visual frequency of landscape elements and the identifiability when the user walks in the street. On the other hand, obvious graphics and background relation is a sufficient condition for high identifiability. 2. On the cultural aspect, the Chinatown street makes full use of the regional culture and has a high identifiability. 3. Behavior identifiability. The interaction between users and the commercial street is a process and result of emotional communication, the higher the recognition of regional culture, lead to the increase of the opportunities and times of interaction, corresponding its identifiability increasing.

Keyword : Daerim-dong(대림동) , Chinatown commercial street , landscape identifiability

Student Number : 2018-25160

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Chapter 1. Introduction

1.1. Study Background and Objectives

1.1.1. Study Background

The places or streets where Chinese people gather to live abroad are often referred as 'Chinatown'. Since the establishment of diplomatic relations between China and South Korea in 1992, a large number of Chinese have come to South Korea to look for work opportunities, and gradually formed a lot of Chinese inhabited settlements. In South Korea, Incheon has an official Chinatown, but there is no clear concept of Chinatown in Seoul. ^① In the general perception, Daerim-dong has become the Chinatown area with its largest Chinese immigrant population in Seoul.

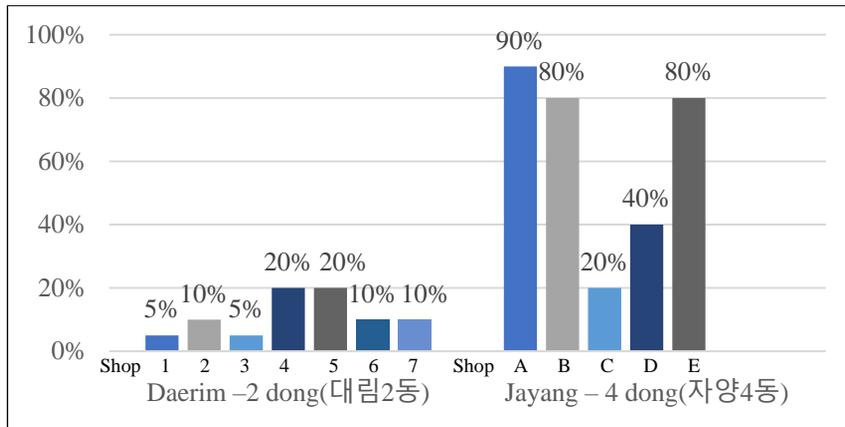
In the early 1990s, the Chinese food wholesale center formed in Daerim-dong, which attracted more and more Chinese people to gather here because of selling Chinese food and raw materials that are hard to find in other parts of Korea. Gradually, a large number of Chinese restaurants appeared around the food wholesale center—— Chinatown commercial street began to grow up. At the same time, many Chinese people lived in the residential areas around Chinatown street, until today, it has become the largest settlement of Chinese people in Seoul.

While the landscape environment of the commercial street is recognized and praised by consumers, it will attract them to experience and consume, thus driving economic growth; on the contrary, the growth of consumption will also drive the environmental construction of the commercial street, forming a virtuous circle. However, in Seoul, for a long time, due to cultural isolation, Daerim-dong area has become a 'criminal city', 'Korean isolation area' in the impression of local people, and resulting in the ratio of local customers in Daerim-dong Chinatown commercial street far lower than that of Jayang – dong(자양동) Chinatown commercial street (Figure 1) . ^② But for Chinese immigrants, Daerim-dong Chinatown not only provides a

① OH, Jung-Eun. 2017. "Immigrant Enclaves in Seoul: A future as intercultural hubs or isolated ghettos? ". IOM MRTC Issue Brief. No.2017-08

② Sukjoon Lee & Kyung-min Kim. 2014. "Differences among Korean-Chinese Ethnic Clusters in Seoul". Seoul Urban Research 15-4. p1 ~16

shopping container space in Korea, but also carries the recognition and sense of belonging of hometown.



<Figure 1> The ratio of Korean customers in some shops of two different Chinatown in Seoul. Data source: Differences among Korean-Chinese Ethnic Clusters in Seoul

At the same time, the unique cultural background of Daerim-dong Chinatown area has influenced and changed the original space landscape environment, presenting a unique landscape style. The different cognition of Daerim-dong Chinatown commercial street leads to the specific groups of the users, and also leads to the difference of the identifiability of the street users.

1.1.2. Study Purpose and Significance

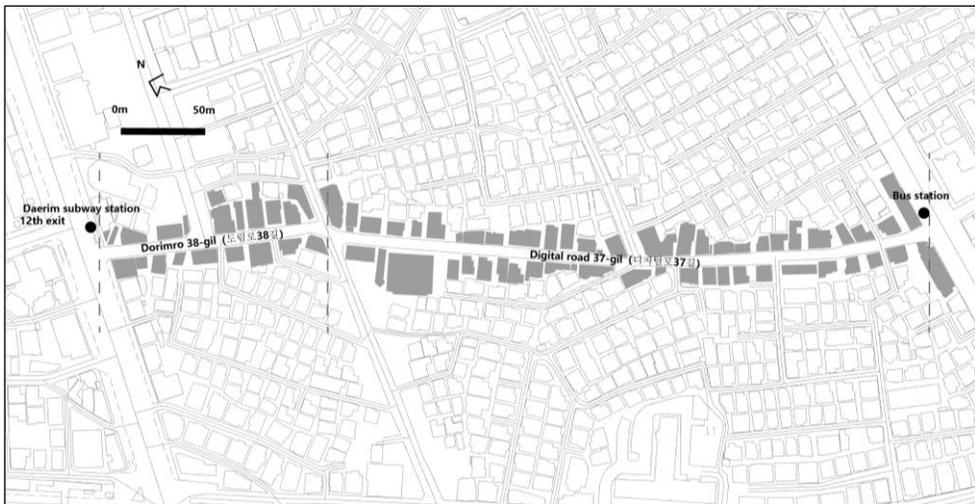
Most of Chinatown in the world are based on cheap residential areas, and center with commercial streets. Due to the integration of foreign cultures, the physical environment and usage patterns have also changed. The settlement of Chinese immigrants forms a unique cultural landscape of China that is distinguished from Korean culture and also shows the cultural diversity of urban landscapes. In recent years, the Korean government has introduced some policies to improve the living environment of Daerim-dong. In order to understand this cultural integration space, it is necessary to understand the internal culture and characteristics of Chinese people living in the area.

Through data collection, field research and theoretical analysis, this paper discusses the relationship between landscape elements and identifiability from the perspective of vision, behavior and culture of Chinatown commercial street. On the other hand, it enriches the theoretical research of identifiability of Chinatown street and provides theoretical reference for urban landscape renewal.

1.2. Study Contents and Methods

1.2.1. Study Object

In this study, the research Chinatown commercial streets of Dorimro 38-gil (도림로 38 길) and digital road 37-gil (디지털로 37 길) are selected as the study area. The commercial street, located within the Daerim-dong Chinatown area, begins at the transfer Daerim subway station 12th exit of subway lines 2 and 7 and is about 480 meters via the central market entrance until the bus station. The commercial street is densely distributed with all kinds of shops meeting various living needs of Chinese immigrants, which is a commercial street with Chinese characteristics. (Figure 2)



<Figure 2> Research area

1.2.2. Study Contents

The study content of this paper is divided into three levels. 1. The thesis puts forward the study questions to be discussed by referring to the relevant literature and the current status of Daerim-dong Chinatown area. 2. On the basis of questionnaire survey (the degree of landscape elements impressed by the users) and in combination with case study, the elements with high identification were analyzed and compared to explore the causes of high identification of landscape elements in Daerim-dong Chinatown street. 3. Summarize the features and contents of identifiability of Daerim-dong Chinatown commercial street.

The content structure of this paper:

Chapter 1: according to the current situation of Daerim-dong Chinatown street, to collect relevant data, analyze the research on the identifiability of Chinatown commercial street landscape, and puts forward the questions of this study; Chapter 2: defines the relevant concepts clearly (identifiability, Chinatown commercial street) and briefly introduces the relevant theories. Chapter 3 is a survey on the Daerim-dong Chinatown commercial street, combined case study, interview and questionnaire survey method to understand the users' identifiability of landscape of Daerim-dong Chinatown commercial street. Chapter 4 is the landscape analysis of Daerim-dong Chinatown commercial street. On the basis of landscape elements those which users has deep impression on, analyze the landscape status of the commercial street in detail. Chapter 5 summarizes the characteristics of identifiability of landscape elements and elaborates the relationship between vision, culture, behavior and identifiability. Chapter 6 concludes the identifiability of the commercial street in Daerim-dong Chinatown and points out the shortcomings of this study.

1.2.3. Study Methods

- (1) Literature research method: refer to literatures on Chinatown commercial street and landscape identifiability, and collect relevant available information. Provide theoretical support for this thesis.
- (2) Field investigation method: through the investigation of the research area, I can feel the landscape personally.
- (3) Questionnaire and interview survey method: collect public opinions on the landscape identification of Daerim-dong Chinatown commercial street through questionnaire and interview survey, and provide a strong support for this thesis.

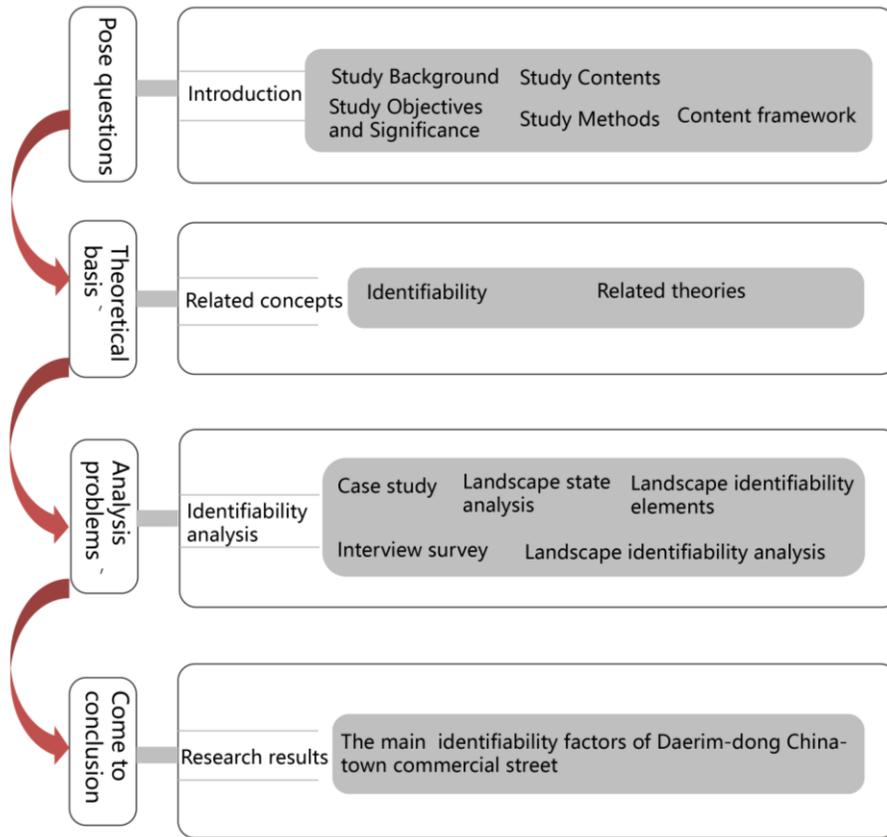
In the process of survey, questionnaire survey and interview survey are carried out simultaneously. Three representative people are selected to have an interview for about 1 hour, and the record is recorded under the authorization of the interviewee. Thanks to Mr. Li, who lives in Daerim-dong and works in Guro(구로) industrial district, who has moved away from Daerim-dong and now lives in Sinrim-dong (신림동) ; Mrs. Zhang, the owner of Daerim-dong Chinese restaurant, and Miss. Chen, who occasionally

comes to Daerim-dong Chinese restaurant to eat her favorite hometown style food.

In order to investigate the landscape identifiability of the selected research object, a questionnaire survey was conducted on the users of Daerim-dong Chinatown commercial street. The questionnaire has been conducted from Monday, October 28, 2019 to Sunday, November 3, 2019. The content of the questionnaire is composed of three parts: responders' data, overall identifiability score and identifiability score of each element. First of all, the data about the responders are composed of age, gender and the distance between the place of residence and Daerim-dong Chinatown commercial street. The question of 'overall identifiability score' focuses on the overall cognitive evaluation of Daerim-dong as a Chinatown street. The 'identifiability score of each element' is divided into architecture elevation/advertise board mixed Korean and Chinese/ stall space/green space and sculpture/trash can, street lamp, guide sign/street entrances and squares/Chinese cultural atmosphere/diet and entertainment/street features /traffic conditions. No impression shows 0 of the identifiability score and the deepest impression at 10 scores. In the last question the users were also asked about the landscape elements that need to be improved.

- (4) Comparison analysis method: compare and analyze the research cases to find out the similarities and shortcomings. Furthermore, compare the results of questionnaire and theoretical analysis to explore the internal relationship between landscape elements and identifiability.
- (5) Summary method: sort out the collected literature, field research information, questionnaire and other relevant contents, and draw the conclusion.

1.3. Content framework

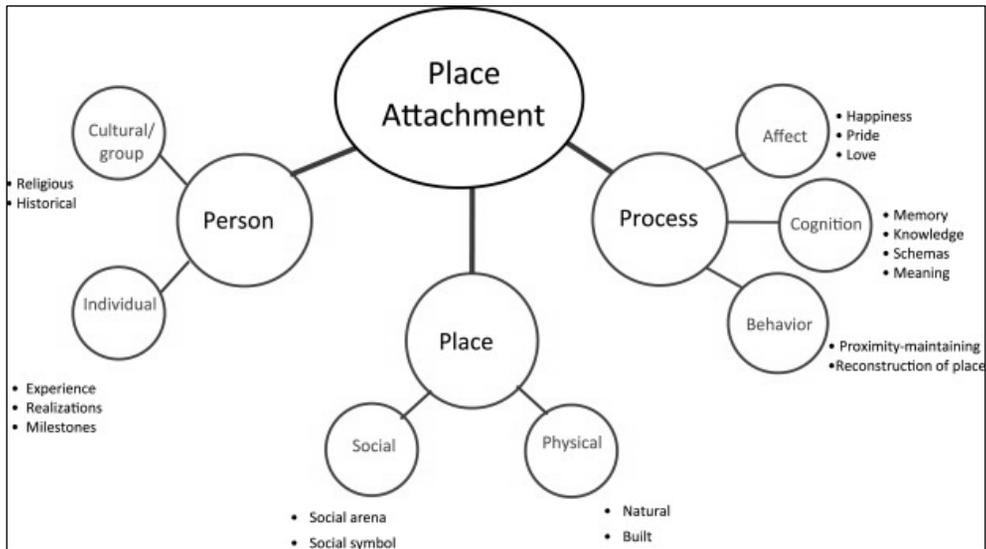


<Figure 3> Content framework

1.4. Literature review

Sun Xiangming's 'Research on urban identity system'(2012) firstly describes the current situation, background, theoretical basis and principle of identity system, and then expounds that the urban identity system should be established from four aspects of spirit, vision, behavior and space, and finally discusses the management and promotion system of the urban identity system. Isil Kaymaz in 'Urban Landscapes and Identity' firstly takes a brief introduction on the concept of identity and focus on the relationship between place identity and urban landscape. Isil Kaymaz thinks that people's affective and cognitive responses to a place are occurred through experiencing the place. Experience is the key action in development of human-place bond. The intensity, duration, content and result of the experience may influence the

individual's perception of a place. ^③ Milligan (1998) states that an emotional bond with a place is formed by the meaning given to a place by the individual, as a result of his interaction with the place (Inalhan and Finch). Scannell and Gifford's 'Environmental Psychology' put forward the tripartite model of place attachment. They state that psychological process involves three components: (i) affect (emotional connection), (ii) cognition (memories, beliefs, meaning and knowledge), and (iii) behavior (attachment is expressed through actions). (Figure 4)



<Figure 4> Scannell and Gifford's tripartite model of place attachment

Seeing from literatures about Chinatowns all over the world, Elena Barabantseva's 'Seeing beyond an ethnic enclave: the time/space of Manchester Chinatown' (2016) stresses the importance of taking into account the temporal dimensions of the examinations of space and migrants' relationships with the city. Ching Lin Pang and Jan Rath in 'The force of regulation in the land of the free: the Persistence of Chinatown, Washington dc as a symbolic ethnic enclaves' (2013) says that the Washington Chinatown does not represent the nodal point of a vibrant community. On the contrary, it is artificially kept alive by city planners and a handful of self-appointed

As a Chinatown block in Seoul, Daerim-dong Chinatown street is also studied in many related literatures. Chun, Hyun-jin in 'Little Yanbian in

③ Isil Kaymaz.2013. "Urban Landscapes and Identity". Advances in Landscape Architecture.

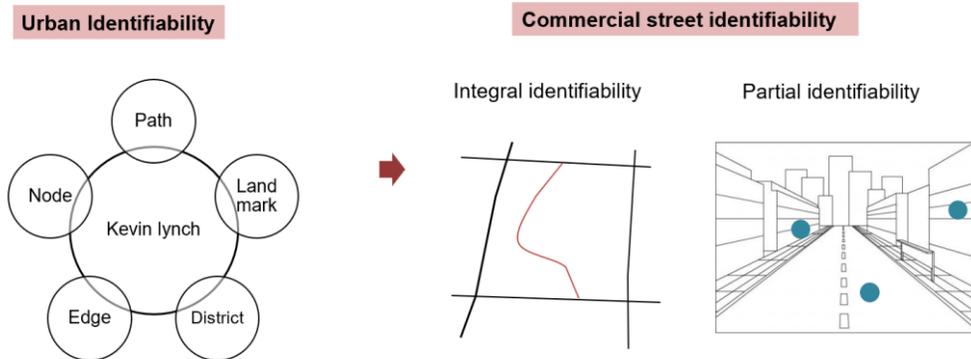
Seoul: Interpreting Cultural Landscape of Daerim-dong Chinatown'(2015) describes that most of the Chinese shopkeepers and customers in commercial streets are Chinese Korean. Therefore, the physical form and utilization attitude of stores vary according to Korean culture and concludes this area as 'Little Yanbian' in Seoul. Suh, Ji-su's 'The making of Korean Chinese portal at Daerim-dong Seoul'(2012) analyzes various factors of residential environment such as foreign aid related facilities, number of manufacturing workers, average apartment price as influential factors affecting immigrants' residential location choice. And stresses when classified by nationality, impact of residential environment was different by their origin.

The differences of this research lies in the fact that the rest of the study of chose Daerim-dong area , mainly concentrated in the form of culture landscape, specific to the commercial landscape, are generally the author according to the related theory in architectural space, and road space ,but not embarks from the person's subjective feeling to make the analysis and research of the identifiability of landscape elements. In addition, what is the essence of the identification of landscape elements in the Chinatown commercial street? And is there a positive correlation between the identification of landscape elements and the number of times people receive landscape elements in the landscape? These problems have not been solved and verified. This paper will discuss these problems.

Chapter 2. Related theories of identifiability and Chinatown commercial street landscape

2.1. Identifiability overview

Identifiability: to recognize somebody or something and be able to say who or what they are. Identifiability was first proposed by Kevin Lynch in the book ‘The image of the city’, which means that the target is obviously different from the surrounding environment and can display its own value and content.^④The primary goal of an effective impression is identifiability, that is, being distinguished from other things and recognized as a separate entity. Identifiability is mainly studied by the author in the aspect of city, and five elements, including path, edge, district, node, landmark are proposed to establish city identifiability. Identifiability in the commercial street landscape is divided into two parts, the integral and partial. (Figure 5)



<Figure 5> Two kinds of identifiability

As a whole, the landscape of the entire commercial street is recognized by people among numerous landscapes, while the landscape elements in the landscape of a commercial street are recognized by people. Part is the landscape elements of one commercial street landscape. The basis of the two kinds of identifiability is the local landscape elements.

^④ Kevin Lynch. 1961. "The Image of the City". Review by: Anselm Strauss. American Journal of Sociology 66.4:426-427.

This paper focuses on the identifiability of some landscape elements in the commercial street, and then the identifiability of users' impression on the whole street. Combined with the above concept of identification, the identification of commercial street landscape is mainly a landscape element (a street) that can be distinguished from other landscape elements (another street) by users to know and remember.

2.2. Chinatown commercial street landscape

2.2.1. Chinatown commercial street

A Chinatown is an ethnic enclave of Chinese people located outside mainland China, Hong Kong, Macau or Taiwan, most often in an urban setting. Areas known as "Chinatown" exist throughout the world, including Europe, North America, South America, Asia, Africa, Australia, Zealandia and the Middle East.

In recent years, Chinese-themed shopping centers have started to take on a role as historical and touristic centers, though the centers themselves are not "Chinatowns" by definition, usually as they are built in areas where the Chinese populations are intermixed with the general population at large. For example, the "Chinatown" in Albany, New York has been created as an attraction rather than an enclave, intended to give the feeling of the "old Chinatown" in an upscale setting. The new Chinatown in Raleigh, North Carolina will be built with a five-star hotel, and is intended mainly as a visitor attraction. Other examples of Chinese-themed malls exist in Richmond, British Columbia, Houston, Las Vegas, Dubai, and Santo Domingo have received official recognition as a "Chinatown". While many Chinese-themed areas have in many cases displaced original Chinese enclaves as places where authentic Chinese cuisine restaurants and shopping can be found, they are not considered tourist attractions as the most notable historic Chinatown districts are. Bonnie Tsui in her book states that the newer "commercial Chinatowns" rely on the Chinatown being built before the local Chinese population arrives.

⑤

⑤ Bonnie Tsui. 2009. "American Chinatown: A People's History of Five Neighborhoods"

2.2.2. Landscape elements of Chinatown commercial street

In the previous division, the landscape elements of commercial street were classified as fixed landscape elements, semi-fixed landscape elements and non-fixed landscape elements. ⑥ Fixed landscape elements include street topography, building elevation, building contour, spatial form, etc. Semi-fixed landscape elements include street furniture, marketing exhibition tools, sculpture, landscape lighting, water, etc. Non-fixed landscape elements include history, cultural characteristics, customs, weather, human activities, etc.

This paper divides landscape elements into physical landscape elements and non-physical landscape elements. Non-physical landscape elements are those that cannot exist independently and need certain things to be directly accepted by our senses. Including customs, history and culture. A custom formed in a place over a long period of time, accepted by all, and appropriate to the local customs. It may still be in use today. History and culture: a region, a piece of land, there are many stories and allusions. Especially for China, a place with vast land and abundant resources and a long history. In the past, many people and things have vanished, but what happened to them at that time has some influence on future generations and is preserved.

Physical landscape elements are directly felt by our senses in our daily life. It is divided into static landscape elements and dynamic landscape elements. Static landscape elements refer to the things that cannot produce fluidity in the landscape. Including: architecture, plants, landscape accessories, ground pavement, public service facilities. Landscape sketch: including sculpture, structure, etc. Public service facilities: including seats, trash cans, street lamps, signs, etc. The dynamic landscape element refers to the thing that has the flowing nature in the landscape. Including: light, water, wind, human activities, traffic flow(vehicles).

<Table 1>Elements of Commercial Landscape

Elements of Commercial Landscape	
Non- physical Elements	customs, history and culture

⑥ Wang, Pengqiang.2018. "Research on urban historic street landscape renewal and reconstruction based on environmental behaviourology——Taking food street in Taiyuan as an example". A Dissertation, Xi'an University of Architecture and Technology.

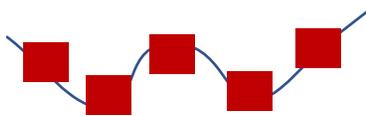
Physical Elements	Static Elements	architecture, plants, landscape accessories, ground pavement, public service facilities
	Dynamic Elements	Traffic Flow, View , Human Activities, Light, Water, Wind

2.3. Related theories

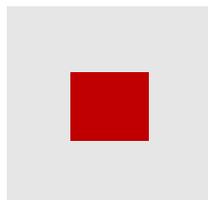
2.3.1. Gestalt psychology

The key principles of gestalt systems are emergence, reification, metastability and invariance. ^⑦

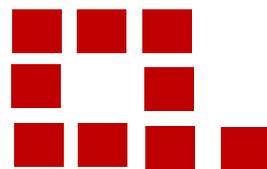
- (1) Proximity and continuity. Proximity refers to some short distance or similar parts, easy to form one whole part. Continuity refers to a tendency to perceive lines. (Figure 6) the red square, due to its close distance, is easy to be regarded as the whole of the curved arrangement.
- (2) Graphics and background. A well-organized image, in which some things will be recognized first by people, is called a figure, and the rest is to set off the existence of the figure, that is, the background. For example, if a white lamb appears on a green grassland, it will be seen at a glance; the bright moon hanging in the dark night sky is very eye-catching; a white ship sailing on the blue ocean is also relatively easy to identify. (Figure 7)



<Figure 6> Proximity and continuity



<Figure 7> Graphics and background

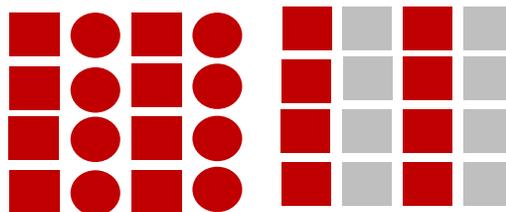


<Figure 8> Integrity and closure tendencies

- (3) Integrity and closure tendencies. When a single element forms a simple or figurative whole image, the element can be easily inferred by the perceiver to form a whole rather than the existence of a single element.

^⑦ Steven., Lehar.2003. "The World in your Head: A Gestalt View of the Mechanism of Conscious Experience". Mahwah, N.J.: Lawrence Erlbaum Associates.

- ⑧ On the other hand, instead of forming simple or concrete images, the elements are separate and unrelated. For the perceiver, the image is more regular (e.g. symmetry, boundary) or simpler and concrete, which is easier to form. (Figure 8), there are 8 squares on the left and one square on the right. According to the principle of proximity, they are a whole, but people always regard the 8 squares on the left as a whole and the one on the right as a separate one. This is because the figure on the left forms a closed direction, and people have a corollary inertia, which means that the square on the right is treated separately.
- (4) Similarity. Things of the same form or color are easy to be taken as a whole (Figure 9). In the permutation of the figure, people tend to regard the square or circles as the vertical permutation, instead of the square mixed with the horizontal permutation of the circle. The same is true on the right, where the red and grey squares are arranged vertically.



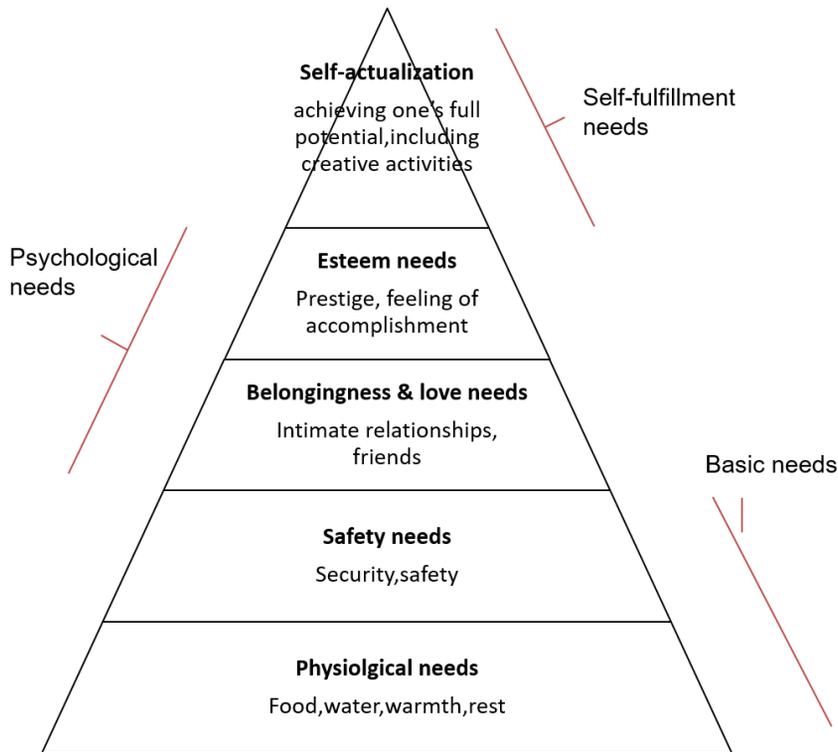
<Figure 9> Similarity

2.3.2. Environmental behavior theories

Environmental behavior is a discipline that studies the relationship between people's psychological needs, spiritual perception and the surrounding environment. The surrounding environment refers to the social, cultural and material environment. Compared with psychology, environmental behavior focuses on the relationship between human and the environment. Maslow divides human's basic needs into five levels^⑨ (Figure 10):

⑧ Sternberg, Robert J& Sternberg, Karin.2012. "Cognitive Psychology (6th ed.) ". Belmont, Calif: Cengage Learning. pp. 113–116.

⑨ Maslow, A.H. 1943. "A theory of human motivation". Psychological Review. 50 (4): 370–96.



<Figure 10> Maslow's Hierarchy of Needs

Human's perception information is constituted by different degrees of cognition in the outside world. Most cognition in life comes from the surrounding environment. Therefore, the level of people's perception ability is closely related to the reaction and cognition in the environment, and different people's perception ability is different. That is the same environment, the same stimulus, different people receive the perceptual information will change.

Human's spiritual demand for landscape is a kind of cultural demand for history, nationality and region. The degree of such demand generally depends on a person's cultural level, which reflects a regional social culture. Landscape can also be used in many ways to show the landscape association and landscape innovation. For example, from the perspective of psychology, the relationship between "landscape and aesthetics" is regarded as a relationship between "stimulus and response", which is conducive to the understanding of landscape perception by the general sense of the group.

Chapter 3. Landscape identifiability survey of Daerim-dong Chinatown commercial street

3.1. Case study

Manhattan's Chinatown is one of nine Chinatown neighborhoods in New York City, bordering the Lower East Side to its east, Little Italy to its north, Civic Center to its south, as well as one of twelve in the New York metropolitan area, which contains the largest ethnic Chinese population outside of Asia, comprising an estimated 893,697 uniraical individuals as of 2017.^⑩ Unlike most other urban Chinatowns, Manhattan's Chinatown is both a residential area as well as commercial area. Despite the gentrification going on in the area and the decline in Chinese population and businesses and although there is an increasing influx of high income hipster residents and businesses moving into the Chinatown neighborhood, it is still a large popular Chinese commercial shopping district, frequented by residents of the New York metropolitan area. An influx of tourists and visitors also come to Chinatown, including both non-Chinese and mainland Chinese. In addition, high income professionals are moving into the area and patronizing Chinese businesses. All these customers contribute significantly to the profits of the Chinese businesses.

For much of Manhattan Chinatown's history, there were few unique architectural features to announce to visitors that they had arrived in the neighborhood (other than the language of the shop signs). In 1962, the Lieutenant Benjamin Ralph Kimlau Memorial archway at Chatham Square was erected in memorial of the Chinese-Americans who died in World War II, designed by local architect Poy Gum Lee (1900–1968).^⑪ A statue of Lin Zexu (林則徐), also known as Commissioner Lin, a Foochowese Chinese official who opposed the opium trade, is also located at the square.

More decorations and cultural institutions followed. In the 1970s, New York Telephone, then the local phone company, started capping the street

^⑩ U.S. Census Bureau
https://factfinder.census.gov/bkmk/table/1.0/en/ACS/17_1YR/S0201/330M400US408/popgroup~016. Retrieved January 27, 2019

^⑪ June, Williamson. 2016. "Chinese Style: Rediscovering the Architecture of Poy Gum Lee, 1923-1968."

phone booths with pagoda-like decorations. In 1976, the statue of Confucius in front of Confucius Plaza became a common meeting place. In the 1980s, banks that opened new branches and others that were renovating started to use Chinese traditional styles for their building facades. The Church of the Transfiguration, a national historic site built in 1815, stands off Mott Street.

<Table 2> Manhattan Chinatown Streetscape and San Francisco Chinatown Streetscape

Manhattan Chinatown Streetscape	San Francisco Chinatown Streetscape
	
<p>A Single Historic District On The National Register Of Historic Places</p>	<p>The oldest and largest of the four notable Chinatowns within the City</p>
Commercial Space	Dragon Gate
	
<p>Shops selling Chinese food</p>	<p>Southern entrance to Chinatown on Grant. One of the most photographed locations.</p>
Confucius Plaza	Saint Mary's Square
	
<p>Confucius Plaza apartments and Confucius statue</p>	<p>Features statue of Dr. Sun Yat-sen, by Beniamino Bufano and a memorial for Chinese-American veterans of World Wars I and II</p>
Museum of Chinese in America	Nam Kue Chinese School



Presenting the living history, heritage, culture, and diverse experiences of Chinese Americans



Private school offering classes in Chinese culture, history, and language.

Chinese Style Decoration

Chinese Telephone Exchange



Chinese eaves and lantern



All calls to Chinatown were routed by name and occupation until 1948.

Shop Signs

Tin How Temple



English and Chinese



Oldest Taoist temple in Chinatown.

Cultural Event

Portsmouth Square



Chinese New Year celebration in Chinatown



Oldest public space in San Francisco.

The Chinatown centered on Grant Avenue and Stockton Street in San Francisco, California, is the oldest Chinatown in North America and the largest Chinese enclave outside Asia. It is also the oldest and largest of the four notable Chinatowns within the City.^⑫ Chinatown is located in downtown San Francisco, covers 24 square blocks. Since its establishment in 1848, it has been highly important and influential in the history and culture of ethnic Chinese immigrants in North America. Chinatown is an enclave that continues to retain its own customs, languages, places of worship, social clubs, and identity. In the 1906 the Chinatown neighborhood was completely destroyed earthquake and fire that leveled most of the city. A group of Chinese merchants, including Mendocino-born Look Tin Eli, hired American architects to design in a Chinese-motif "Oriental" style in order to promote tourism in the rebuilt Chinatown. The results of this design strategy were the pagoda-topped buildings of the Sing Chong and Sing Fat bazaars on the west corners of Grant Ave (then Dupont St) and California St, which have become icons of San Francisco Chinatown. Given this specific historical background, San Francisco Chinatown has more typical Chinese landscape elements. There are two hospitals, several parks and squares, numerous churches, a post office, and other infrastructure. Recent immigrants, many of whom are elderly, opt to live in Chinatown because of the availability of affordable housing and their familiarity with the culture. San Francisco's Chinatown is also renowned as a major tourist attraction, drawing more visitors annually than the Golden Gate Bridge.

Within Chinatown there are two major north-south thoroughfares. One is Grant Avenue, with the Dragon Gate ('Chinatown Gat' on some maps) at the intersection of Bush Street and Grant Avenue. A war memorial to Chinese war veterans; and stores, restaurants and mini-malls that cater mainly to tourists. The other, Stockton Street, is frequented less often by tourists, and it presents an authentic Chinese look and feel reminiscent of Hong Kong, with its produce and fish markets, stores, and restaurants. It is dominated by mixed-use buildings that are three to four stories high, with shops on the ground floor and residential apartments upstairs. A major focal point in Chinatown is Portsmouth Square. Since it is one of the few open spaces in

^⑫ Hoiberg, Dale.2017. "The New Encyclopedia Britannica Micropaedic". Encyclopedia Britannica. vol. 10, Page 388.

Chinatown and sits above a large underground parking lot, Portsmouth Square bustles with activity such as T'ai Chi and old men playing Chinese chess. In both two Chinatowns, Chinese people organized many cultural events like the Chinese New Year Festival and Parade, including art shows, street dances, martial arts, music, and a fashion show.

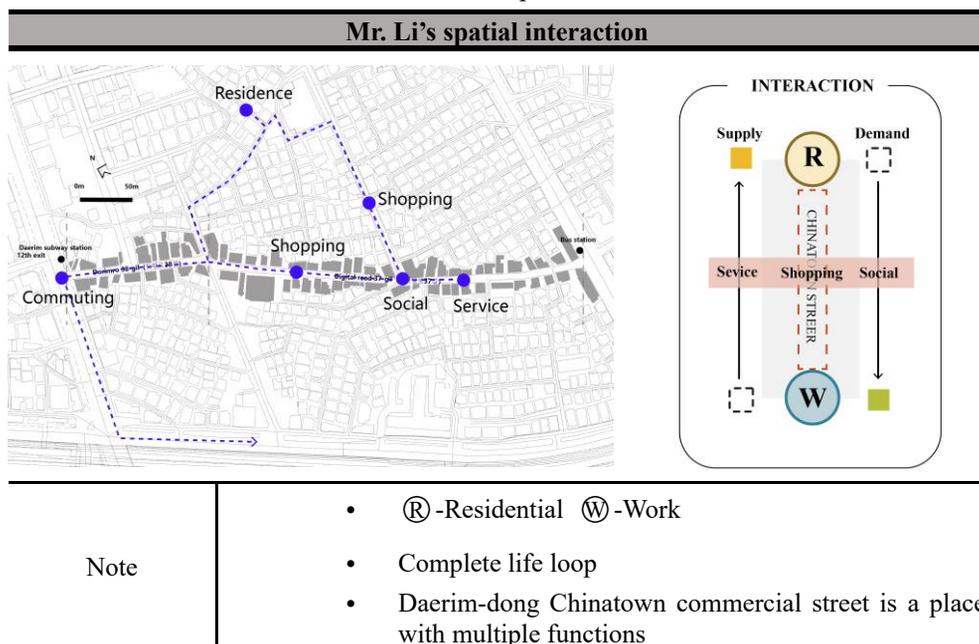
<Table 3> Chinatown street cases summary

Chinatown	Location	Chinese population	Main industries	Street image	Landscape characteristic
Manhattan		63.9%	Commercial Catering business Residential Cultural tourism		<ul style="list-style-type: none"> • Little Hong Kong, little Guangdong • Linguistic landscape • Street vendors style • Bright colors • Chinese decoration • Landmark statues • Cultural event • Gentrification
San Francisco		92%	Commercial Catering business Residential Cultural tourism		<ul style="list-style-type: none"> • Fire reconstruction • Entrance arch • Linguistic landscape • Bright colors • Architecture style • Public square • Landmark statues • Chinese decoration • Cultural event • Night view

3.2. Interview survey

In this study, three representative people are selected to have an interview for about 1 hour, and the record is recorded under the authorization of the interviewees. Through interviews, the first interviewee, Mr. Li is living in Daerim-dong area as a worker served in Guro(구로) industrial district and take one day off per week, usually in the Daerim-dong commercial market shopping for food and daily commodities. At weekends he always stays at home or in the entertainment places of Daerim-dong commercial street to meet friends or family members, talking accumulated resentment and pain. In his spare time, he often goes outside and sits with two or three Chinese friends to read newspapers, play chess, or just talk and laugh in the chairs outside Daerim-dong Chinatown commercial street. This is also a very common neighborhood landscape in China.

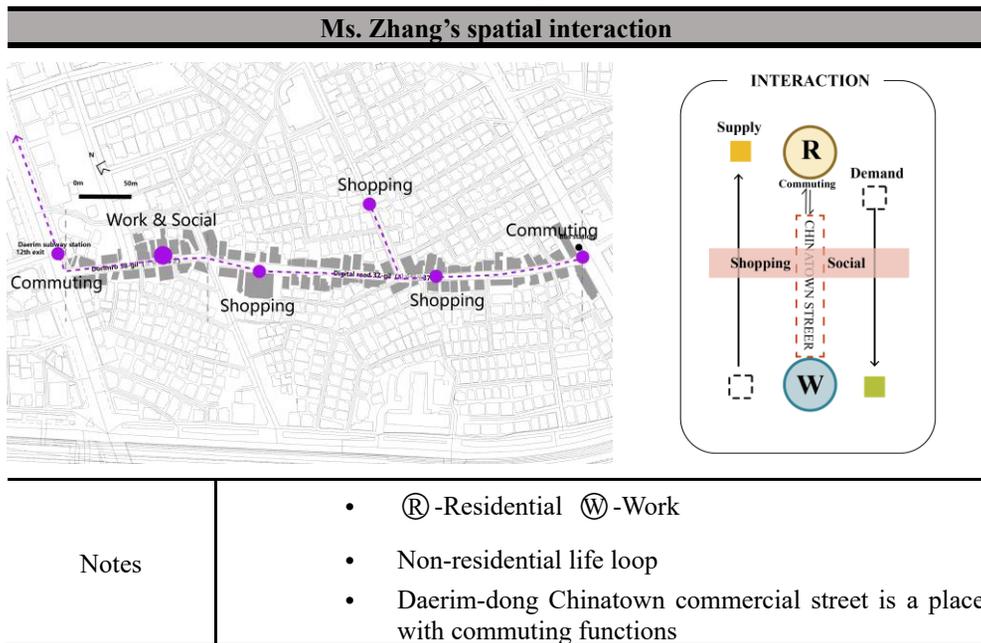
<Table 4 > Mr. Li's spatial interaction



And another interviewee Ms. Zhang who opens a Chinese food restaurant in Daerim-dong commercial street, whereas her residence already moved to other place very early. She thought the chaos of the environment here is not suitable to live for a long time, meanwhile, as more and more Chinese people to work for jobs, the real estate market has become more active, the advantage of low rent is becoming more and more inconspicuous. She thinks that the

environment of Daerim-dong Chinatown commercial street is messy and disorderly, which is caused by the habit of setting up stalls and throwing garbage irregularly of the civilian in Daerim-dong. She believes that a proper renovation plan is needed for the Daerim-dong area, so as to preserve the Chinese cultural characteristics while improving the environment, and meanwhile, build a Seoul characteristic street to attract more tourists and help merchants in this area to obtain more customers.

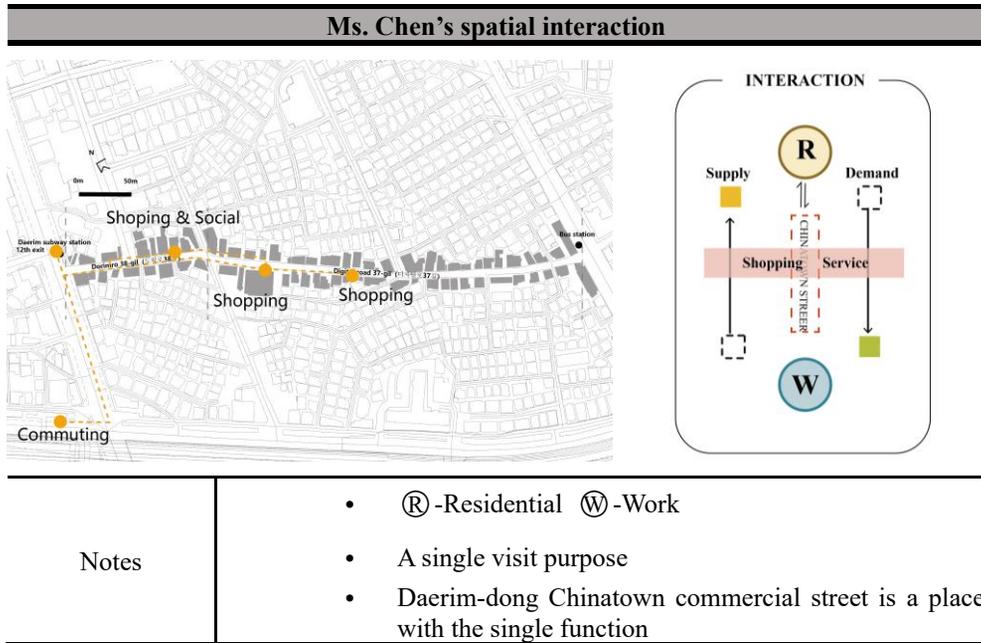
<Table 5> Ms. Zhang’s spatial interaction



Interviewee Miss Chen comes to Daerim-dong commercial street for shopping occasionally, who lives far away from this area. Because of the habit of eating in hometown, she often comes to the Chinese restaurant here for dinner with her friends. In Daerim-dong Chinatown commercial street, she can buy Chinese food and raw materials that cannot be obtained in other places, and also due to the convenience of the same communication language, Daerim-dong Chinatown can provide all kinds of life service facilities in a foreign country without speaking Korean, that is why the Daerim-dong area is the first choice for Chinese who are not proficient in Korean. This place for Miss Chen is the embodiment of another hometown. When it comes to Chinese traditional festivals, she comes here to participate in cultural events,

but she said that in the past two years, cultural activities are less than past years.

<Table 6> Ms. Chen's spatial interaction



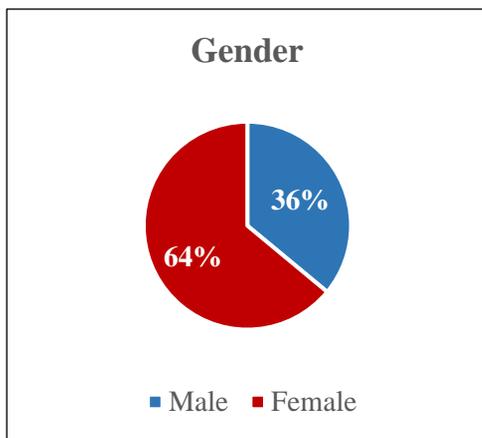
For Mr. Li, he is a resident here. The interaction between him and Daerim-dong Chinatown commercial street involves all aspects of his life: living, shopping, social networking, living facilities and services. Mr. Li's workplace is located along the Subway Line 2, so it's his daily commute route to the subway station through the commercial street. For Mrs. Zhang, on the contrary of Mr. Li, her living place is not here, and her working place is Daerim-dong Chinatown commercial street. Her space interaction scope is obviously smaller and her use function is relatively simple. As a visitor of the Chinatown street, Miss Chen has a strong purpose of interaction with the space for leisure or shopping, a small range of activities and the lowest frequency of use.

3.3. Questionnaire survey

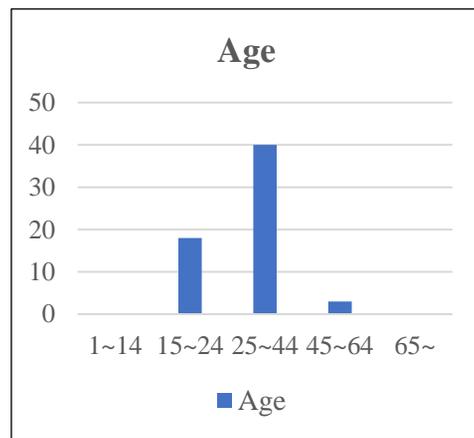
A total of 65 questionnaires and 61 valid questionnaires were distributed in this survey. The specific results are as follows. Because the influence of complex elements on the landscape identifiability involved in the commercial street landscape of Daerim-dong Chinatown cannot be directly obtained

through observation, the residents and tourists nearby are Consulted and investigated through questionnaire survey. The content of the questionnaire is composed of three parts: responder’s data, overall identifiability score and identifiability score of each element. The responder’s data part includes the age composition, gender, distance from residence place to the Daerim-dong Chinatown street and times of visiting Daerim-dong Chinatown commercial street. The ‘identifiability score of each element’ is divided into architecture elevation/advertise board mixed Korean and Chinese/ stall space/green space and sculpture/trash can, street lamp, guide sign/street entrances and squares/Chinese cultural atmosphere/diet and entertainment/street space/traffic conditions. Finally, the results are summarized and analyzed based on the questionnaire data.

The overall gender distribution of the responders is relatively balanced, with the proportion of gender accounting for 64% of females and 36% of males (Figure 11). From the perspective of age composition, the age range of responders is 15 to 65 years old, mainly concentrated in the 25 to 44 years old range. (Figure 12)

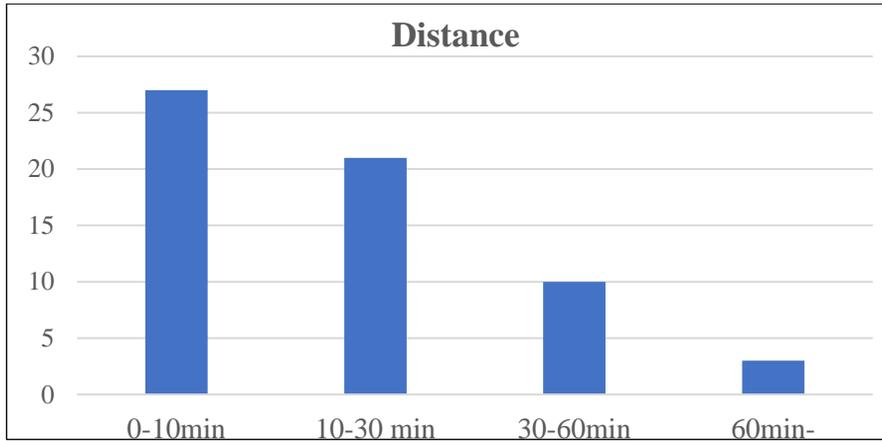


<Figure 11> Gender



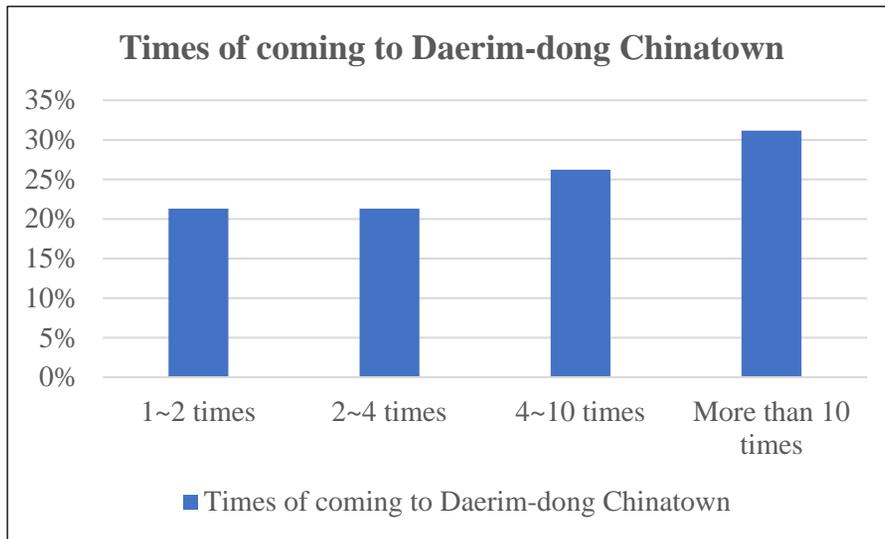
<Figure 12> Age

According to the distance from their residence places to the Daerim-dong Chinatown street of the respondents, the consumers and sellers of the commercial street in Daerim-dong Chinatown commercial street are mainly Chinese people living nearby, most of whom come from within a radius of 10 to 30 minutes of the traffic time. Convenient accessibility is also one of the main reasons why they often visit here. (Figure 13)



<Figure 13> Time for visitors to arrive at Daerim-dong Chinatown commercial street

According to the survey data, 21.3% of the respondents only came to Daerim-dong Chinatown commercial street once or twice, 2 or 4 times 21.3%, and 4 to 10 times 26.2%, 31.2% of the respondents have been to Daerim-dong Chinatown more than ten times. (Figure 14)



<Figure 14> Times of coming to Daerim-dong Chinatown

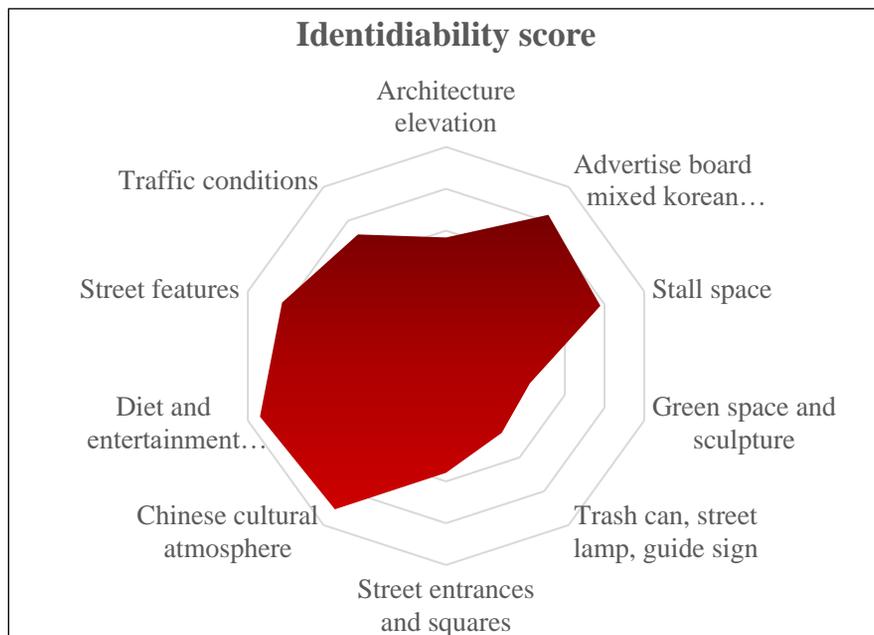
As for the overall impression score of this street, this index is an evaluation score of the overall impression of Daerim-dong Chinatown street. A score of 1-2 points means 'No impression'; 3-4 points means 'Little impression'; 5-6 points means 'Normal impression'; 7-8 points means 'Deep impression'; 9-10 points means 'Very deep impression'. The result shows that 55.7% of the people gave an average level of 5-6 points, and the overall identifiability

rating of Daerim-dong Chinatown commercial street was relatively normal level. (Figure 15)



<Figure 15> The overall impression score

According to the survey results of different landscape elements identifiability evaluation, (Table 7) ‘Diet and entertainment facilities’ got the highest score. Meanwhile, ‘the board mixed Korean and Chinese’, ‘stall space’ and ‘Chinese cultural atmosphere’ all had high identifiability. (Figure 16)

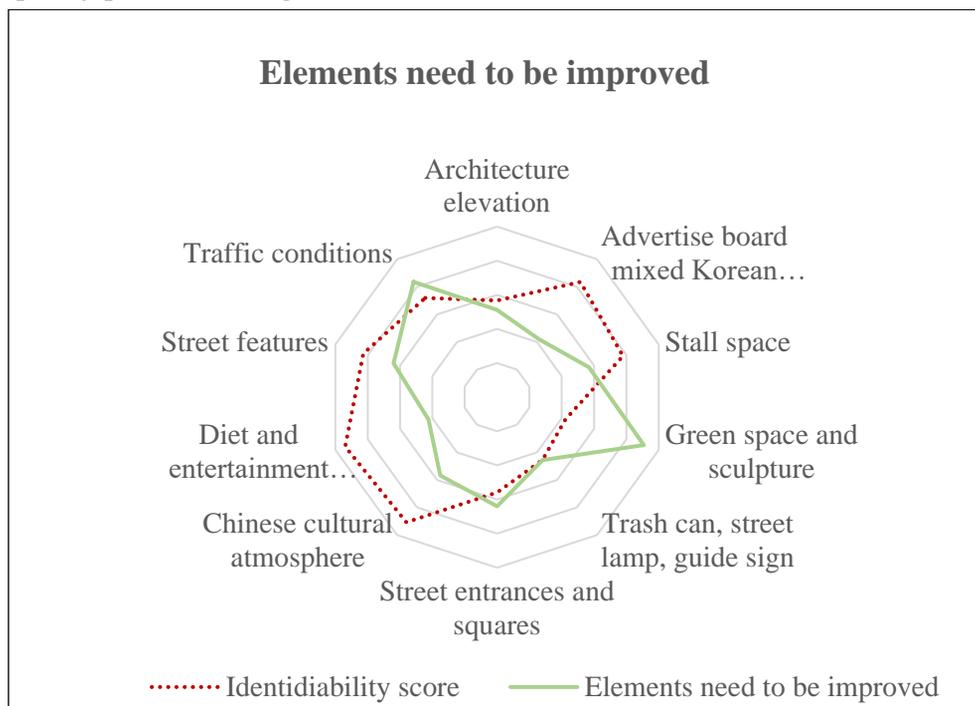


<Figure 16> Identifiability score of different elements

<Table 7> Detail landscape elements identifiability score

Identifiability score	1-2 points	3-4 points	5-6 points	7-8 points	9-10 points	Average
	No impression	Little impression	Normal impression	Deep impression	Very deep impression	
Architecture elevation	11(18.03%)	14(22.95%)	26(42.62%)	10(16.39%)	0(0%)	2.57
Advertise board mixed Korean and Chinese	2(3.28%)	8(13.11%)	11(18.03%)	27(44.26%)	13(21.31%)	3.67
Stall space	2(3.28%)	5(8.2%)	21(34.43%)	30(49.18%)	3(4.92%)	3.44
Green space and sculpture	26(42.62%)	16(26.23%)	13(21.31%)	6(9.84%)	0(0%)	1.98
Trash can, street lamp, guide sign	23(37.70%)	14(22.95%)	19(31.15%)	4(6.56%)	1(1.64%)	2.11
Street entrances and squares	13(21.31%)	13(21.31%)	24(39.34%)	11(18.03%)	0(0%)	2.54
Chinese cultural atmosphere	0(0%)	4(6.56%)	9(14.75%)	33(54.1%)	15(24.59%)	3.97
Diet and entertainment facilities	0(0%)	2(3.28%)	13(21.31%)	23(37.70%)	23(37.70%)	4.1
Street features	3(4.92%)	8(13.11%)	10(16.39%)	27(44.26%)	13(21.31%)	3.64
Traffic conditions	3(4.92%)	8(13.11%)	27(44.26%)	20(32.79%)	3(4.92%)	3.2
Total	83(13.61%)	92(15.08%)	173 (28.36%)	191(31.31%)	71(11.64%)	3.12

The last part of the questionnaire is a survey on relevant landscape elements that need to be improved. The results show that green space facilities are considered to be most in need of improvement among the landscape elements. Correspondingly, the identifiability score of green space and sculpture is not high. Traffic condition is an option that has a high identifiability score among all elements and is considered to be in great need of improvement. This may be because poor traffic environments are also highly identifiable. For other elements, the higher the degree of recognition, the better the environmental quality presented. (Figure 17)



<Figure 17> Elements need to be improved

To sum up , according to the survey results, the gender composition of respondents is mainly female; the age range is mainly between 15-44 years old, with 25-44 years old as the most; the residence of visitors is mainly come from near the commercial street; most of them have been there more than 10 times; the overall impression score of this street is mainly between 5-6 points; the impression of landscape elements is relatively balanced; but the most impressive elements are food and culture. The most important thing is to strengthen the green space and public space.

3.4. Summary

In the Manhattan's Chinatown and San Francisco's Chinatown two cases, although the development of Chinatown Street has different historical background and development process, but in the street landscape presentation, they have some similarities. Linguistic landscape, street vendors style, bright colors, Chinese decoration, landmark statue, cultural event, entrance arch, architecture style, public square ... all of these factors are unique and identifiable factors in Chinatown commercial street.

Through interviews with different people, they show that Daerim-dong Chinatown commercial street not only take on the function of shopping, but also providing a regional cultural connection. Chinatown is not only the emotional comfort place for their homesickness, but also the preferred service support place for overseas Chinese as Chinatown can meet almost all related needs of them.

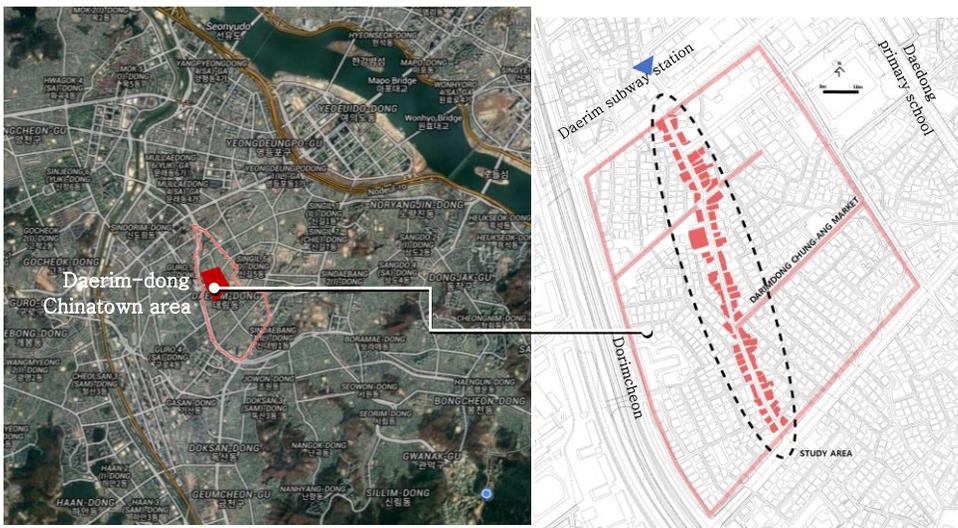
In the questionnaire survey, the landscape factors with high identifiability also have a positive correlation with the characteristics of the street. As a Chinese cultural street, the factors with high identifiability also represent the landscape elements with Chinatown street characteristics to a certain extent. For the Daerim-dong Chinatown commercial street, 'Diet and entertainment facilities', 'the board mixed Korean and Chinese', 'stall space' and 'Chinese cultural atmosphere' all had high identifiability. From the survey results, it can be concluded that food industry, characteristic commercial facilities and bilingual landscape play an important role in the construction of cultural landscape identifiability of Daerim-dong Chinatown commercial street.

Chapter 4. Daerim-dong Chinatown Commercial Street Landscape status

4.1. Overview

4.1.1. Location and population

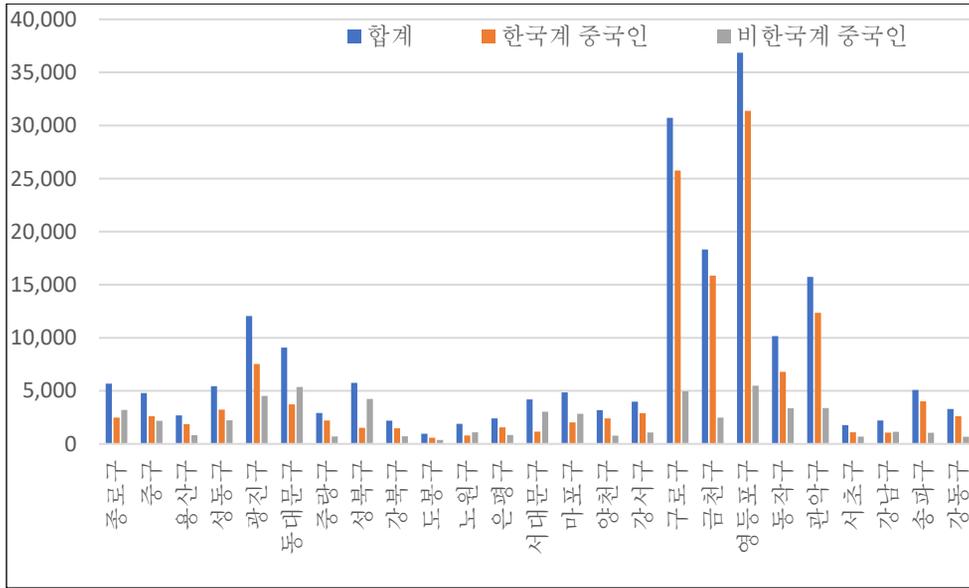
Even if there is no official Chinatown in Seoul, in the common perception, Daerim 2 dong area is identified as Seoul's Chinatown. Although the exact boundary of Daerim-dong Chinatown is not clear, it generally centers on the Daerim 2 dong residential center within a radius of 200 to 300 meters, adjacent to Seoul Daedong primary school in the east and Dorimcheon(도림천) river in the west.^⑬



<Figure 18>Location of Daerim-dong Chinatown commercial street

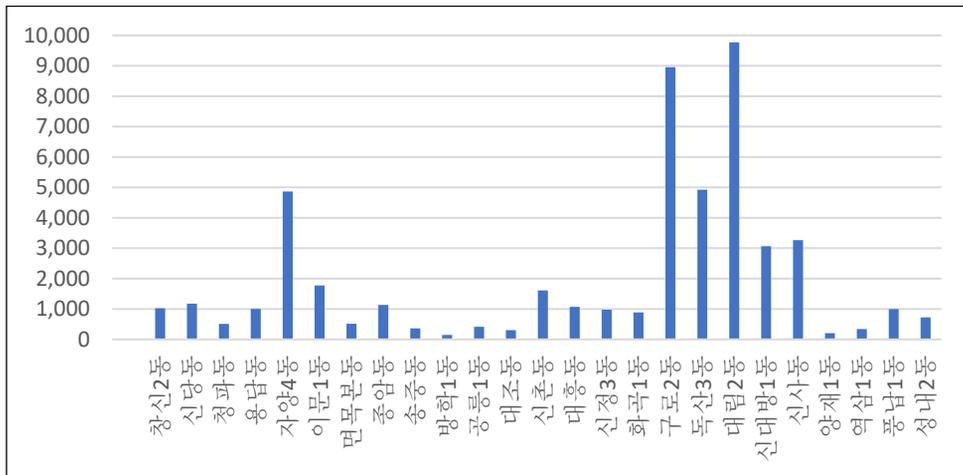
According to the official registration data of Chinese residents in Seoul, until 2018, the number of registered Chinese residents in Seoul has reached 196,181. According to the different regional data, the Chinese population of Yeongdeungpo-gu (영등포구) is up to 36856, most of them are Chinese Korean residents.(Figure 19)

⑬ Chun, Hyun-jin.2014. "Little Yanbian in Seoul: Interpreting Cultural Landscape of Daerim-dong Chinatown". A Dissertation, Seoul National University. p4

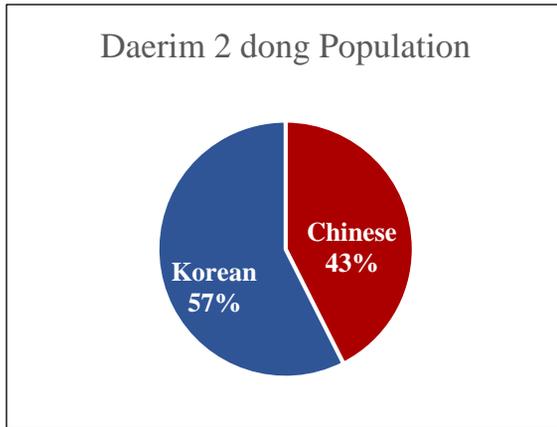


<Figure 19> Chinese Population Situation in Seoul.
Data source: Seoul registered population 2018

The area with the largest population of Chinese residents in Yeongdeungpo-gu (영등포구) is 9772 in Daerim 2 dong, followed by 8952 in Guro 2 dong. Daerim 2 dong area is identified as Seoul's Chinatown and there are many Chinese people living in Guro 2 dong who work in the Guro industrial areas. (Figure 20)



<Figure 20> Chinese Population Situation in Yeongdeungpo-gu (영등포구) .
Data source: Seoul registered population 2018



In Daerim 2 Dong area, the total resident population is 22,231 and the Chinese immigrant population up to 9,453, less than Korean resident population 12,778, up to 43% of the total. (Figure 21)

<Figure 21> Daerim 2 dong Chinese and Korean population

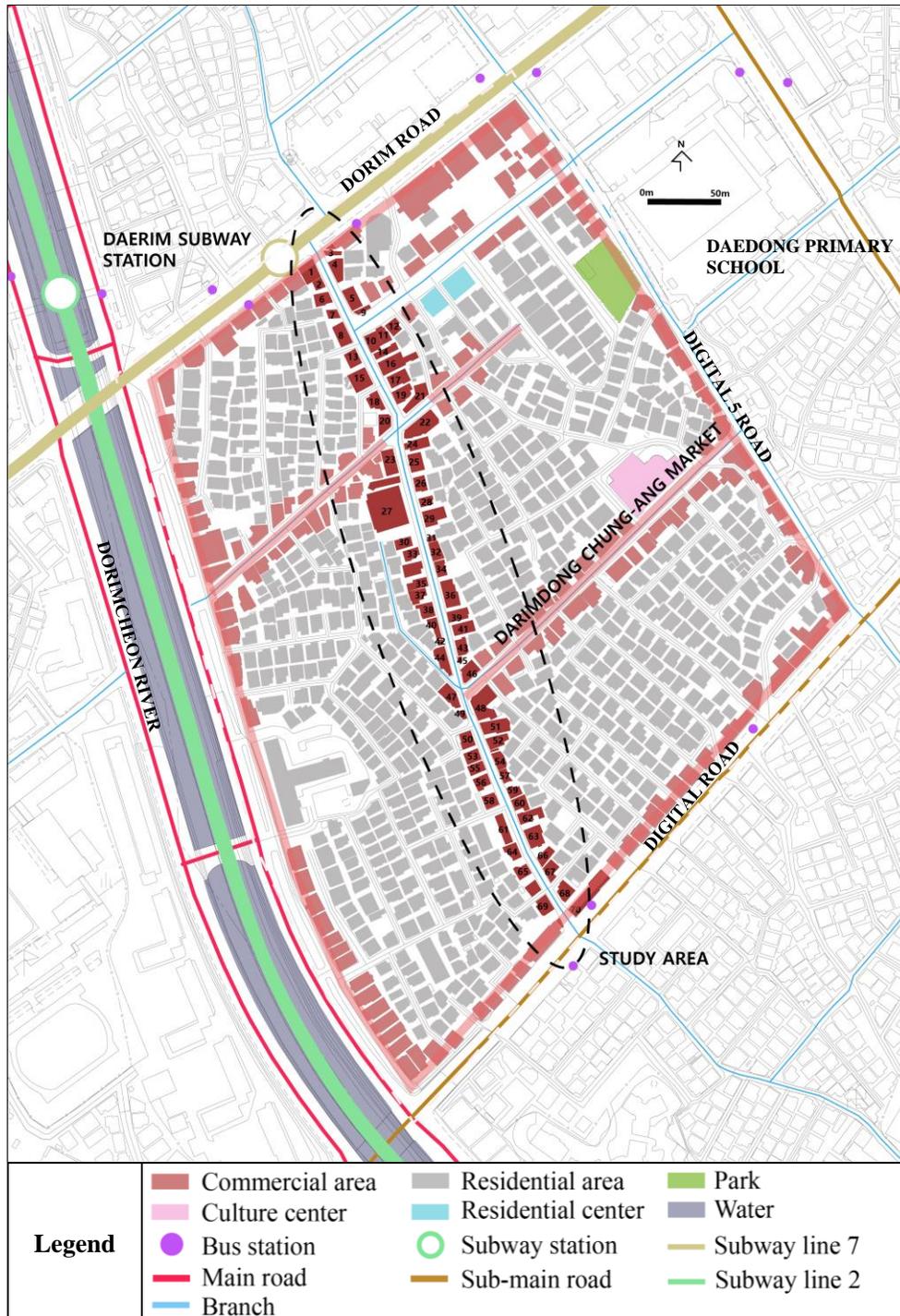
4.1.2. History background

The places or streets where Chinese people gather to live are often referred to as 'Chinatown'. Since the establishment of diplomatic relations between China and South Korea in 1992, a large number of Chinese have come to South Korea to look for work opportunities, and gradually formed a lot of Chinese inhabited settlements. In South Korea, Incheon has an official Chinatown, but there is no clear concept of Chinatown in Seoul. Before 2017, Daerim-dong was only the largest Chinese settlement. After 2017, it officially began to call this area as 'Chinatown'.

In the early 1990s, the Chinese food wholesale center formed in Daerim-dong, which attracted more and more Chinese people to gather here because of selling Chinese food and raw materials that are hard to find in other parts of Korea, gradually a large number of Chinese restaurants appeared around the food wholesale center—— Chinatown commercial street began to grow up. At the same time, a large number of Chinese people lived in the residential areas around Chinatown street, until today, it has become the largest settlement of Chinese people in Seoul. The atmosphere in this area is very similar to that in Yanbian, China. There are many restaurants selling various kinds of food, such as 'malatang', hot pot and other traditional Chinese food. The Chinese signs in this area are also very conspicuous. Almost all restaurants have Korean menus, and there are also some shops in which the customers cannot use Korean to communicate with sellers. The government planned that Daerim-dong Chinatown area in Seoul will not only be a

ordinary residential area for foreigners, but also a tourist attraction for cultural communication.

4.2. Daerim-dong Chinatown commercial street landuse



<Figure 22> Daerim-dong Chinatown commercial street block landuse

4.2.1. Block landuse

Daerim-dong Chinatown block is located in Dorim Road (도림로) in the north and Dorimcheon River (도림천) in the west, digital road (디지털로) and digital 5 road (디지털 5 로) surrounding in the east and south . In addition, the northeast is close to Seoul Daedong primary school, and the northwest is close to the transfer subway station of line 2 and line 7, Daerim-station. Most of this block is inhabited by Chinese Korean people, which has the characteristics of Chinese Korean culture.

The whole block is surrounded by continuous strip-shaped commercial facilities along the street. There is a river in the west of the block, an urban park and green space in the south of the block. At the same time, Daerim-dong residential center is adjacent to Daerim-dong Chinatown Commercial Street. This block is mainly composed of commercial buildings and individual houses, and most of the population in this block are Chinese. This street is crowded with restaurants selling local food and stores selling food ingredients where most of the shop signs in this area are mixed with Korean and Chinese. Chinese living in Daerim-dong's residential area call this street a "food street" because it is mainly cored on the catering industry. (Figure 22)

4.2.2. Street commercial landuse

Daerim-dong Chinatown is a place where Chinese people come to Korea for decades to engage in leisure or catering work, have gradually formed a mature commercial street. It used to be one of the underdeveloped areas in Seoul, but it has totally different significance to the Chinese in South Korea. Unlike the ordinary commercial street, the main users of Daerim-dong Chinatown street are the Chinese living in South Korea, so it has irreplaceable advantages in terms of food resources, raw materials and other cultural resources. After preliminary statistics, there are about 200 shops of 28 types in Daerim-dong Chinatown commercial street, including mobile agency、 food shop、 restaurant、 liquor store、 employment agency、 general-merchandise store、 cash exchange、 pub、 KTV、 house agency、 hospital、 pharmacy、 beauty care、 games facility、 service center、 food raw material market、 clothing store、 tourist agency、 bank、 pc club、 convenience store、 international logistics、 market、 photo studio、 barber shop、 kindergarten、

jewelry shop and office. (Table.8) The proportion about food business in Daerim-dong's commercial facilities is almost 40%.

<Table 8> Commercial Types Proportion

Commercial Types Proportion				
Commercial Types	Quantity	Commercial Types	Quantity	Proportion
Restaurant	53	Food Shop	23	
KTV	15	Mobile Agency	11	
Tourist Agency	9	Beauty Care	9	
Cash Exchange	9	Liquor Store	8	
Clothing Store	8	Barber Shop	7	
House Agency	6	Food Raw Material Market	5	
Games Facility	5	PC CLUB	5	
Hospital	4	General-merchandise Store	4	
Pharmacy	3	Pub	2	
Service Center	2	Convenience Store	2	
Market	2	Photo studio	2	
Employment Agency	1	Bank	1	
International Logistics	1	Kindergarten	1	
Jewelry shop	1	Office	1	

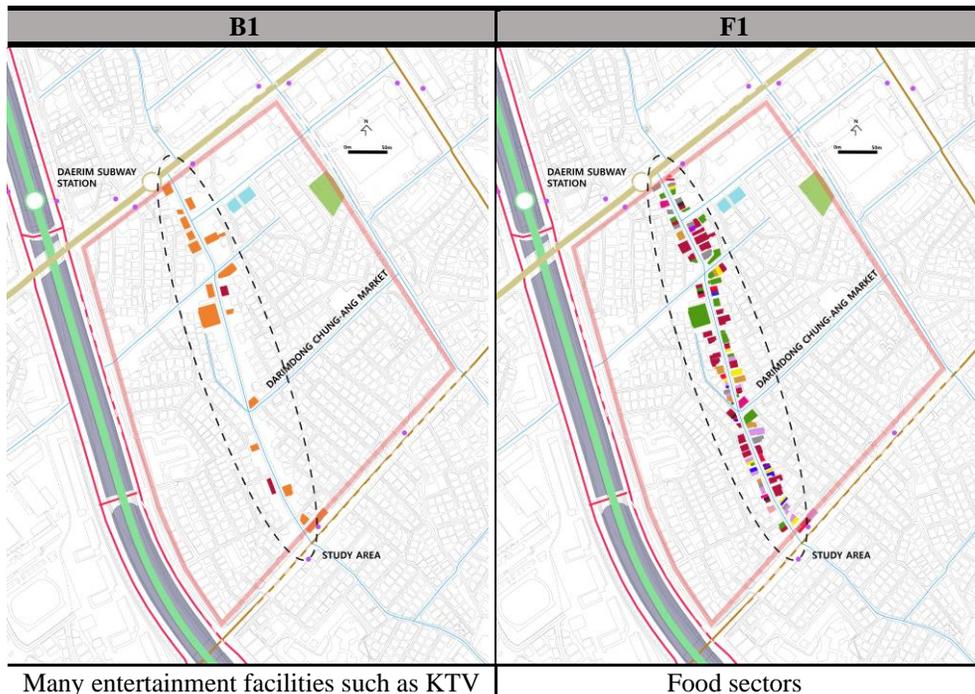
Legend
<ul style="list-style-type: none"> <li style="width: 25%;">■ Mobile Agency <li style="width: 25%;">■ Food Shop <li style="width: 25%;">■ Restaurant <li style="width: 25%;">■ Liquor Store <li style="width: 25%;">■ Employment Agency <li style="width: 25%;">■ General-merchandise Store <li style="width: 25%;">■ Cash Exchange <li style="width: 25%;">■ Pub <li style="width: 25%;">■ KTV <li style="width: 25%;">■ House Agency <li style="width: 25%;">■ Hospital <li style="width: 25%;">■ Pharmacy <li style="width: 25%;">■ Beauty Care <li style="width: 25%;">■ Games Facility <li style="width: 25%;">■ Service Center <li style="width: 25%;">■ Food Raw Material Market <li style="width: 25%;">■ Clothing Store <li style="width: 25%;">■ Tourist Agency <li style="width: 25%;">■ Bank <li style="width: 25%;">■ PC CLUB <li style="width: 25%;">■ Convenience Store <li style="width: 25%;">■ International Logistics <li style="width: 25%;">■ Market <li style="width: 25%;">■ Photo studio <li style="width: 25%;">■ Barber Shop <li style="width: 25%;">■ Kindergarten <li style="width: 25%;">■ Jewelry shop <li style="width: 25%;">■ Office

The commercial types and distribution is driven by the demand of consumer groups. The main consumers in Daerim-dong commercial street are Chinese immigrants in South Korea. Most of the Chinese living in Daerim-dong are working in the service sector or as temporary workers in factories or construction companies. Not only the food sectors, other commercial facilities are also fully adapted to the living conditions of Chinese immigrants, such as the cash exchange, house agencies, employment agencies, and travel agencies handling immigration matters. At the same time, each clothing store is also selling a large number of work clothes for the workers, and all kinds of entertainment facilities must support bilingual services.

<Table 9> Commercial characteristics of Chinatown immigration area

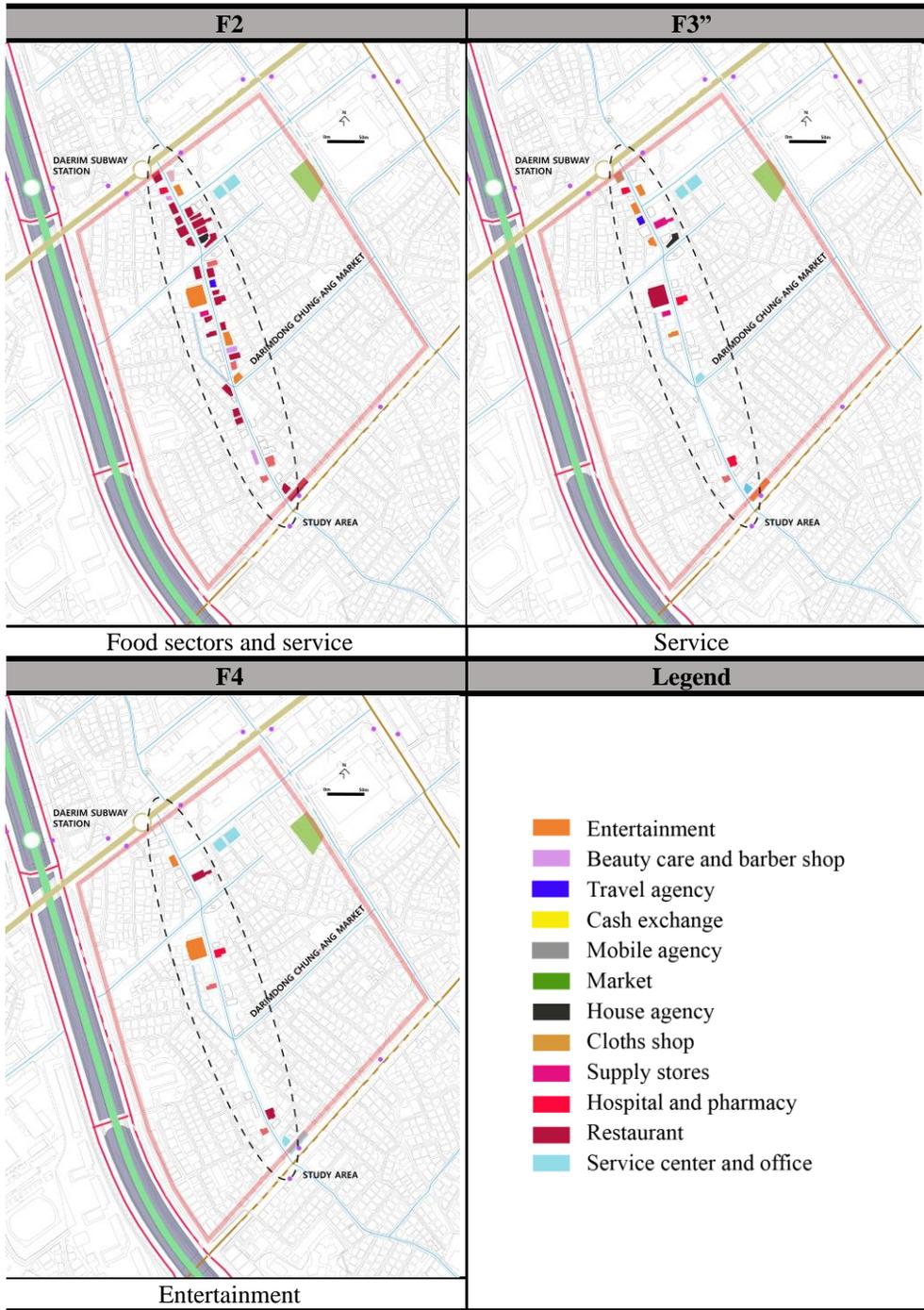
Basic Requirements	Needs of Foreign Residents	Cultural and Entertainment Needs	Service Facilities
1. Food from Hometown (materials and production) 2. Cloths (Daily and work) 3. Mobile Agency 4. Hospital and Pharmacy 5. Beauty Care and Barber Shop 6. General-merchandise Store	1. Cash Exchange 2. House Agency 3. International Logistics 4. Employment Agency 5. Tourist Agency	1. KTV (Bilingual) 2. Pub 3. Games Facility 4. PC CLUB	1. Foreigners Service Center 2. Bank

There are 15 KTVs on the underground floor. The first floor of the street space, excluding buildings that have been demolished or are under repair, there are total 126 operating stores at present, in which 35 Chinese restaurants, 21 food raw material markets and shops, 10 cash exchange and logistics, 3 hospitals and pharmacies, 6 travel agencies, 11 beauty care shops, 5 house agencies, 8 clothing stores, 12 mobile agencies etc. The second-floor space as the extension space of the first floor, some space on the second floor has the same functions as the space on the first floor. And due to the location of the third and fourth floors, a lot of space is unused. (Figure 23)



Many entertainment facilities such as KTV

Food sectors

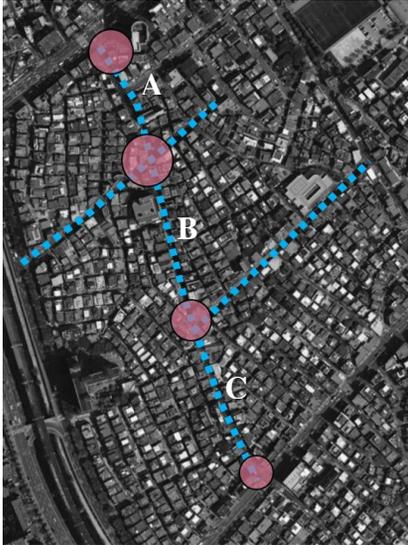


<Figure 23> Street commercial landuse

4.3. Daerim-dong Chinatown commercial street space

4.3.1. Street space

(1) Space structure:



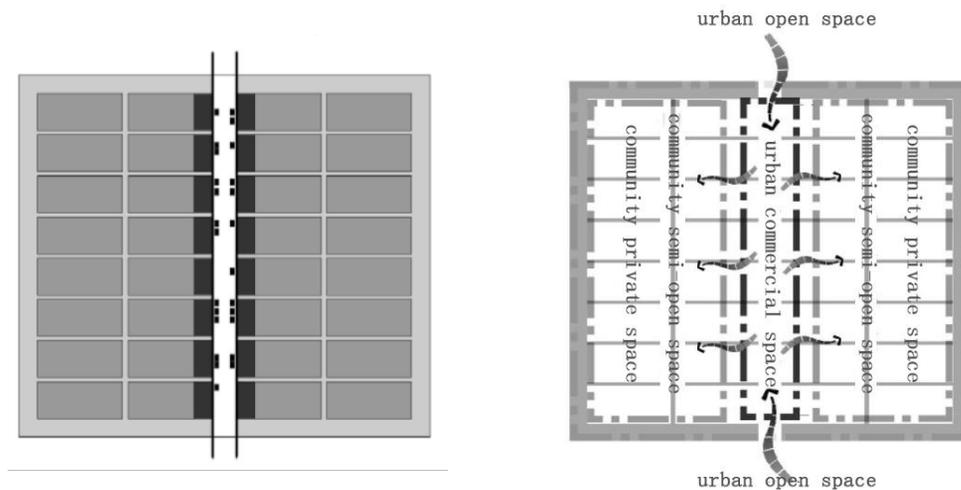
<Figure 24> Daerim-dong
Chinatown street structure

Chinatown commercial street is straight shape on the whole, this street is divided into 3 sections and 4 points, north starting point—— subway station exit 12th; the 1st intersection——Daerimcheonro 11-gil (도림천로 11 길) ; the 2nd intersection—— Daerim-dong central market and the southern ending—— digital road (디지털로) . Totally about 480 meters long, about 7 meters in width. Section A is nearest to the exit of the subway station. There is a large flow of people and active commercial activities. Section B is connected to the central market of Daerim-dong Chinatown, where many food raw

materials markets and coarse processed food stores are gathered. Section C is at the end of this street. Due to the location, there is less visitors on the whole, and there are more relevant service agencies for the migrant population.

From the overall spatial layout of Daerim-dong Chinatown commercial street, it presents the spatial characteristics of ‘business relying on the street’. On the other hand, among the Chinatowns in the world, at least one street in Chinatown block is a special section of the city road passing through the Chinatown block, which embodies the specific life customs of Chinese immigrants, and is also the focus of multi-cultural complexity in the block. Daerim-dong Chinatown commercial street located on the central road of the residential area, connects the inner space of the city and the whole block, which belongs to the public or semi-public space. (Figure 25) Seeing from the spatial layout, the commercial facilities connect with the city, serving both the interior of the neighborhood and other urban residents, and play the role of serving people's livelihood internally as well as exchanging information and culture externally.

Meanwhile, Daerim-dong Chinatown commercial street generally has the characteristics of ‘stall in the front and shop behind’. The shops in the commercial street are relatively small scale, and the distribution of commercial types is relatively concentrated, mostly related to the catering service. On both sides of the street, snack stalls are flexible and have special windows to show the food making process so as to sell goods more. With the development of this area, the commercial types gradually increase, and the functions of different floors in the buildings combine complexly, creating a lively commercial atmosphere.



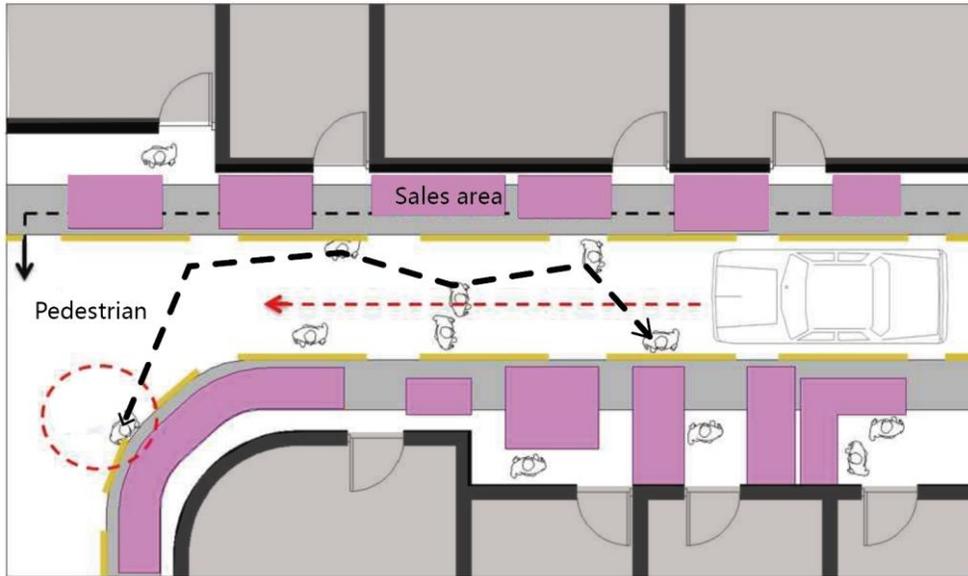
<Figure 25> The spatial layout of Daerim-dong Chinatown commercial street

(2) Street plan:

As one of Seoul's commercial streets, Daerim-dong Chinatown commercial street plays a special roll in urban space compared with other city commercial street because of its cultural characteristics. Daerim-dong Chinatown commercial street is located in the residential area, so it is an important gateway hub for the transition from private space to urban open space. In another words, it belongs to urban semi open space.

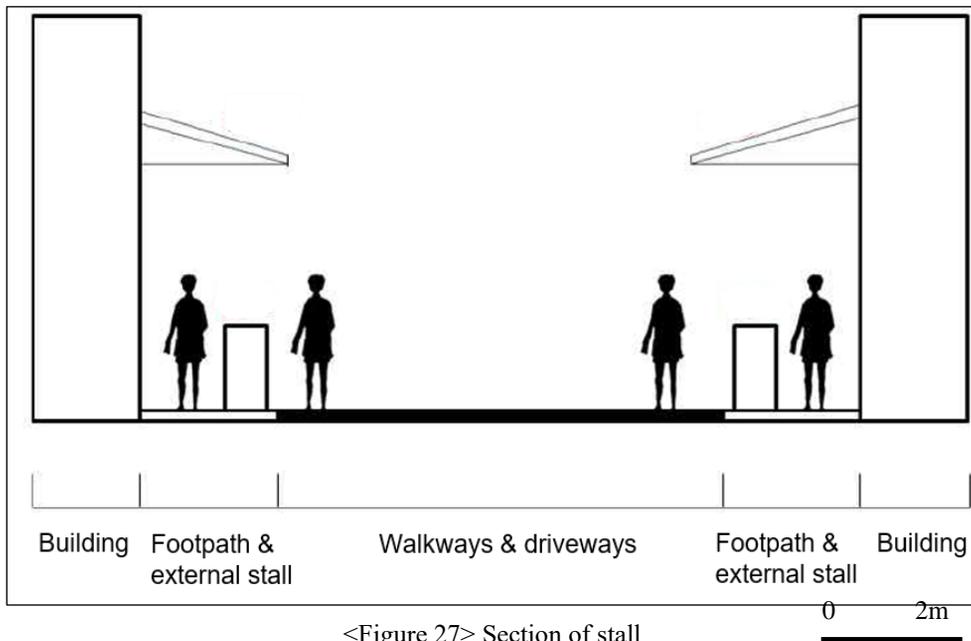
This commercial space is divided into two parts: building space and street space. In Daerim-dong Chinatown Commercial Street, most of the building space adopts the method of adding tents, which expands the sales area but reduces the utilization space of the road space. These Chinese food stalls are installed on the pedestrian road and can be used not only as a space for product sales and display, but also as a space for cooking. In this way, as it is set up in various Chinese stores, the road space is smaller than before. Figure 26 shows that the tents occupy the walking road, so that most pedestrians cannot

use the pavement. In a limited space, the pedestrian flow line and the traffic flow line are excessively crossed.



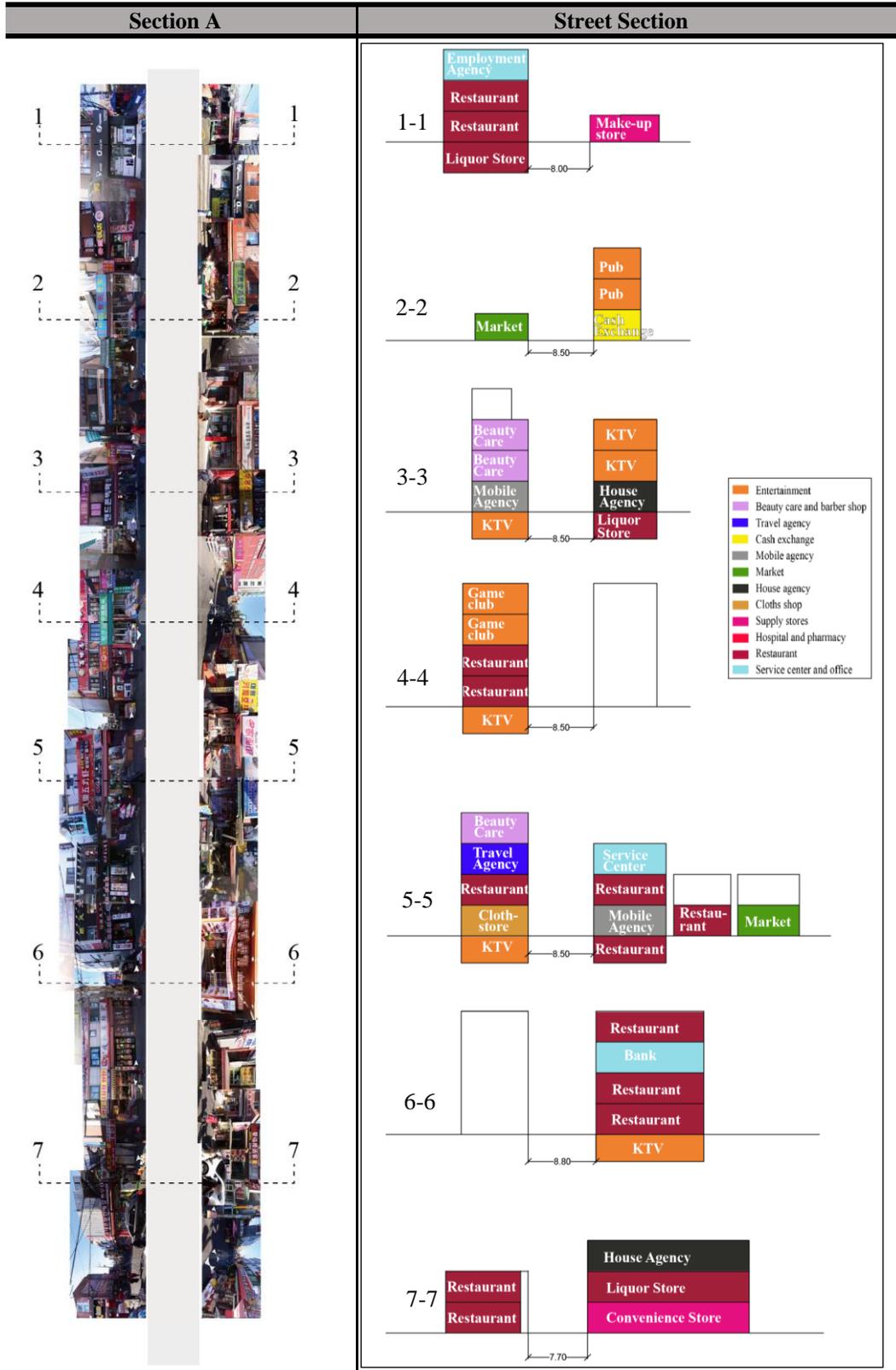
<Figure 26> Commercial street space part plan 0 5m

(3) Street section:

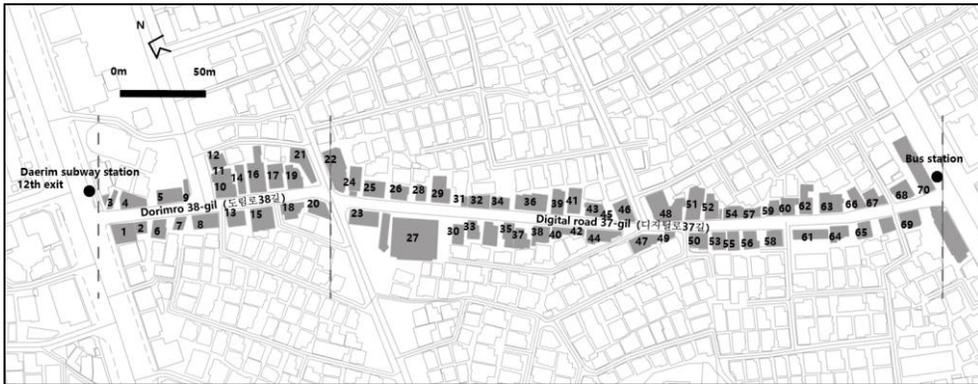


<Figure 27> Section of stall 0 2m

<Table 10> Section of Chinatown street (A section)



4.3.2. Building plan



<Figure 28> Building number

According to figure 28 building number information, lot area、 building area、 building coverage ratio、 total floor area、 FAR、 height、 numbers of floors data to get building information summary (Table 11).

The results of the survey on the construction of Daerim-dong Chinatown commercial street show that the average building coverage ratio is 71.7%, slightly higher than the maximum building coverage ratio (60%) in ordinary commercial areas stipulated by Seoul city regulations. The average floor area ratio is 189.0%, and the average number of floors is 2.7. Considering that the width of the roadway passing through the commercial street is 4-8 meters, it can be seen that the building structure is relatively dense. The mean value of D/H is 0.94, which is a slightly depressing value.

<Table 11> Buildings data

NO.	BUILDINGS DATA							
	Lot area (m ²)	Building area (m ²)	Building coverage ratio (%)	Total floor area (m ²)	FAR	Height (m)	Numbers of floors	D/H
1	205.3	149.8	73.0%	599.2	291.9%	14.9	4	0.47
2	77.6	46.9	60.4%	46.9	60.04%	3.5	1	2.00
3	59.7	33.8	56.6%	33.8	56.6%	3.5	1	2.00
4	158.7	116.0	73.1%	347.9	219.2%	10.5	3	0.67
5	227.9	124.6	54.7%	373.7	164.0%	10.3	3	0.68
6	133.8	91.0	68.0%	364.2	272.2%	17.0	4	0.41
7	81.3	47.3	58.2%	189.2	232.7%	14.2	4	0.49
8	151.8	128.4	84.6%	513.6	338.3%	13.6	4	0.51

9	33.6	32.1	95.6%	32.1	95.6%	3.2	1	2.19
10	123.5	109.1	88.4%	327.4	265.1%	12.1	3	0.58
11	102.0	77.1	75.6%	154.2	151.2%	7.0	2	1.00
12	115.9	76.5	66.0%	153.0	132.0%	9.4	2	0.74
13	148.1	92.7	62.6%	370.9	250.4%	13.5	4	0.52
14	80.2	78.0	97.2%	156.0	194.5%	9.5	2	0.74
15	285.7	173.8	60.8%	695.3	243.4%	14.0	4	0.50
16	330.4	208.9	63.2%	835.6	252.9%	13.6	4	0.51
17	171.4	121.5	70.9%	243.0	141.8%	7.6	2	0.92
18	166.5	100.4	60.3%	401.7	241.3%	12.9	4	0.54
19	156.1	112.0	71.8%	336.1	215.3%	10.1	3	0.69
20	111.2	98.8	88.9%	197.7	177.8%	6.3	2	1.11
21	212.8	142.6	67.0%	427.9	201.1%	13.9	3	0.50
22	289.4	235.5	81.4%	1177.6	406.9%	17.7	5	0.40
23	226.8	146.9	64.8%	587.6	259.1%	15.1	4	0.46
24	161.3	95.6	59.3%	191.2	118.5%	8.0	2	0.88
25	172.0	115.7	67.3%	231.4	134.5%	6.7	2	1.04
26	105.7	81.2	76.8%	243.7	230.5%	8.9	3	0.79
27	1060.4	642.0	60.5%	3210.1	302.7%	23.2	5	0.30
28	101.3	55.9	55.2%	223.5	220.7%	15.1	4	0.46
29	220.1	150.0	68.1%	750.0	340.7%	23.2	5	0.30
30	135.5	78.2	57.7%	312.8	230.9%	11.3	4	0.62
31	29.9	21.1	70.5%	21.1	70.5%	3.1	1	2.26
32	111.9	91.4	81.7%	182.8	163.3%	9.9	2	0.71
33	133.5	73.6	55.1%	147.2	110.2%	6.5	2	1.08
34	100.4	91.4	91.0%	182.8	182.1%	7.9	2	0.89
35	170.5	86.8	50.9%	347.0	203.5%	11.4	4	0.61
36	245.7	174.4	71.0%	697.5	283.9%	12.3	4	0.57
37	145.3	92.0	63.3%	92.0	63.3%	7.0	1	1.00
38	119.5	98.6	82.5%	295.7	247.5%	8.1	3	0.86
39	150.7	104.7	69.5%	418.9	278.0%	14.1	4	0.50
40	129.5	74.6	57.6%	149.3	115.3%	6.8	2	1.03
41	174.2	113.1	64.9%	339.3	194.8%	11.2	3	0.63
42	18.4	14.2	77.0%	14.2	77.0%	3.2	1	2.19
43	112.3	82.0	73.0%	164.0	146.1%	6.6	2	1.06
44	143.1	125.8	87.9%	251.5	175.8%	7.2	2	0.97
45	11.9	10.6	89.2%	10.6	89.2%	3.2	1	2.19
46	175.9	114.5	65.1%	457.8	260.3%	14.1	4	0.50
47	188.2	129.5	68.8%	259.1	137.7%	5.3	2	1.32
48	195.5	162.0	82.8%	162.0	82.8%	3.5	1	2.00
49	28.7	26.5	92.4%	26.5	92.4%	3.5	1	2.00

50	121.5	94.4	77.7%	188.7	155.3%	6.5	2	1.08
51	184.7	166.8	90.3%	166.8	90.3%	3.5	1	2.00
52	128.4	102.9	80.2%	102.9	80.2%	3.5	1	2.00
53	119.3	83.7	70.2%	167.4	140.3%	7.8	2	0.90
54	121.2	84.3	69.6%	168.6	139.1%	5.9	2	1.19
55	80.6	76.9	95.4%	153.7	190.7%	6.0	2	1.17
56	146.1	87.1	59.6%	174.2	119.2%	6.7	2	1.04
57	62.2	51.3	82.4%	51.3	82.4%	4.1	1	1.71
58	107.9	85.0	78.7%	339.8	315.0%	13.5	4	0.52
59	102.1	61.2	60.0%	183.7	179.9%	11.0	3	0.64
60	108.7	88.7	81.6%	177.4	163.2%	6.2	2	1.13
61	208.3	116.3	55.8%	581.4	279.1%	14.8	5	0.47
62	157.2	118.2	75.2%	236.3	150.3%	6.8	2	1.03
63	236.7	150.1	63.4%	600.4	253.7%	11.5	4	0.61
64	114.6	88.2	77.0%	176.4	153.9%	6.9	2	1.01
65	125.7	77.8	61.9%	311.1	247.5%	11.5	4	0.61
66	128.7	79.3	61.6%	317.0	246.3%	10.7	4	0.65
67	116.0	89.6	77.2%	179.1	154.4%	6.4	2	1.09
68	148.9	103.9	69.8%	415.5	279.0%	11.5	4	0.61
69	111.7	106.8	95.6%	213.5	191.2%	8.9	2	0.79
70	498.2	255.5	51.3%	1022.0	205.1%	14.1	4	0.50
Average	158.9	108.8	71.7%	341.0	189.0%	9.6	2.7	0.94



<Figure 29> Examples of stall architecture

Most of the stores adopt the way of selling space outside, which divides the food processing and display function into different zones, makes the selling area closer to the consumers to the greatest extent, and makes the consumers more convenient to select and purchase goods. At the same time, the external stall enclosure becomes a semi open space, so as to avoid the walking routes of the stall owner and the consumer crossed.

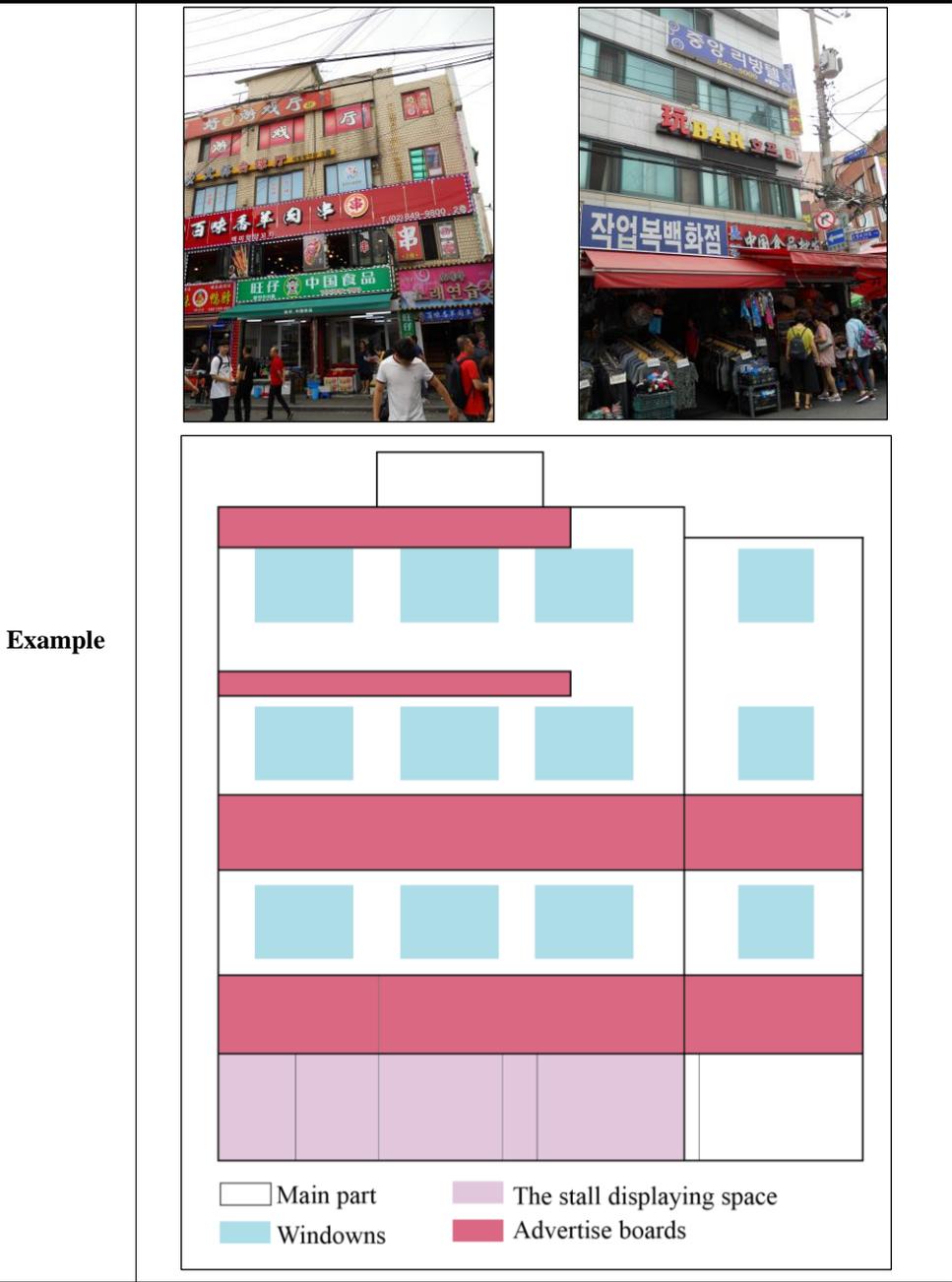
4.3.3. Building elevation

(1) Building elevation

For the buildings of Daerim-dong Chinatown commercial street, the building elevation is mainly composed of three parts: the main part, the subsidiary part and the embellishment part. The main part of the building is the most proportion of the area in the building elevation, which shows the overall atmosphere of the building. The subsidiary part of the commercial building, as the display part of the architectural characteristics, focuses on the display function and well connection with the urban space and traffic system. The first-floor space of Daerim-dong commercial buildings keep a high degree of openness, and many buildings combine the entrance space with the stall space. As a Chinatown commercial street in the city, the embellishment part of the building's elevation there, which also has the factor of reflecting Chinese culture. Large areas outside the buildings are hung with eye-catching billboards, with bright color, which plays an important role in attracting customers, and is also conducive to the advertising of commercial facilities.

<Table 12> Building elevation composition

Elevation composition	Definition	Content
Main part	The structure of background part, occupy larger area, forming integral space	Wall
Subsidiary part	The subsidiary part occupies the area next to the main part, showing different characteristics	Roofing, window frames, doors, balconies, etc.
Embellishment part	Emphasize small area part	Walls (some small areas), advertise boards, decoration etc.



(2) Advertise boards

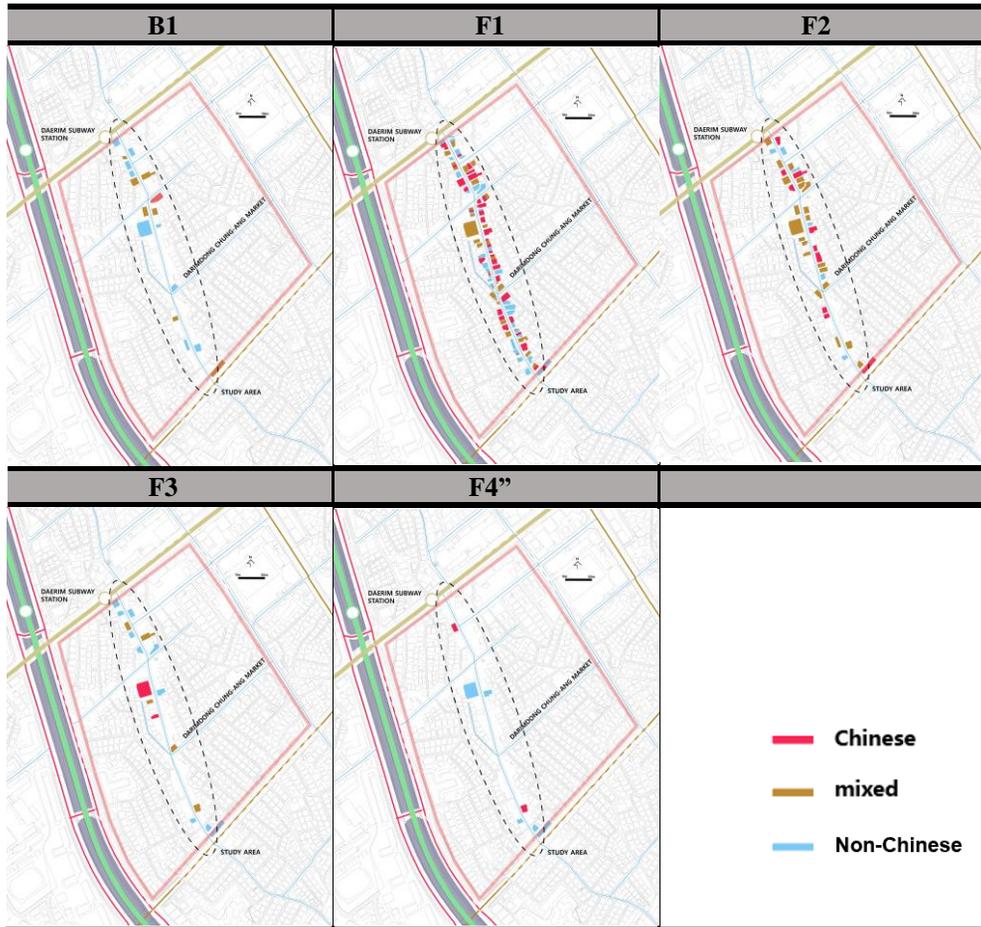
According to language classification, the billboards of Daerim-dong Chinatown stores can be divided into three categories: Chinese, non-Chinese and mixed language. As there are different shops in different floors of the same building, there are many advertise boards hanging on the same building. From the perspective of quantity, the distribution of billboards on the first

floor is relatively concentrated, and the proportions of billboards of the three language categories are relatively equaled.

<Table 13> The number of advertise boards in three languages

Language	Location	Number	Proportion
Chinese	B1	1	34.53%
	F1	60	
	F2	12	
	F3	2	
	F4	2	
Non-Chinese	B1	9	34.08%
	F1	46	
	F2	6	
	F3	10	
	F4	5	
Mixed	B1	7	31.39%
	F1	37	
	F2	21	
	F3	5	
	F4	0	

As shown in figure 30, although the total number of advertise boards in different languages between different floors is roughly the same, there are some differences in different distribution of advertise boards. Chinese billboards are mainly distributed in the first floor, while the frequency located in the third and fourth floors is very low. Non-Chinese billboards are also concentrated in the first floor, but there are also many of them in the three and four floors and also mixed languages billboards are more concentrated in the first and second floors.



<Figure 30> The distribution of advertise boards in three languages

Advertise boards as an important part of this commercial street, seeing from the color use of billboards in Daerim-dong Chinatown commercial street, according to preliminary statistics, black, white, yellow, blue and red are the main color elements of billboards, of which 71.7% use red color elements. According to table 14, the most commonly used color combinations are red + white, black + white, black + red + yellow, black + red, white + red, red + white + yellow, blue + white etc.

<Table 14> Advertise boards color combination

Color combination		Example
Background	Text	
Red	White	

Red	White+yellow	
Black	White	
Black	Red+yellow	
Black	Red	
White	Red	
Blue	White	

(3) Chinese decorations



<Figure 31> Chinese lanterns



<Figure 32> Chinese style roofs

From the aspect of building elevation, Chinese style building components such as ‘Dougong’, curly eaves and sloping roof are usually used in the buildings of the Chinatown street. In Daerim-dong Chinatown commercial street, although the main body of the house has been less changed like Chinese style buildings, on the outer wall of the buildings, there are also many cultural decorative elements such as Chinese tiles and lanterns.

4.3.4. Open space and public facilities

<Table 15> Open space and public facilities

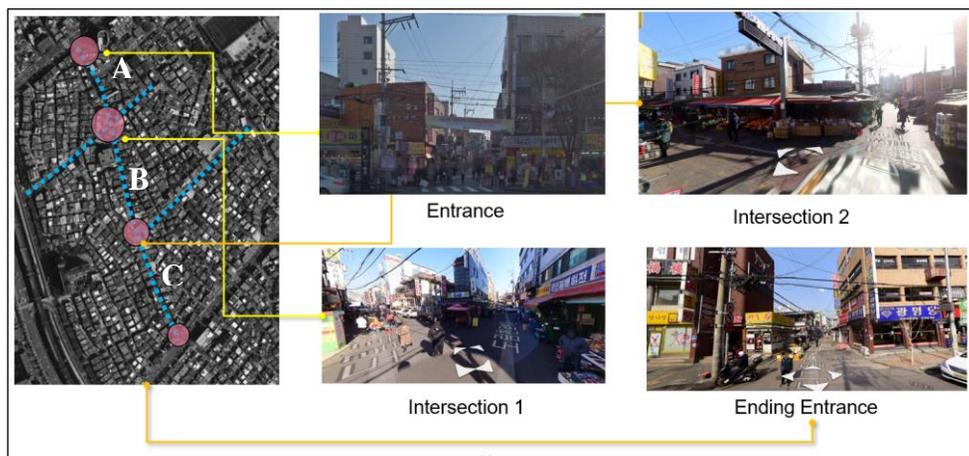
Road space	Public underground parking
	
Coexistence of pedestrian and vehicles	
Lack of open space	Indicator
	
No space for rest and stay	Bilingual signs

There is a lack of open space for visitors to rest and stay in the whole street area. And the traffic environment of the coexistence of pedestrian and

vehicles also makes the walking environment more chaotic. About public service facilities, there are several public underground parking entrances in this commercial street and some Chinatown style service facilities such as road signs, use bilingual Chinese and Korean. However, there are lack some public service facilities like trash cans, rest benches, sunshades or rain shelters etc.

4.3.5. Landscape nodes

The Daerim-dong Chinatown commercial street is a straight linear street with the road as the axis and the buildings on both sides enclosed along the road, which has a strong sense of direction and guidance. But this kind of linear street is too transparent and monotonous, clear at a glance, without visual interests, lack of space changes. At the same time, this street is coexistence of pedestrian and vehicles, with a certain hidden safety concern.



<Figure 33> Street landscape nodes space

From the view of the entrance space, the entrance space of many Chinatown streets around the world, such as Busan Chinatown, are decorated with Chinese style archways using light red and yellow colors and have certain national characteristics. As the starting space of the street, the entrance is the prelude of the commercial street space. It has a prominent role in urban form and spatial environment, which can attract people and indicate the beginning and spatial scope of the street. However, there is no obvious "gate" at the entrance of Daerim-dong Chinatown street.

The middle section (section B) of Daerim-dong commercial street is the intersection of two roads, which is also the highlight space of the commercial street and has more customers concentrated here. However, on such an important node, there are no any landscape facilities, nor the formation of public square space. The whole street is too empty to focus the views. And the street environment is dirty and disordered, which has a negative impact on the street landscape, and there are no landmarks or signs on the street, which cannot guide for the visitors who come here for the first time. At the ending space of the street, due to less people flow, the landscape facilities are not in good condition and there is no obvious landscape design for the ending entrance.



<Figure 34> Chinese style archways of Busan Chinatown

into: shopping, walking, rest, entertainment, dining, communication, observation, photography etc. The activities that often appear in the environment reflect people's potential demand for environmental conditions. In Daerim-dong Chinatown, people sit on the roadside for a rest, which actually reflects that people's demand for rest space has not been met. As a commercial street in Chinatown, Daerim-dong has a sense of belonging and ownership, in other words, a potential sense of territory. The street is not only a place to meet the most basic needs of life, but also a place for people to socialize interaction activities and experience environmental fun.

<Table 16 > People behavior in Daerim-dong Chinatown

<p style="text-align: center;">Shopping</p> 	<p style="text-align: center;">Walking</p> 
<p style="text-align: center;">Street vendors</p>	<p style="text-align: center;">The chaotic traffic line</p>
<p style="text-align: center;">Rest</p> 	<p style="text-align: center;">Entertainment</p> 
<p style="text-align: center;">People sit on the roadside</p>	<p style="text-align: center;">Prosperous streets at night</p>
<p style="text-align: center;">Dining and communication</p> 	<p style="text-align: center;">Observation and photography</p> 
<p style="text-align: center;">Dining space is also a communication space</p>	<p style="text-align: center;">Pedestrians Stop and observe</p>

4.5. Summary

In the early 1990s, the Chinese food wholesale center formed in Daerim-dong, which attracted more and more Chinese people to gather here because of selling Chinese food and raw materials that are hard to find in other parts of Korea, gradually a large number of Chinese restaurants appeared around the food wholesale center—until now Chinatown commercial street has become the largest Chinese settlement in Seoul.

Daerim-dong Chinatown block is mainly composed of commercial buildings and individual houses. Daerim-dong Chinatown commercial street unlike the ordinary commercial street, the main users are the Chinese living in South Korea, so it has irreplaceable advantages in terms of food resources, raw materials and other cultural resources. The proportion about food business in Daerim-dong's commercial facilities is more than 40%. As one of Seoul's famous commercial streets, Daerim-dong Chinatown commercial street belongs to urban semi open space, which is an important gateway hub for the transition from private space to urban open space.

Many of the stores in this street sell goods outside, which divides the food processing and display function into different zones. According to the building elevation, Chinese style building components such as ‘Dougong’, curly eaves and sloping roof are usually used in the buildings in Chinatown street. However, in Daerim, Seoul, the main body of the house has been less changed by culture, and the most influential part of the cultural landscape is mainly concentrated in the outer surface and outer space of the building. The overall interface of the block strengthens the horizontal line through the big signboard, presents certain landscape continuity, and also focuses on the use of bright red and yellow colors, setting off a certain cultural atmosphere. Many of the external walls of the single building are hung with bilingual billboards in Chinese and Korean and several Chinese decorations, and because most of the consumers here are Chinese in South Korea, most of the consumption communication is in Chinese, forming a specific language landscape.

From the whole street, Daerim-dong Chinatown commercial street commercial lacks landmark landscape nodes. Moreover, there is a lack of open space for visitors to rest and stay in the whole street area and also short

of some public service facilities like trash cans, rest benches, sunshades or rain shelters etc.

According to above, the landscape factors of the identifiability of Daerim-dong Chinatown are mainly composed of five aspects: road space, building function, building elevation and decoration, landscape nodes, open space and public infrastructure. Combined with the Gestalt psychology theory, the characteristics of identifiability factors in Daerim-dong are derived as follows:

<Table 17> characteristics of identifiability factors

Gestalt psychology theory	Landscape identifiability factors	Characteristic
<ul style="list-style-type: none"> • Proximity and continuity • Integrity and closure tendencies • Similarity 	Road space (space and people behavior)	Poor road environment and scale, not easy to form high identifiability
<ul style="list-style-type: none"> • Graphics and background • Proximity and continuity. • Integrity and closure tendencies 	Building function	Unique, with the highest identifiability under the premise of clear commercial purchase intention
<ul style="list-style-type: none"> • Graphics and background • Proximity and continuity. • Similarity 	Building elevation and decoration	Distinctive and striking display is easy to attract attention, and bilingual billboards are attractive to Chinese consumers' mother tongue, thus forming high identifiability
<ul style="list-style-type: none"> • Proximity and continuity. • Similarity 	Landscape nodes	Lack of facilities is difficult to form a higher identifiability.
<ul style="list-style-type: none"> • Proximity and continuity. • Similarity 	Open space and public infrastructure (street lamp, Indicator...)	It has high continuity, but the infrastructure of Daerim-dong Chinatown is not regional and has low identifiability

Chapter 5. Landscape identifiability features of Daerim-dong Chinatown commercial street

5.1. Landscape visual identifiability

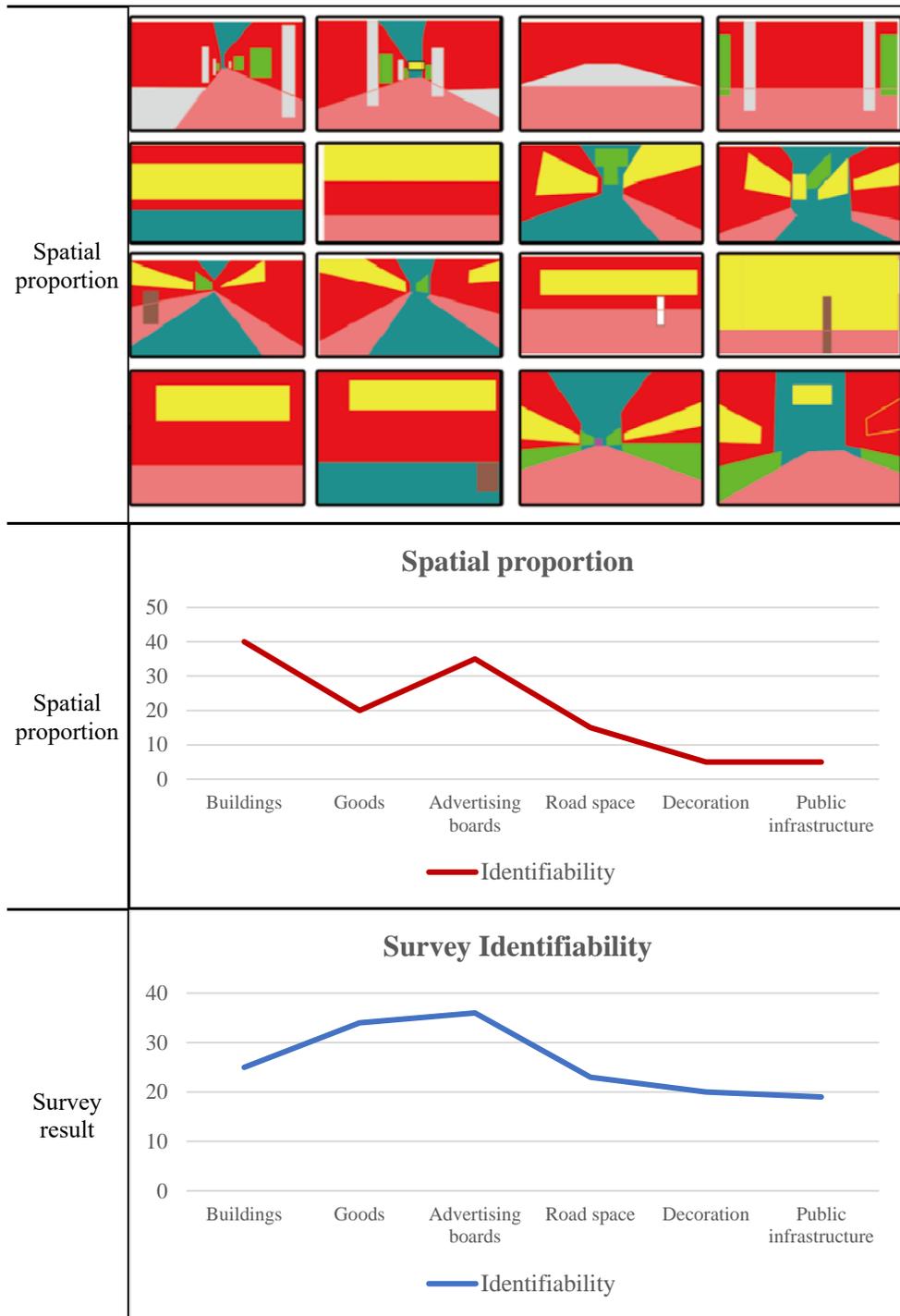
5.1.1 Enlarged visual spatial proportion

In the questionnaire survey of Chapter 3, the landscape factors with high identifiability in the Daerim-dong Chinatown commercial street are ‘Diet and entertainment facilities’, ‘the board mixed Korean and Chinese’, ‘stall space’ and ‘Chinese cultural atmosphere’. Meanwhile, Chapter 4 shows that Daerim-dong Chinatown commercial street has the corresponding landscape space characteristics in five different aspects (road space, building function, building elevation and decoration, building elevation and decoration, landscape nodes, open space and public infrastructure). So what is the relationship between these spatial landscape space characteristics and the results of the identifiability survey?

Visual stimulation is one of the factors directly affect landscape identifiability. The cognition to landscape space is that people first receive visual stimulation through their eyes, and then transmit it to the brain for comparison with the previous cognition, and then retain the memory in the brain. The high identifiability of the commercial street in Daerim-dong Chinatown commercial street is highly correlated with the enhancement of visual stimulation of landscape factors. Firstly, select a site in the commercial street, and select the four directions of the site from the East, West, North and south to form four pictures and count the proportion of each landscape factors in each commercial street, and then count the comparative relationship between the proportion of each landscape factors in the pictures and the proportion of the impressive landscape factors in the commercial street.

<Table 18> Spatial proportion of each landscape factors

Proportion of each landscape factors			
East view	South view	West view	North view
			



Compared with the graph of spatial proportion and questionnaire result, the fluctuation trend of the two curves is almost similar, it can be concluded that the landscape spatial proportion and landscape identifiability basically conforms to the positive correlation. In others words, more visual stimulation

higher identifiability. However, there are great differences in the aspect of building scale. Due to the huge size of the building, it occupies a high proportion in the sight area. However, although Daerim-dong is a Chinatown cultural commercial street, the main body of the buildings have been less changed like Chinese style buildings, so that the highest score is not get in the questionnaire survey.

5.1.2. Landscape visual contrast and coordination

According to gestalt's psychology, the contrast between the graphics and background and continuous coordination of space are the important factors that affect the landscape identifiability. Through the ways of strengthening the exhibition space, creating bright color atmosphere and space function combination, the commercial street of Daerim-dong Chinatown has reflected landscape visual contrast and coordination.

<Table 19> Landscape visual identifiability features in Daerim-dong Chinatown

Landscape visual identifiability features in Daerim-dong Chinatown	
Visual contrast	<ul style="list-style-type: none"> • Emphasize the exhibition function of space • Use bright colors • Functional composite
Visual coordination	<ul style="list-style-type: none"> • Continuity of street space • Functional integrity

More exhibition space more spatial interaction. Exhibition space is the directly space of commodity display and is also the basic or main space of commercial exhibition. Commercial exhibition activity is to convey the purpose of commodity display by visual feeling and language expression such as shape, color and space. We should not only consider the scale of human, but also consider the types and shape of commodities, deal with the relationship between goods and customers, customers and space, focus on visual effects so as to attract people's attention and provide better experience and deep interests of shopping and get well physical and mental feelings. In Daerim-dong Chinatown commercial street, most of the commodities are food raw materials and daily necessities goods from mainland of China. This kind of commodities are small in scale but have various types, and need

relatively more exhibition space. The stores in Daerim-dong Chinatown adopt like canopy devices to add commodity display space along the street. At the same time, the transparent glass window is also used in the indoor display area to show the production process and the whole appearance of commodities, which plays a well role in attracting customers.



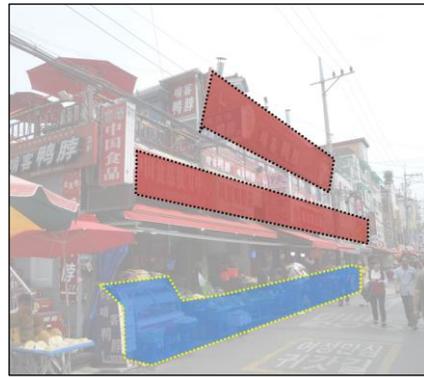
<Figure 36 > The exhibition space of stores

Color geography is a theory of practical applied color theory founded by Jean Philippe Lang Colo in 1960s, a famous French colorist and master of color designer. He believes that the building colors of different types are the result of the interaction and combination of local materials and local traditional colors. Color psychology is the first intuitive reflection in brains which is formed by people see specific colors through their eyes. Different colors give customers different psychological feelings, also can make different life emotion. In Daerim-dong, the main colors of the building mainly retain the concise colors of Korean architecture, while the auxiliary



<Figure 37> Color composition of Daerim-dong Chinatown street

colors of the buildings establish the bright color atmosphere of the street through a large area of bright color billboards and various colorful goods. Although the brightly decorative colors are only used in the small area of the building elevation, it is flexible in position and an important part of the street colors composition.



<Figure 38> Continuity of street space

Meanwhile, Daerim-dong Chinatown street has high visual and functional continuity in parallel direction

5.2. Landscape cultural identifiability

5.2.1. Regional cultural landscape

Cultural landscape is a pattern in which cultural groups act on the natural environment. Culture is the agent, natural environment is the medium, and cultural landscape is the result. The regional cultural landscape and the landscape environment it constitutes will influence the people involved in landscape environment unconsciously in thought, psychology and behavior, thus inspiring a new environmental experience, and constantly changing and developing in the integration with foreign culture. Table 20 lists some of the Chinese-style landscapes symbols and their proportions in the commercial street of Daerim-dong Chinatown. Although Daerim-dong Chinatown street does not have a complete structure foundation of regional cultural landscape like the San Francisco Chinatown, it can also be seen that its spontaneous growth process also depends on the regional cultural landscape as the foundation.

<Table 20 > Regional cultural landscape in Darim-dong Chinatown

LANDSCAPE FACTORS	CHINESE CULTURAL SYMBOL		PROPORTION
Architecture	Modelling	Chinese hipped roof	0.13%
	Color	Red	21.70%
		Yellow	12.50%

Stall space	Modelling	Outdoor	12.5%
		Semi-indoor	60.32%
		Indoor	25.23%
Advertise board	Language	Chinese	34.53%
		Non-Chinese	34.08%
		Mixed	31.39%
	Color	Red	71.70%
		Yellow	30.63%
Decoration	Particular types		1.04%

Daerim-dong Chinatown is also called another Yanbian city by some Chinese immigrants. They are very similar in block structure, business functions, language environment, etc. Chinatown block is the projection of Chinese life mode in foreign countries. All Chinese immigrants who consume or live in Daerim-dong Chinatown have a sense of belonging to their hometown, which also greatly strengthens the emotional cognition of the regional cultural factors in Daerim-dong Chinatown commercial street.

5.2.2. Food culture as the leading factor

Restaurants in Daerim-dong Chinatown sell malatang, mutton shashlik, Sichuan hotpot, Chinese pork dishes, etc. those which are popular for Chinese people. At the same time, these restaurants often use pungent spices such as chilis and Sichuan peppercorn, etc. Because malatang and mutton shashlik can be cooked outside, many restaurants use iron plates to make cooking tables for cooking or placing ingredients outside. To observe the general characteristics of Chinese food culture, which is using a lot of oil, cooking at high temperature for a short period of time, maximizing the characteristics of the materials while minimizing the loss of nutrients in cooking. In addition, in Daerim-dong Chinatown commercial street, it is easy to buy Chinese food that is difficult to buy in South Korea. The representative food includes corn flour, sunflower seeds and special condiments such as sesame paste, which are popular and often used in cooking in China. In addition, you can also see the representative Chinese Gaoliang alcohol, called ‘Maotai’.

In the questionnaire survey on landscape identifiability of Daerim-dong Chinatown, the option with the highest score is not the landscape spatial

factors but the Chinese food. This phenomenon can be explained from two aspects: cultural landscape and environmental psychology. 1. Chinese food culture is an embodiment of regional culture. For Chinese immigrants, the food stores such as Chinese restaurants, market, snack stalls in Daerim-dong Chinatown play an irreplaceable role. As today's culture types become more monotonous, so does the desire for novelty and richness. In the common street landscape design, the architecture was simply regarded as the expression form of regional culture, while other types of expression factors were ignored. 2. According to environmental psychology, when people save cognition in their brains, they will firstly form strong memories and then identify them. Besides the sense of vision and touch, taste, smell and hearing are most pronounced on this street. The production of taste is usually accompanied by the result of multiple interactions between people and the environment. Generally speaking, when faced with various delicious food on the commercial streets, they first form the visual and olfactory interaction with various food and other environments, and then decide whether they are worth being purchased, tasted and eaten. This process will deepen the memory of the customers, thus forming a high degree of identifiability.

The complex behavioral interactions of diet require the deployment of various human senses to perform multiple calculations to determine whether food is being memorized. So, eating in the street is not just a simple sightseeing activity. In other words, food is more memorable than landscape elements. In addition, from Maslow's Hierarchy of Needs, diet is a relatively low level of demand, while landscape appreciation called aesthetic demand, is a much higher level of needs. From low to high level, aesthetic needs are built on the basis of low food needs. Therefore, in Chinatown street, the condition of landscape aesthetic needs is more demanding than diet. 3. About landscape design, Daerim-dong Chinatown street, as a characteristic commercial street, provides great convenience for customers to buy food, as the main street is 7 meters wide+ pavement 2-4 m + stalls and shops about 2 m. The exhibition space of the stalls provides great convenience for visitors, and they can make a series of decisions such as purchasing goods without going into the stores. In addition, the street is crowded with pedestrians, providing privacy and anonymity. In a word, the external exhibition space of the stalls increases the chances that customers interact with the goods.

<Table 21> Food stores in Daerim-dong Chinatown commercial street

Chinese restaurants	Market
	
Chinese noodle shop	Food material supermarket
Snack stalls	The exhibition space
	
Chinese Snacks	Food display cabinet

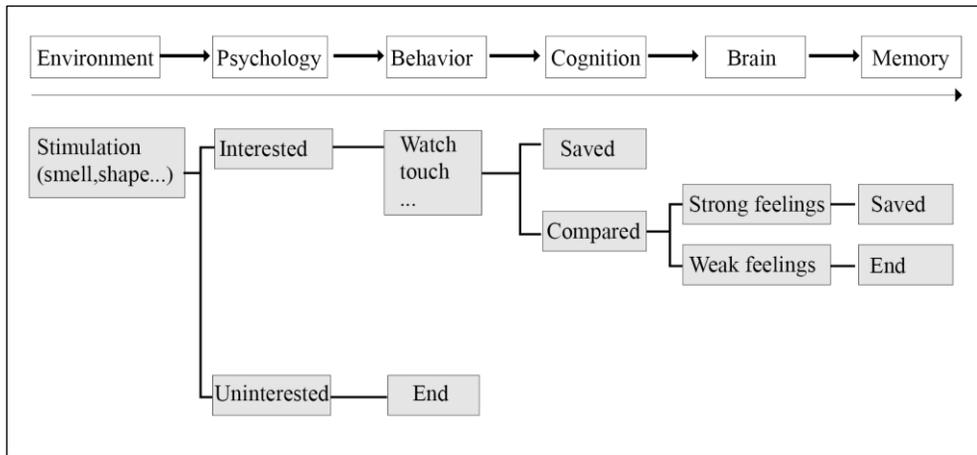
5.3. Landscape behavior identifiability

There are many interactive behaviors in commercial street, including social behavior, spontaneous behavior and necessary behavior. (Table 22)

<Table 22> Types of commercial street behavior

Types of commercial street behavior	
Social behavior	<ul style="list-style-type: none"> • Communication • Sharing
Spontaneous behavior	<ul style="list-style-type: none"> • Sightseeing • Rest • Shopping
Necessary behavior	<ul style="list-style-type: none"> • Walking

The interaction between human and environment is the occurrence of behavior. The behavior in the commercial street can be divided into negative behavior and positive behavior. The negative behavior is that people's emotions are not awakened in the street environment, that is, people do not interact with the environment, only have superficial behaviors. That is to say, people and environment are isolated and have no connection with each other. Positive behavior is that after receiving all kinds of stimulation and processing all kinds of information in the brain, some parts of people are activated to respond to the environment, people and the environment have certain behavior interaction. Take people walking on the street as an example. At the beginning of walking, people's behavior is negative, when there is something that cause their interest. They will observe things concretely or touch them, which is called positive behavior. This kind of positive behavior will compare the information of the current situation with memory in human brain, and then deal with whether to save or not.



<Figure 39> Cognitive behavior of Commercial Street

The interaction between users and the commercial street is a process and result of emotional communication. Although the scale of Daerim-dong Chinatown is not very large, it can provide almost all living functions without contacting other spaces, including living, shopping, working, living services, communication and social intercourse, etc. This also leads to regional and cultural segregation in some sense.



<Figure 40> Space behavior in Daerim

Familiarity with place + complete demand → More place interaction = Higher place identifiability

Most Chinese people living in South Korea will feel despised, prejudiced and discriminated. They will like to share the life difficulties with their relatives and friends in the same situation. Therefore, they believe that Daerim-dong Chinatown is a space where people can rely on each other and share spiritual comfort together. It is a cultural buffer zone for Chinese people aboard, which helps to reduce the psychological impact of cultural differences suffered by Chinese immigrants. Residents said that this area is much better than it was 10 years ago, and the emergence of various Chinese food stores or restaurants has contributed to the economic vitality of this area. With the increase of

Chinese immigrants, permanent residents and floating population, the recovery of this street and the emergence of many companies providing services such as tourism, exchange, visa agency, funeral for Chinese people, Daerim-dong Chinatown has become the region with the highest interaction frequency of some Chinese immigrants and the area with the highest identifiability in memory.

Chapter 6. Conclusion

Through interviews with different people, they show that Daerim-dong Chinatown commercial street not only take on the function of shopping, but also providing a regional cultural connection. Chinatown is not only the emotional comfort place for their homesickness, but also the preferred service support place for overseas Chinese as Chinatown can meet almost all related needs of them. In Daerim, Seoul, the main body of the house has been less changed by culture, and the most influential part of the cultural landscape is mainly concentrated in the outer surface and outer space of the building. The overall interface of the block strengthens the horizontal line through the big signboard, presents certain landscape continuity, and also focuses on the use of bright red and yellow colors, setting off a certain cultural atmosphere. Many of the external walls of the single building are hung with bilingual billboards in Chinese and Korean and several Chinese decorations, and because most of the consumers here are Chinese in South Korea, most of the consumption communication is in Chinese, forming a specific language landscape.

In the questionnaire survey, the landscape factors with high identifiability also have a positive correlation with the characteristics of the street. As a Chinese cultural street, the factors with high identifiability also represent the landscape elements with Chinatown street characteristics to a certain extent. For the Daerim-dong Chinatown commercial street, ‘Diet and entertainment facilities’, ‘the board mixed Korean and Chinese’, ‘stall space’ and ‘Chinese cultural atmosphere’ all had high identifiability. From the survey results, it can be concluded that food industry, characteristic commercial facilities and bilingual landscape play an important role in the construction of cultural landscape identifiability of Daerim-dong Chinatown commercial street.

For the establishment of the identifiability of Daerim-dong Chinatown commercial street commercial pedestrian street, this paper can provide some help:

1. The identifiability of the commercial street in Daerim-dong Chinatown is a commercial street recognized by the general public, which is formed by the urban landscape of other cultures based on the location and environment of the street, as well as specific historical background. In addition, after the function is gradually and steadily produced, in the process of implementing

specific landscape factors, factors' modeling, colors and other aspects of detail also appear to adapt to the change of culture.

2. The role of visual identifiability of Daerim-dong Chinatown commercial streets: two levels: contrast and coordination. Shape and colors are the first level that affects identifiability, that is, to arouse the emotions of the users; The second is that the sight ratio is a repeated superposition of the awakened sensation. The enlarged visual spatial proportion will cause more attention.

3. Regional culture plays an important role in the identifiability of Daerim-dong Chinatown commercial street. The uniqueness of various carriers of regional culture influence the identifiability of commercial streets. As the largest Chinese gathering area in Seoul, the recognition of regional culture is the main factor that Chinese immigrants often visit here.

4. The more frequent the behavior interaction is, the higher the identifiability of the commercial street is. The interaction between users and landscape is an important cognitive channel for users to the street: Although the scale of Chinatown is not large, it can provide almost all living functions without contacting other spaces, including living, shopping, working, living services, communication and social needs, etc. The behavior interaction between the commercial street and the crowd is mainly shopping behavior, while the Daerim-dong Chinatown street attracts the crowd by virtue of the characteristic catering industry, which also enhances the purpose of the communication and its own popularity.

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Appendix

首尔大林洞中国城商业街景观可识别性调查问卷

The landscape identifiability survey of Daerim-dong Chinatown commercial street

1. 您的性别是：
Gender

男 Male 女 Female
2. 您的年龄是：
Age

1-14 岁/years old 15-24 岁/years old 25-44 岁/years old

25-64 岁/years old 65 岁以上 over 65 years old
3. 您去过大林洞中国街次数是？
How many times you have been here?

1-2 次/times 2-4 次/times 4-10 次/times 10 次以上 over 10 times
4. 您对该中国城商业街的总体印象深浅打分是？（1分没有印象 10分印象深刻）
What is your overall impression of Daerim-dong Chinatown commercial street?

1-2分/points 3-4分/points 5-6分/points 7-8分/points

9-10分/points
5. 请您对首尔大林洞中国街各元素在脑海中留下印象进行打分。
Please grade all factors of Daerim-dong Chinatown commercial street.

可识别性分值 Identifiability score	1-2 分 /points	3-4分/ points	5-6 分 /points	7-8 分 /points	9-10 分 /points
	没有印象 No impression	一点印象 Little impression	一般 Normal impression	较深印象 Deep impression	很深印象 Very deep impression
建筑立面 Architecture elevation					
中韩双语广告牌 Advertise board mixed Korean and Chinese					
摊位空间 Stall space					
绿化雕塑等 Green space and sculpture					
座椅、垃圾桶、路 灯、导视牌等 Trash can, street lamp, guide sign					

街区入口、广场 Street entrances and squares					
中国文化氛围 Chinese cultural atmosphere					
饮食娱乐设施 Diet and entertainment facilities					
街道特色 Street features					
交通条件 Traffic conditions					

6. 您觉得大林洞商业街需要改进的方面是哪些？

What factors do you think need to be improved in Daerim-dong Chinatown commercial street.?

可识别性分值 Identifiability score	1-2 分/points	3-4分/ points	5-6 分 /points	7-8 分 /points	9-10 分 /points
	不需要 Unnecessary	需要一点 Little	一般需要 Normal	较需要 Deep	非常必要 Highly necessary
建筑立面 Architecture elevation					
中韩双语广告牌 Advertise board mixed Korean and Chinese					
摊位空间 Stall space					
绿化雕塑等 Green space and sculpture					
座椅、垃圾桶、路灯、 导视牌等 Trash can, street lamp, guide sign					
街区入口、广场 Street entrances and squares					
中国文化氛围 Chinese cultural atmosphere					
饮食娱乐设施 Diet and entertainment facilities					
街道特色 Street features					
交通条件 Traffic conditions					

Abstract in Korean

서울 대림동 차이나타운 상업가로 경관인지성 분석연구

봉 헌

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협동과정 도시설계학 전공

1992년 한중 수교 이래 일자리를 찾기 위해 한국에 온 중국인들이 대량 증가하면서 중국인 밀집 거주지가 많이 형성되었다. 대림동 차이나타운은 이미 중국식품 도매센터에서 서울의 최대 중국인 밀집지역으로 성장되었다. 이 곳은 한국에 사는 중국인들에게 쇼핑할 수 있는 공간을 제공할 뿐만 아니라 중국인의 문화적 정체성과 소속감을 담고 있다. 대림동 차이나타운의 독특한 문화적 배경은 기존의 공간적 경관환경에게 많은 영향과 변화를 주었다. 따라서 이 차이나타운의 상업가로에 대한 경관인지성을 연구하는 것은 중요한 의미를 갖는다.

본 연구는 우선 현장조사와 데이터 분석을 연구방법으로 사용하여 대림동 차이나타운 상업가로의 위치, 토지이용, 인구, 블록구조, 가로공간과 공간행위, 건물, 상업시설, 간판, 공공시설 등의 현황을 경관 인지성 요소로 분석한다. 그리고 조사과정에서 설문조사와 인터뷰 조사가 동시에 진행되었다. 대표자 3명을 선택하고 각 1시간 동안 인터뷰를 진행했다. 선택된 연구 대상의 경관 식별인지성을 조사하기 위해 대림동 차이나타운의 이용자를 대상으로 설문조사를 실시하였다. 설문지의 내용은 세 부분으로 구성된다: 응답자 데이터, 전체적인 인지성 점수와 각 요소의 인지성 점수. “각 요소의 인지성 점수”는 건물 입면/간판 언어사용/노점 공간/녹지와 구조물/쓰레기통, 가로등, 안내판 등 공공시설/가로입구 및 광장/중국 문화 분위기/음식 오락/가로공간/교통현황으로 구분된다. 설문 조사 결과는 대림동 차이나타운 상업가로에서는 한국어와 중국어를 같이 쓰는 간판/노점 공간/중국 문화 분위기/음식오락 등이 높은 인지성 점수를 받은 것으로 나타났다.

본 연구는 맨해튼 차이나타운과 샌프란시스코 차이나타운의 두 차이나타운을 사례로 참고하여, 가로사용자의 설문지에 나타난 높은 인지성 점수의 경관요소로부터 양식탑 심리학, 환경행위학 등의 이론적 연구를 결합하여 가로의 공간, 경관요소, 규모 등의 현황을 분석했다. 인지성 높은 경관요소를 비교 분석하여 경관요소 인지성이 높은 원인을 탐구하고 대림동 차이나타운의 인지성특성을 정리하였다. 1. 시각적 측면. 한편으로 인지성은 경관요소가 전체 가로에서 나타나는 빈도와 관련이 있으며, 또한 사람이 보행로에서 걷는 시각에서 경관요소가 나타나는 빈도와 인지성사이에 정비례관계가 존재한다. 다른 한편으로는 선명한 대조적 관계는 인지성이 높은 하나의 충분한 조건이다. 2.문화적 측면. 대림동 차이나타운은 지역문화를 활용하였기에 인지성이 높다, 3. 공간행위 측면. 사용자와 상업가로 사이의 상호작용은 감정적 의사소통의 과정과 결과로서, 지역 문화의 인식이 높을수록, 상호작용의 기회와 시간의 증가로 이어지고, 이에 경관인지성이 증가한다.

주요어 : 대림동, 차이나타운 상업가로, 경관인지성

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