Mapping the Linguistic Landscape of Old Bund of Ningbo through Translanguaging Theory

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

Original Research Article

ABSTRACT

Aims: To explore the overall features of Old Bund of Ningbo's linguistic landscape and investigate readers' perceptions of it, as well as the reasons for using different language symbols on store signs.
Study Design: In the initial stage, data were collected using fieldwork methods, including collecting language samples and distributing questionnaires. After that, the collected data were analyzed using the Translanguaging Theory [1].
Place and Duration of Study: Old Bund of Ningbo, between November 2022 and December 2022.
Methodology: The researchers mapped out two steps for data collection. The digital devices were used to gather data and 150 questionnaires were handed out to shop owners, residents, and tourists.
Results: First, the study found that the overall characteristics of Old Bund's linguistic landscape. Bottom-up linguistic landscape is more diverse than top-down signs. The majority of signs were a combination of Chinese and English, especially in restaurants and beverage shops. Second, the finding shows that shop owners, tourists, and residents have varying attitudes and perspectives towards linguistic landscape in this site.Generally speaking, there is a positive attitude towards it.

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Conclusion: This study applies translanguaging theory to analyze the linguistic landscape of Ningbo's Old Bund, focusing on reader perceptions and reasons for language choice on store signs. Data collection involved 131 images, questionnaires, and interviews. Bilingual signs are most common, followed by monolingual and multilingual. Simplified Chinese characters prevail, with English also prominent. Tourists generally approve, but residents worry about modernization eroding traditional culture. Official signs are standard and simplified, while private signs are diverse and vivid. Shop name design is influenced by individual preference and commercial considerations.
Recommendations: First, researchers can expand the range of interviewers to capture more comprehensive data. Second, two or more sites can be selected as research objective to assure the accuracy of results.

1. INTRODUCTION

Over the last few decades, the world has witnessed rapid growth.Various languages in public space have captured international attention. In 1997, scholars Landry and Bourhis [2] first proposed the term "linguistic landscape", defining it as "the language of public road signs, advertising billboards, street names, place names, commercial signs, and public signs on government buildings that combine to form the linguistic landscape of a given territory, region, or urban agglomeration." In other words, linguistic landscape focuses on the languages in the public area with all writing styles. As Mensel, Vandenbroucke, and Blackwood [3] referred that the research object of the linguistic landscape can be any visible display of written language, as well as people's interactions with these signs. Linguistic landscape studies are a fertile tool to investigate grassroots socio-cognitive engagement with multilingualism [4]. Through linguistic landscape studies, researchers can understand various aspects such as cross-cultural understanding, language education development, and tourism in a different way [5].

Old Bund of Ningbo, located in Ningbo, Zhejiang Province, China, has been one of the most prosperous ports since the Tang and Song Dynasties. It is also named after the North Bank of the Yongjiang as a modern historical and cultural district. For historical reasons, in the first half of the 19th century, the West flocked to Ningbo in large numbers and settled on here, bringing Western culture and architectural facilities to Ningbo. Known as the oldest Bund in China, it predates the Bund in Shanghai by 20 years. Nowadays, Old Bund has been a commercial consumer center. The surviving buildings are a profound display of history and culture. It is an area where Chinese and Western cultures meet with the collision of multiple cultures [6]. Nowadays, Old Bund is an important platform for Ningbo's "17+1" Central and Eastern European economic and trade cooperation. Until now, it has hosted the Central and Eastern European Food Festival for three consecutive years which made it as a city window for Ningbo to open up to the outside world [7].

The pedestrian street reveals the history and the culture of a city, and also reflects the spirit of a certain period. Linguistic landscape is a material carrier of language, not simply reflecting an arrangement of language symbols, but containing the creation mechanism and ideology behind it. Therefore, researching the linguistic landscape of Old Bund can deepen the understanding of the linguistic culture of the coastal port city. More importantly, Old Bund is a significant platform for economic and trade cooperation between Ningbo and Central and Eastern Europe. This study is conducive to unifying and standardizing the existing language issues.

Many scholars have studied the Old Bund from the perspective of urban construction. For instance, Ma [8] explored the background and existing problems of Old Bund, proposing corresponding conservation methods; Huang [6] studied the neighborhood history and culture of the Old Bund, and gave advice to conservation and enhancement strategies; Wang [9] found that the combined Chinese and Western architecture of Old Bund has gradually become a characteristic of Ningbo. However, few scholars explored the linguistic and cultural accumulation of Old Bund from a sociolinguistic lens.

In this paper, the researchers applied the translanguaging theory to explore the linguistic landscape of Old Bund of Ningbo. Through field research, the researchers followed the symbol selection approach in the linguistic landscape to

obtain the ultimate data. The questionnaires were released around the research question of this thesis.Consequently, the study addresses the following two research questions:

RQ1: What are the characteristics of the linguistic landscape in Old Bund of Ningbo?
RQ2: How do residents, tourists, and shop owners respond to the status quo of the linguistic landscape in Old Bund?

2. LITRATURE REVIEW

2.1 Linguistic Landscape

Landry and Bourhis [2] pointed out that linguistic landscape refers to the visibility and salience of languages on the public and commercial signs in a given territory or region. Other experts held the views that linguistic landscape is the exploration of writing styles to display the public sphere (Shohamy, 2009); [10]. It can be understood that the linguistic landscape discusses all writings in a public area such as a banner or a name of a certain store [5].

Over the decades, considerable developments have been made in researching linguistic landscape. Many scholars explored linguistic landscapes in different fields, centering on research themes. Backhaus [11] considered that linguistic landscape research concentrates on three aspects: who designs the linguistic landscape? Who is the receptor for LL? How the social connotations can be reflected behind LL? Other scholars reckoned that language dominance, language policy, forms and features of language signs, and English use were the central themes [12]. According to Shohamy (2019), linguistic landscape research themes can be summarized as linguistic landscape and representations, multimodality, cities, neighborhoods, and entities, contestations in public spaces, and education. Specifically, most of the research focuses on shops, public institutions, and buildings (Jezai,2022); [13,14,15]. Multimodality refers to gain more sources to learn the meaning of public spaces such as images, sounds, etc [16,17,18]. Linguistic landscape in cities are frequently studied across the countries, especially in minor areas like Hispanic places, South Korea, and comodia [19,20,21,22] Besides, researchers began to study education with the help of linguistic landscape [23,24,25]. As the LL study deepens, there will be more themes discovered and explored.

Some scholars also proposed a corresponding theoretical framework. American linguistic anthropologist Hymes [26] studied the communicative efficiency of human speech activities from the perspective of ethnography of communication. Subsequently, he introduced SPEAKING theory, which means linguistic landscape research can also rely on the SPEAKING model to sort out the multiple relationship between language means and social meanings. Besides, Scollon &Scollon [27] put forward place semiotics by adopting visual symbols framework [28] to explore discourses in place, which focuses on the meaning of signs, discourse, and behavior, and how to use language in a material world. This theory mainly includes code preference, inscription, emplacement, and discourse in space and time. Spolsky [29] proposed the theory of language choice conditions in public signs. Many scholars used it to build an analytical framework in their articles [30,31,32].

In conclusion, linguistic landscape constitutes an analytical space for languages. The interdisciplinary field of linguistic landscape studies adds to our understanding of language, society, and people [33].

2.2 Translanguaing and Linguistic Landscape

The term "translanguaging" is brought forward by Colin Baker [1] which gains popularity in linguistics, education, cognitive science, cultural study and the like. In practice, it considers that the concept of language, encompassing such as English, German, Dutch, and others is fundamentally socio-political in nature.It attaches great importance to observe how humans transcend and break language boundaries with their capacity, and create new ways of expression and communication in daily social interactions (Li, 2021). The translanguaging theory suggests that all language users draw from a singular, integrated linguistic repertoire, contrary to the traditional view of possessing two or more autonomous language systems, bilinguals, multilinguals. They select and utilize specific linguistic features to construct meaning and effectively engage in diverse communicative contexts [34]. Translanguaging is a theoretical lens that offers a different view of bilingualism and multilingualism [34].

As Ben-Rafael, Shohamy and Barni (2010) wrote, linguistic landscape is a Gestalt which

emerges from the aggregation of individual signs but it is also the space where translanguaging goes beyond the boundaries of individual signs and languages. And the use of bilingual and multilingual language is an expression of translanguaging which provides an effective opportunity for bilingual and multilingual readers [35,36]. As globalization and economic development, Chinese, Japanese, Korean, and Arabic has an increasingly modest presence [37]. In translanguaging practice, crossing language boundaries not only hints on stepping over the language itself, but also transcends the cognition and symbol system. It also changes language users' language ability, identity, and worldview (Li et al., 2021). The practice of translanguaging is almost in line with the concept and function of linguistic landscape. In the light of Gorter and Cenoz [38], translanguaging in the linguistic landscape shows how linguistic and multimodal resources are switched, translated and mixed. At the level of individual signs, the linguistic landscape can be perceived as monolingual or multilingual. In a holistic perspectives, multilingualism emerges not only from the combination of features found in one or more languages, but also integrates elements such as fonts, images, and colors. Researches in inguistic landscape and multilingualism has a strong development (Shohamy, 2012; Gorter, 2013). Translanguaging, as a dynamic approach, links multilingualism in the linguistic landscape to the communication practices among multilinguals [38].

In this article, the researchers analyzed Old Bund's linguistic landscape from the perspective of translanguaging theory. First, the researchers applied the linguistic landscape of Old Bund to demonstrate how readers navigate between languages and go across linguistic borders. Second, a holistic view was adopted to analyze the linguistic landscape through translanguaging theory. The researchers valued the multilingual units and social contexts when analyzing language signs. Combing translanguaging theory with linguistic landscape enriches the linguistic landscape researches, and takes it forward.

3. MATERIALS AND METHODS

In this study, the researchers applied the translanguaging theory to explore the linguistic landscape in Old Bund of Ningbo. The study aims to explore the overall characteristics of the linguistic landscape in Old Bund of Ningbo and how residents, shop owners, and tourists respond to it.

3.1 Research Site

In this study, we chose Old Bund of Ningbo as the research site, which has a significant impact on the city's urban landscape due to its profound port culture. It is one of the only remaining Bunds in China with a history of over 100 years. Old Bund is a historical street that evolves with the changes in Ningbo port and gradually becomes a hub for transportation in the Jiangsu and Zhejiang region in the last century. The area is home to several historical sites, including the British Consulate, Catholic Church, Ningbo Customs site museum, British Business Firm, Port Office, Yan Family Residence, and others. The buildings here have been restored and renovated to reflect the original shape of the Bund, which provides a contrast to the modern houses in the neighborhood.

3.2 Data Collection

The researchers mapped out two steps for data collection. First, we took a field trip to Bund in November, 2022 to have a basic understanding of it. Smartphones were utilized to take photos. In December of the same year, 289 pictures of this site were collected. After deleting the blurred and repetitive images, we finally captured 218 pictures. Then, we started to hand out 150 questionnaires to shop owners, tourists and residents relevant to their attitude, satisfaction and personal perception on the linguistic landscape of this bund (see Appendix 1).

3.3 Data Analysis

Broadly, data analyzes proceeded following the interactive steps summarised by Creswell (2014): reading through the data, identifying themes and generating descriptions, coding, re-reading the data, interpreting the coding in light of the research questions, reflective questioning of the interpretation and search for discrepant cases before finalising the interpretation. Based on this, we described the analytical procedures as identifying the unit of analysis, classifying the collected images and coding the shop signs.
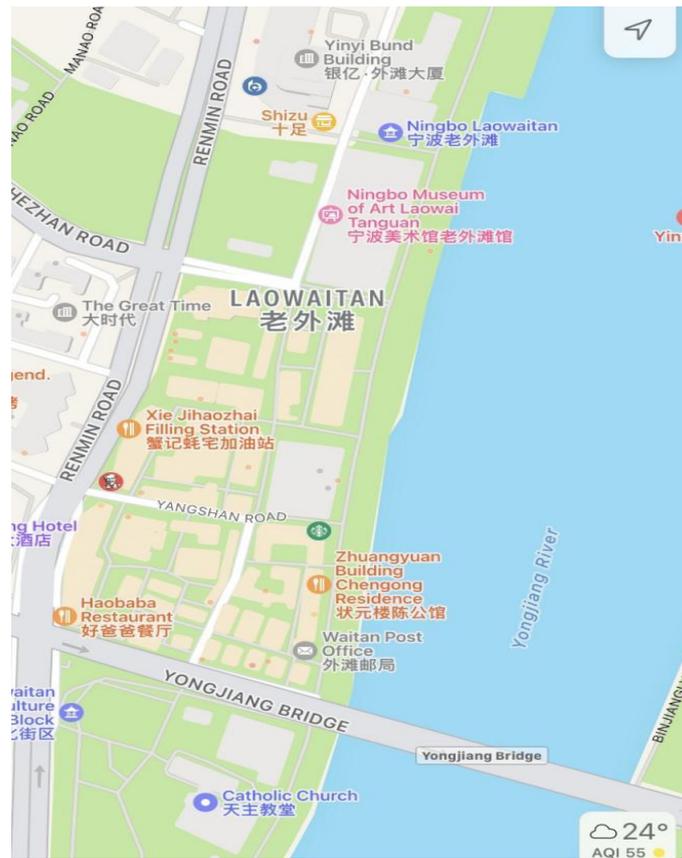
Fig. 1. Location of old bund of Ningbo (LAOWAITAN)
Source:Apple Maps

3.3.1 Identifying the analytical unit

In linguistic landscape research, being clear on the unit of analysis in the public matters most. Cenoz and Gorter (2006) view each establishment as the unit of analysis and not each individual sign because "each text belongs to a larger whole instead of being clearly separate." This needs to regard signs pertaining to each establishment (e.g. Starbucks) as an independent unit of analysis. We found that some buildings have repeated language signs. Generally speaking, the signs on the front of these buildings are more representative where the information and appearance conveyed are more significant. Thus, we adhered to the principle of "one building, one sign". This principle also promises the efficacy and accuracy of the whole statistics.

3.3.2 Classifying and coding the language signs

After finishing data collection, we adopted a coding method by splitting these images into two categories, top-down and bottom-up. Then, following the taxonomy of "code method" (Shohamy, 2012), we sorted these pictures into three types: monolingual, bilingual and multilingual on account of the number of language signs used on the sign and other variables, including symbol materials (wood, metal, paper, stone, fabric, etc.) and text types (traditional characters, simplified characters, etc.).

3.3.3 Processing the questionnaires

After sending out 150 questionnaires for shop owners, tourists, and residents, we finally got 90 valid questionnaires including 33 questionnaires from shop owners, 15 ones from tourists and 42 ones from residents. The content of questionnaire include attitude, satisfaction and personal perspective. All data collected were input into Microsoft to have a frequency analysis. In the depth interview, we asked 15 shop owners about how signs were made, why their signs were made, and in this way and their intention of making the signs?

4. RESULTS AND DISCUSSION

In this section, we reported the findings in relation to the language signs, the language combination, the attitude (residents, tourists, shop owners), and the intention of sign-makers toward the local linguistic landscape. Three tables were made to show the specific statistics.

4.1 The Old Bund's language Signs

4.1.1 The feature of language signs

Top-down linguistic landscape refers to the signs of public buildings, faculty, cultural publicity, warning, etc. While bottom-up linguistic landscape points the shop signs, advertising board, etc. As is presented in Table 1, generally, the number of top-down signs (N=56, 40.9%) is less than the bottom-up signs (N=81, 59.1%). The language signs distribution of top-down is rather average including the roads signs (N=16, 11.7%), introduction signs (N=1 , 10.2%), museums/public buildings (N=16, 11.7%), and the warning boards (N=10, 7.3%). However, when it comes to bottom-up signs, shop owners can make up their minds on making signs based on their needs or the surroundings. For instance, there is a street overrun with various drinking/coffee stalls (N=42, 30.6%), restaurants (N=21, 15.3%), which accounts for the largest proportion. Language signs on other shops equally distribute such as grocery stores/convenience store (N=3, 2.2%), firms (N=7, 5.1%), and hotels (N=2, 1.5%), and others (N=6, 4.4%).

4.1.2 Language combination

In this part, we input the data collected of top-down and bottom-up signs into the Microsoft sheet according to the language classification method of Ben-Rafael et al [39] and Backhaus [11]. As is shown in Table 2, a total of 56 top-down signs are categorized into three types: monolingual (N=17, 30.3%), bilingual (N=35, 62.5%), and multilingual (N=4, 7.1%) in terms of different language combination. It is found that the general pattern of bottom-up signs are split into several categories according to the language choice: monolingual (N=28, 34.6%), bilingual (N=52, 65.4%).

Table 1. Composition and proportion of language signs

Attribute of signs	Categories	Number (N)	Percentage (%)
	Road signs	16	11.7
	Introductory signboard	14	10.2
Top-down	Museums/public institution	16	11.7
	Warning boards, etc	10	7.3
Bottom-up	Restaurants	21	15.3
	Grocery/convenience store	3	2.2
	Coffee/drinking stalls	42	30.6
	Firm	7	5.1
	Hotel	2	1.5
	others	6	4.4
Totals	137		100

Table 2. Top-down linguistic landscape in the old bund of Ningbo

Types of signs	Language combination	Counted signs (N)	Ratio (%)
Monolingual	Traditional Chinese characters	4	7.1
	Simplified Chinese characters	13	23.2
	English	-	0
	Pinyin	-	0
Bilingual	Simplified Chinese characters +English	30	53.6
	Simplified Chinese characters +Pinyin	5	8.9
Multilingual	Simplified Chinese characters +English+Japanese+Korea	4	7.1
Totals	56		100

When it comes to the language combination of top-down signs, it can be seen that bilingual signs, mostly focusing on Chinese+English, has the largest proportion, ranking first (N=35, 62.5%), which are marked on the road signs and public buildings. It means that Ningbo, as a coastal city, impacts its linguistic seriously. Some researchers pointed that language switching and mixture are positively associated with empathy, tolerance of blurred concepts, and creativity from a pool of people who engaged in a standardized test [40,41]). The combination of Chinese and English on language signs in this bund can play a positive role in people's decision and cognition. To some extent, the language composition can promote the images of some shops. In addition, monolingual signs (N=17, 30.3%) ranked second, among which simplified Chinese accounts for the largest ration (N=13, 23.2%), followed by traditional Chinese (N=4, 7.1%). It not only shows the progress-making in standardizing Chinese characters, but expresses a desire of the local government to intentionally preserve and protect traditional culture. As Scollon & Scollon [27] put forward a principle that languages marked on the right or the top are the dominant language if monolingual or bilingual symbol in a same size are written in a sign, while the most bright and largest languages dominate the different shapes of symbols. In this linguistic landscape, Chinese is the priority code, occupying a pivotal position (see Fig. 2). It is noted that multilingual signs are bountiful, accounting for 7.1% (N=4). They are consisted of Chinese, English, Korean, and Japanese, attaching on the pubic buildings (Fig. 3). Because Japanese and Korean are the majority of foreign tourists [42], the government takes this group in full consideration. Translanguaging thinks that human language practice is the outcome of cultural evolution and social evolution, and people can realize the politic attribute, cultural and social mean behind various languages [43]. Looking at Fig. 3, Shikumen Architectural Complex mixes Chinese traditional culture with Western culture, remaining its reputation as a grand and exquisite building. It draws much attention from tourists. Applying four languages to introduce this complex shows its creativity and criticism, which is meaningful for language users, and social culture changes [43].

In terms of bottom-up linguistic landscape, as is presented in Table 3, we separate the language signs based on their business attributes. Opportunities are presented by groups with various backgrounds by communicating and making contacts, they can adjust and construct social identities and values with consciousness and persistence with the help of translanguaging practice [44] Obviously, bilingual composition is the most used type (N=53, 65.4%), this language combination in private landscape is flexible and has plenty of choice compared with the same classification in top-down landscape (Fig. 4), while monolingual-Chinese is the second preferred language (N=30, 34.6). Specifically, catering industry embraces bountiful language signs and choice (N=21, N=42), and coffee, drinking or tea stores arrive at 28, consisted of Chinese+English (N=27), and Chinese+Pinyin (N=1). Due to the cultural exchange and globalization, delicacy from different countries is increasingly accepted by Chinese [45]. There are two restaurants serving for Japanese cuisine. The rest of canteens provide Chinese food, so monolingual signs have greater proportion (Fig. 5), which plays a major role in information transmission. However, firms are second to food and beverage sector (N=7).

Fig. 2. Y-Town Post Office
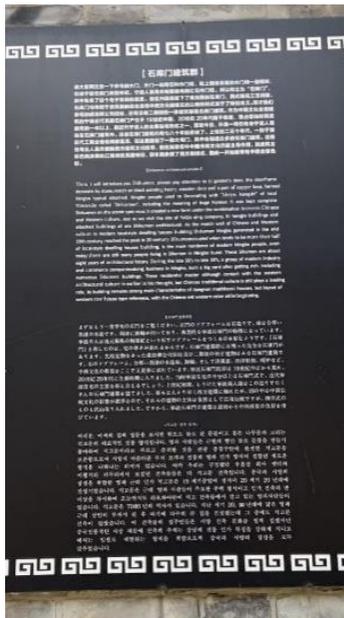
Fig. 3. Shikumen architectural complex

In conclusion, official signage is more standardized impacted by policy, which aims to convey informative communication [46] While private sign is less influenced, it is more diversified and international, which exerts an important role in attracting tourists.

The discussion should not repeat the results, but provide detailed interpretation of data. This should interpret the significance of the findings of the work. Citations should be given in support of the findings. The results and discussion part can also be described as separate, if appropriate.

Fig. 4. A bar in the bar street

Fig. 5. A tea shop in Old Bund

Table 3. Language distribution across categories

Types	Monolingual			Bilingual			Multilingual	Number (N=)	Percentage (%)
	Simplified Chinese	Traditional Chinese	English	Chinese +English	Chinese+ Pinyin	Chinese+J apanese	Chinese+English+Korean +Japanese		
Restaurant	5	2		12		2	-	21	26
Coffee/drinking/ tea stores	6	3	5	27	1		-	42	51.8
Hotel	1			1			-	2	2.5
Firm	2		1	4			-	7	8.6
Grocery stall				3			-	3	3.7
Entertainment	3			3			-	6	7.4
Number(N=)	17	5	6	50	1	2	0	81	100
Percentage (%)	34.6			65.4			0		

4.2 The Attitudes of Residents, Tourists, and Shop Owners to the Linguistic Landscape in Old Bund of Ningbo?

This article conducted a field-based survey and online questionnaires survey in March 2023, some 180 individuals participating the survey as presented in Appendix 1. Participated people were local residents (53), tourists (40), and shop owners (81) along the bund. In practice, the data were gathered by distributing the questionnaires via the online social media platform "questionnaire star", getting 85 useful questionnaires.

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4.2.1 Residents

As the primary readers in the Old Bund of Ningbo, residents are drawn to its linguistic landscape. Questionnaires were applied to obtain residents' perception towards language signs in this area. About 53 residents filled out the questionnaire, among which male residents are 56.8%, female residents are 43.2%. In terms

of the age, the vast majority of respondents are between 20 and 58, accounting for 68.7%. Most respondents have junior high school education and their first language was Chinese. When it comes to their attitudes towards the linguistic landscape, residents with positive attitude and much attention accounted for 30.2% and 34.8% respectively. They reckoned that the language combination (mainly English) is a symbol of internationalization for Ningbo, which could attracted numerous foreign tourists to pay a visit. Some 20.7% residents remained neutral, and 42.3% residents paid average attention to the language signs. They think that its linguistic landscape could coordinate with the surrounding and the features. Regarding the language combination, most native Chinese speaker (49.1), who were negative to Chinese plus foreign languages, preferred the monolingual signs which is composed of Chinese only. They said that this kind of signs enable them to understand Chinese information in top-down and bottom-up signs easily, and useful information could be offered for further exploration. Also, the rapid modernization in this city will threaten to localized language ecology, and the traditional language culture will gradually lose their characteristics and disappearing in the coming years. More importantly, being inept at English or other languages made it tougher for some residents to recognize and absorb information when walking around this area. Of all the participating residents, nearly 5.3% did not take note of the language signs for just admiring the buildings or asking shop owners directly.
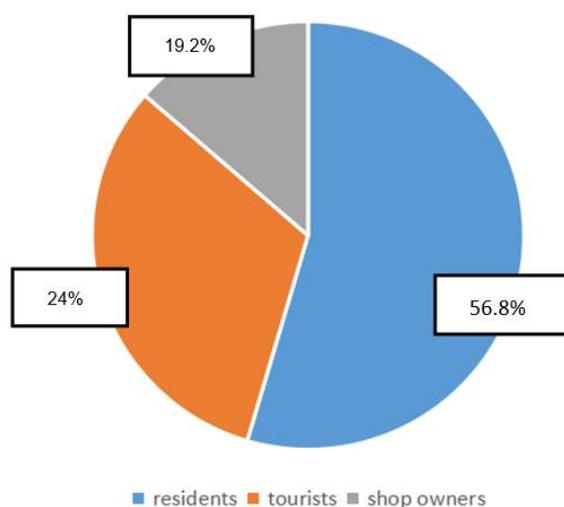

Chart 1. Proportion of participants

Table 4. Attitudes of linguistic landscape

Attitudes	Positive	Neutral	Negative
Residents	30.2%	20.7%	49.1%
Tourists	63.7%	26.1%	10.2%
Shop owners	66.9%	23.4%	9.7%

Table 5. Attention towards linguistic landscape

Attention	Much	Average	A little
Residents	35.2%	45.6%	19.2%
Tourists	32.9%	43.4%	23.7%
Shop owners	52.5%	30.9%	16.6%

4.2.2 Tourists

Tourists are another main readers in this bund. On the one hand, they can be led to visit, on the other hand, language signs can easily attract them to shop. It will deepen the tourists' insight into the special culture. Roughly 40 respondents took part in our survey, finally, obtaining 32 useful questionnaires. Most are domestic tourists, and overseas tourists accounted for 15%, mainly from Korea, USA, Japan, and Central and Eastern Europe, partly due to the Belt and Road Initiative. Most tourists were well-educated who have college degree or above. They were between 20 and 45 years old, Chinese were their first language. Nearly 70% showed that they have a proficiency in English. Firstly, according to the data, 63.7% expressed their satisfaction about the Old Bund's linguistic landscape. They appreciated the language composition of Chinese and English, because it not only provided attractiveness but also the convenience to obtain information. And it was suitable for Ningbo, a coastal and port city. About

26.1% tourists maintained neutrality. These tourists including the domestic and the overseas, had a taste for the language signs written by traditional Chinese and the buildings featured in Jiangnan town like Chen House (Fig. 6). They expressed their opinion that living in big cities who were surrounded by modern and international linguistic landscape, it was a good chance to enjoy the traditional culture, and ancient atmosphere. And they expected to experience the authenticity of the place. And 10.2% tourists were negative to the linguistic landscape, because they said that they could get the meaning offered by some private language signs due to cultural differences or incorrect translation. Interestingly, approximately 23.7% tourists paid little attention to the language signage, they responded that they came into a shop just for its distinctive decoration or they could ask shopkeepers for help. There were some traditional buildings featured with Chinese and Western culture, so 32.9% tourists highly noticed the language signs on the wall for deeper insight into its background and development.

Fig. 6. Chen house

4.2.3 Shop owners

About 81 shop owners with different backgrounds took filled out the questionnaires, among which most of them were the local, finally getting 52 valid questionnaires. Over half of the participants were content with and focused more on the cureent linguistic landscape, largely because they engage in the business activities. These visible objects could impact the business condition indirectly. Few shop owners paid little attention(N=16.6%) to the linguistic landscape. As Ben-Rafael [39] viewed that sign holders of individual business prefer to use sign language fulfill linguistic readers' needs reasonably, thus an increasing number of foreign tourists may encourage shop owners to employ bilingual, multilingual signs to attract customers in running their own business.

Young shop owners adopted the combination of Chinese and English (Korea, Japanese) to appeal tourists and show its speciality, for instance, there were several drinking shops running coffee bars, high-end restaurants which were chain-like brand globally (Starbucks, Hoegaarden, etc), providing parallel translation service in scenic spots for foreign tourists. Interestingly, shop owners liked to create and design shop boards in person according to their personal preferences and stores' characters (see Fig. 7). Young business operators like to use fancy light and electronic displays for pursuing their personality and sleek signage.

Few middle-aged shopkeepers, who managed traditional business, held different attitudes, they thought that monolingual signs in Chinese can preserve and promote traditional culture from the expression of traditional Chinese character such as "涌優茶馆", a store to provide tea drinking. In their opinion, the recent surge in international signage will significantly impact the traditional signs. A shop owner who running traditional business of confection,said " it would be better for traditional shops to use the original complex form of Chinese characters rather than English." What's more, some shopkeepers would invite other people to inscribe the signs of their own shops to coordinate with the characteristics of the Old Bund.

In conclusion, shop owners can choose languages based on their preference without lots of restrictions and regulations. In terms of the language choice, most shops adopted the combination of Chinese and English to offer clear information for foreign tourists. Additionally, simple Chinese characters are the most commonly applied and are often put in the center of signage due to its informative function and dominant status. While the traditional shops often use traditional Chinese characters, most participants thought that the traditional Chinese characters is elegant and attractive but with little informative function.

Fig. 7. A restaurant in Old Bund

Based on the translanguage theory, this study summarizes the characteristics of the linguistic landscape of Old Bund in Ningbo. The research reveals several key findings. Firstly, compared to bottom-up linguistic landscape, the top-down linguistic landscape in Old Bund is less diverse. Private linguistic landscape demonstrates higher flexibility and diversity but also exhibits non-standard translations. Secondly, in terms of language-code combinations, Chinese-English combinations dominate, particularly on signage in the private dining sector. Chinese language signage predominates the overall landscape, emphasizing authority. Impacted by geographic location, commercial environment, and tourism, official buildings display four different languages in one signage. Some private shops' signage are related to the nature of their goods, with traditional Chinese characters and Ningbo dialect being commonly observed.

Investigating into the attitudes and attentions of shop owners, residents, and tourists towards the linguistic landscape of Old Bund in Ningbo, the researchers found different viewpoints emerging from each group. Over half of the shop owners expressed satisfaction with the linguistic landscape and demonstrated a keen awareness of each shop's distinctive features. Most tourists reported satisfaction with the language signage in Old Bund, while few of them gave a deliberate focus on the linguistic landscape. In contrast, local residents exhibited a notably lower satisfaction level, expressing concerns that the diverse linguistic phenomena could potentially threaten the indigenous language and culture of Ningbo. In-depth interviews with a dozen shop owners revealed their tendency to design and produce signage based on commercial strategies and personal preferences.

5. DISCUSSION

Influenced by the predominant geological location and long-standing culture, Ningbo's economy and culture gain greater development. As an external force, tourism has brought fresh economic vitality to this city. Ningbo is a well-known industrial port city whose foreign trade is rather developed as well. Its linguistic landscape undoubtedly receives much attention. In some sense, linguistic landscape in the urban destination can be split into sign makers and sign readers. In this part, this article attempts to interpret the findings with the translanguaging theory.

Our study explicitly indicates that the presence of simplified Chinese characters and bilingualism is very strong in the linguistic landscape of Ningbo. As an official language, standard Chinese character occupies a dominant position in the construction of the official and private linguistic landscape. It is in line with the national language policy which endorses Putonghua (Mandarin) as the official language in mainland China. Besides, a significant minority of traditional Chinese characters in Old Bund's linguistic landscape illustrates that tourism continues the inheritance of culture and brought many chances. Traditional Chinese characters are more like a symbol of traditional culture and are rarely applied to communication. A vivid example is sporadic historical buildings written in traditional Chinese characters. According to Qiu [47], the high percentage of traditional Chinese characters in the city space is associated with commodification. Language signs in traditional Chinese characters converge in restaurants and drinking stores. The visibility and salience analysis above reveals that Chinese plays a dominant role in Old Bund's linguistic landscape, while English is ubiquitous in this area. Bilingualism, concentrating on Chinese+ English, symbolizes fashion and social trends. The presentation of multilingualism in Old Bund's linguistic landscape also has a certain percentage. García [48] mentions clearly that translanguaging refers to making "sense of signs written in two or more languages in the community, often communicating different messages". Wei (2011) adds that translanguaging also considers "the transmission of information and the representation of values, identities and relationships". He thus applies translanguaging in the widest possible sense since it includes 'any going between different linguistic structures, including different modalities'[44]. More importantly, multilingual signs have both a symbolic function and an index function of using a preference for foreign language in a predominately monolingual country [49].

Regarding three groups of individuals' attitudes toward language sings in Old Bund. Most of the local residents make a statement of negative, they like the monolingual signs which are made of Chinese characters. In their view, Chinese culture is profound, and local culture and local linguistic resources should be valued when constructing the linguistic landscape. For another reason, multilingual signs dazzle them, they cannot get the key information quickly. While

tourists hold the view that English is a symbol of internationalization and a fad. That's because bilingual or multilingual signs are set to all passers-by or only at specific target groups like foreign tourists who can get the key information. In terms of sign-making, personal preference, and commercial benefits are the main driving force of making language symbols. These foreign languages use are an implication of a growing preoccupation with participation in a global cultural market [49-54].

6. CONCLUSION AND SUGGESTIONS

6.1 Conclusion

This study utilizes the translanguaging theory, which prioritizes the linguistic fluidity of learners and emphasizes monolingual, bilingual, and multilingual performance to deepen their engagement and comprehension of complex content and texts [34]. Specifically, it explores the linguistic landscape of the Old Bund of Ningbo and investigates reader' perceptions of it, as well as the reasons for using different language symbols on store signs. Using digital cameras, we collected 131 valid images of Old Bund and distributed questionnaires to three groups. We also interviewed shop name makers. Our findings indicate that bilingual signs are the most common, followed by monolingual and multilingual signs. Simplified Chinese characters dominate, although English is also prominent. While tourists are generally content with the linguistic landscape, many residents view it negatively, fearing that modernization will threaten the localized language ecology and erode traditional language culture. Official signs tend to be standard and simplified, while private symbols are more diverse and vivid. Language sign makers informed us that individual preference and commercial profit play a role in the design process of shop names and language symbols.

There are two main limitations of the present study. Firstly, the interviewees were limited to shop owners. Including a wider range of participants, such as government officials and workers from tourist companies, would provide a more comprehensive understanding of the linguistic landscape. Secondly, the data collection of signs was confined to one tourism spot in Ningbo. Future researchers can expand the scope of data collection to include other similar spots, such as Nantang Old Street. By doing so, they can obtain a more diverse range

of data and provide a more nuanced analysis of the linguistic landscape in the region.

6.2 Suggestions for Promoting the Future Investigation into Linguistic Landscape

Our thorough analysis, extensive research, discussions of linguistic landscape of Old Bund in Ningbo has led us gain a deeper insight into the LL sector and translanguaging theory. These findings serve as a helpful research example for coast city's LL. To make future study more impressive and significant, two advice is given. First, researchers can expand the range of interviewers to capture more comprehensive data. Second, two or more sites can be selected as research objective to assure the accuracy of results.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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APPENDIX

Appendix 1

Questionnaire: The attitudes to shop signs in the Old Bund of Ningbo

Section A: General information

1. Gender: £Female £Male
2. Age:
3. Educational Level:
4. You are a:

£Resident £Tourist £Shop Owner £Others

5. Which language can you read?

£Chinese £English £Others

Section B: Attitude to the shop signs in the Old Bund of Ningbo

1. What is your attitude towards the shop signs?

£Positive £Negative £Neutral

2. How much attention do you pay to these shop signs?

£Much £Average £Little

3. Which language combination do you think is the best?

£Chinese + English
£Chinese + Pinyin
£Chinese + English+Korea+Japanese
£Others

4. Which language is more important in the shop signs?

£Chinese £English £Others

5. Do you think English should be put in the shop signs? Please give your reasons.

6. Do you think the "English + Chinese" shop signs are good? Please give your reasons.

7. Can you feel the Chinese Culture through the shop signs? Please give your reasons.

8. What factors affect the shop signs in the Old Bund?

9. Can you give some advice to improve shop signs?

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