A Study on Linguistic Landscape of Zibo from the Multimodal Perspective

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Abstract: Linguistic landscape is an important way to understand a city. Multimodal linguistic landscape is rich in forms and highly interactive. Based on the classification and induction of the linguistic landscape of Zibo commercial street, the paper analyzes the characteristics of the linguistic landscape of Eight Major Bureaus Grocery Market by using the theoretical framework of place semiotics and the principles of linguistic landscape construction from a multi-modal perspective. According to the research, Zibo's multimodal linguistic landscape is not rich, the multimodal modes distribution of private signs is richer and more diverse, and the number of multimodal linguistic landscapes is large. The government encourages the masses to actively participate in the construction of Zibo's image. In order to establish a good city image and highlight the characteristics of Zibo, this paper puts forward reasonable suggestions for non-standard language use and the lack of multilingual in the linguistic landscape of Eight Major Bureaus Grocery Market of Zibo. How to make the linguistic landscape help the scientific and standardized construction of the city is the future focus.

1. Introduction

Linguistic landscape is a representation of language in public spaces. Canadian scholars Landry and Bourhis propose the broadest definition of linguistic landscape as "the signages that people can see in public places, such as street signs, billboards, street names, shop names, and building names" [1]. Within the field of sociolinguistics, linguistic landscape research, which centers on public signage, has garnered significant attention from scholars. Empirical studies predominantly focus on the linguistic landscape, particularly in first- and second-tier metropolises and areas with significant ethnic minority populations in China. Recent years have seen a shift towards investigating linguistic landscapes in smaller inland cities. However, no studies have explored the linguistic landscape of Zibo City to date. This study utilizes language signs from Eight Major Bureaus Grocery Market in Zibo City as corpus samples, with data collection and organization accomplished through mobile phone photography. Quantitative statistical analysis, employing a multi-modal perspective, aims to provide a comprehensive understanding of the linguistic landscape in Zibo City. The study aims to identify language codes and their distribution on language signs, investigate how the linguistic

landscape can facilitate product introduction through various modal forms, offer practical suggestions for enhancing the linguistic landscape of Zibo, and contribute to the urban development of the city.

2. Overview of linguistic landscape research at home and abroad

Since the 1990s, linguistic landscape has become a research hotspot in the field of linguistics, an important branch of sociolinguistics that intersects with various disciplines.

Foreign linguistic landscape research started early. Foreign linguistic landscape studies mainly focus on the use of multiple languages, English linguistic landscape, identity and so on. First of all, multilingual landscape research is the mainstream of foreign linguistic landscape research, and there are many researches on multilingual landscape. Alexander[2] investigated the linguistic composition of commercial signage in the linguistic landscape of Athens, the capital of Greece; Yusuf, Rohmah and Alomoush[3] analyzed the language distribution in the business linguistic landscape of Leipzig, the German trade center. Secondly, the relationship between English as a global language and other local languages is another mainstream of linguistic landscape research. Due to the influence of globalization and the development of science and technology, English has been widely spread. Different scholars have conducted empirical studies in different cities, and the common feature of city selection is that these places have a flow of people and a large number of language symbols. Lawrence[4] analyzed the use of English in the Korean linguistic landscape and concluded that there are areas of English in Seoul as well as in all regions of Korea. Alomoush[5] investigated the use of English in the linguistic landscape of Jerash, one of the oldest cities in Jordan, and concluded that English is widely used in the linguistic landscape of business. Finally, identity is one of the main contents of linguistic landscape research, which focuses on the identity expressed through linguistic landscape and examines different identities. Trumper-Hecht[6] investigated the linguistic landscape of an Arab-Jewish mixed city in Israel, examining local Arab identity by analyzing whether language signs in the city's shopping malls were in Arabic.

Domestic linguistic landscape research is increasingly rich. In recent years, the study of linguistic landscape in China has made important progress in both theoretical introduction and empirical research [7]. With 'title' as the search item and 'linguistic landscape' as the key word, 794 articles, including 157 theses, were searched on CNKI. In terms of theoretical introduction, many scholars have summarized domestic linguistic landscape studies from different perspectives. Yao [8] summarized the theoretical framework and research methods of linguistic landscape. Fu and Liu [9] reviewed the research on domestic linguistic landscape. Chen [10] summarized the research hotspots of linguistic landscape. In terms of empirical research, it mainly focuses on the first and second tier big cities and the cities where ethnic minorities are concentrated. For example, Su [11] analyzed the linguistic and cultural power of private signage in Shanghai; Yuan [12] took Beijing as an example to study the linguistic landscape of the international metropolis. Chen [13] analyzed the study of Hefei's urban linguistic landscape; Li and Xia [14] studied the language use in the linguistic landscape of the ancient urban area of Lijiang. Liu [15] focuses on the linguistic landscape and ethnic identity of the Chinese community in Indonesia; Nie and Munai [16] analyzed the use of Yi linguistic landscape in the old city and business district of Xichang City. The study of linguistic landscape in tourist cities has increased greatly. For example, Liu, Liu and Huang [17] investigated the linguistic landscape pattern of Sanya. In recent years, some scholars have studied the linguistic landscape of small and medium-sized cities. For example, Zhang and Lv [18] studied the linguistic landscape of small and medium-sized towns in China from the perspective of language planning. Qiu [19] studied the linguistic landscape of Shangrao City, Jiangxi Province. But so far, no scholars have studied the linguistic landscape of Zibo City.

Research on linguistic landscape, both domestically and internationally, has primarily focused on

text-based modes, while neglecting non-textual multimodal symbols like sound and video. Indeed, most linguistic landscapes are constructed using multiple modal symbols. Recently, scholars have expanded the scope of linguistic landscape research, highlighting the importance of a multi-modal perspective [20]. Focusing solely on language aspects, known as single mode, may result in distorted or incomplete understanding of the phenomenon. Non-literal multimodal symbols undoubtedly play a crucial role in linguistic landscape research.

3. A Survey of Multimodal Linguistic Landscape in Zibo City

3.1 Overview of the Eight Major Bureaus Grocery Market

Eight Major Bureaus Grocery Market of Zibo City were a highly popular destination during the May Day holiday in 2023, representing a significant aspect of Zibo's city image. Spanning 800 meters, they are situated in Zhangdian District, Shandong Province, serving as a focal point for local residents' daily shopping needs and a prominent tourist attraction. The historical significance of the 'Eight Major Bureaus Grocery Market' has transformed it into a cornerstone of people's shopping and community life, evolving into a bustling commercial hub within Zibo City. The reasons for choosing Eight Major Bureaus Grocery Market f as the research object of Zibo's linguistic landscape are as follows: First, the symbol with the highest density can be found in the city. The sample area is located in Zhangdian District, downtown Zibo. Zhangdian District has a large population flow and abundant language signs. The object of linguistic landscape research is language sign. The density of signs is highest in cities and towns, especially in major shopping streets and industrial areas. [21] Shopping centers and traditional markets are where the bottom-up signs are. As a commercial block, there are a large number of language symbols in the convenience market, which provides a rich corpus for the study of linguistic landscape.

3.2 The Current Situation of Language Use in the Multimodal Linguistic Landscape of the Eight Major Bureaus Grocery Market

This study employed field investigation methods. In November 2023, the author utilized the camera and video functions of an Apple mobile phone to document language signs in the north-south commercial streets and surrounding public areas of Eight Major Bureaus Grocery Market. Following Backhaus's methodology, each language entity, regardless of size, was treated as a statistical sample, resulting in a collection of 634 valid language signs[22]. The study focused on three main areas: (1) Differences in presentation between official and private signs in Eight Major Bureaus Grocery Market; (2) Multimodal features of the linguistic landscape within these markets; (3) The social significance and value embodied in the multimodal linguistic landscape of Eight Major Bureaus Grocery Market.

As shown in Table 1, official and private signs in Eight Major Bureaus Grocery Market vary in presentation but prioritize Chinese language usage. Among official signs, the majority are monolingual Chinese, followed by 7 bilingual Chinese-English signs, 3 Chinese-English-Pinyin signs, and 2 Chinese-Pinyin signs. Private signs predominantly consist of 497 monolingual Chinese signs, with additional variations such as 44 Chinese-Pinyin signs, 38 Chinese-English signs, and 7 Chinese-English-Pinyin signs. Monolingual Chinese signs constitute the majority, indicating its dominant role in communication within Zibo City.

The presence of multilingualism is not prominent in the linguistic landscape of the convenience market, and the popularity of bilingual signs is relatively low. Chinese serves as the official language, whereas English primarily reflects the influence of internationalization. As an inland third-tier city, Zibo's linguistic landscape is predominantly Chinese, with English serving a supplementary role due to regional demographics and other factors. This observation aligns with one of Ben-Rafael's

'principles of linguistic landscape construction,' rooted in sociological theory: the principle of power relations [23]. In China, Chinese serves as the dominant sign language, effectively conveying information in the linguistic landscape and fostering a strong sense of identity and acceptance among the masses. The prevalence of Chinese monolingual signs highlights the firm national and cultural confidence of both the Zibo municipal government and its citizens.

Table 1: Overview of the linguistic landscape of Eight Major Bureaus Grocery Market

type	Chinese	Chinese & pinyin	Chinese & English	Chinese& pinyin& English	sum
Official	36	2	7	3	48
Non-official	497	44	38	7	586
sum	533	46	45	10	634

As shown in Table 2, the linguistic landscape of Eight Major Bureaus Grocery Market predominantly features visual modes, particularly single-mode text visual signs, totaling 339. The number of single-mode text visual mode signs is large, with 339 single-mode text signs, up to 53.5%. One of the functions of linguistic landscape is information function, conveying information, and word symbols are the most commonly used symbols in linguistic landscape. Multiple modes include visual mode, auditory mode, tactile mode and olfactory mode, etc. [24]. The number of single-mode text visual modes in signs is the largest, 25 in the official signs accounted for 52%, 314 in the private signs accounted for 53.6%; The second is the combination of text and pictures, 23 of the official signs accounted for 48%, and 261 of the private signs accounted for 44.5%; A multimodal linguistic landscape with 6 auditory modes of text, picture and sound; Five multimodal linguistic landscape with text, pictures and tactile modes of physical movements.

Table 2: Multimodal linguistic landscape of Eight Major Bureaus Grocery Market

type	mode	number
official	text only	25
	text & image	23
non-official	text only	314
	text & image	261
	text & image & sound	6
	text & image & physical movement	5

3.2.1 Unimodal linguistic landscape

The billboard designed by Luyi Food Co., Ltd. falls under the category of unimodal linguistic landscape. Scollon and Scollon's theory of place semiotics is rooted in geographical semiotics[25]. This theory aims to elucidate the meaning of signs within a specific society by examining their placement in the social and cultural context, delineating hierarchies, and facilitating systematic comparisons. Place semiotics comprises three main aspects: code orientation, lettering, and placement. The sign incorporates two codes, with Chinese characters visibly larger than English, signifying Chinese as the dominant code. The artistic depiction of 'Zibo' on the left encapsulates the history and culture of Zibo City. 'Zibo' refers to symbols such as Zibo barbecue, the landmark building Haidai Tower, and Zibo ceramics, representing local porcelain making skills at that time. The 'fu' in 'bo' is derived from the ancient Chinese character 'qi'. Football symbols indicate that Zibo City is the origin of the world football 'Cuju'. Furthermore, alongside depicting the history and culture of Zibo, the

artistic character also represents the process of bread making, thus integrating aspects of corporate culture.

3.2.2 Linguistic Landscape Combining Text Mode and Picture Mode

The 'Eight Major Bureaus Grocery Market Picture' memorial sign combines text and picture modes: the left side features the origin of the 'Eight Major Bureaus Grocery Market Picture' name and relevant text introduction, while the right side displays the food map of Eight Major Bureaus Grocery Market. The symbol in the upper left corner of the sign is the 'Pursuing Dreams Zibo' LOGO, selected by public vote as part of Zibo's 'urban aesthetics' initiative, symbolizing public involvement in city development. The translation error of 'ZiBo' should be corrected to 'Zibo' as linguistic landscape reflects a city's civilization degree and image, underscoring the importance of accurate language management and supervision by relevant government departments.

Party and Mass Service Station V is a crucial location for grassroots party organizations to engage with and serve the public. The signage at Station V combines text and picture modes: the center features name and location introductions in pinyin, while the left side displays the emblem of the Communist Party of China. The small box contains the functions of Station V, providing clear information to the public with words and icons. In addition to information transmission, the symbolic function of linguistic landscape is crucial. Ensuring convenience and inclusivity, Station V signage should cater to diverse audiences, including non-Chinese speakers, reflecting Zibo's open approach to all visitors and citizens. Correcting Chinese pinyin spelling errors in private signs, particularly at Eight Major Bureaus Grocery Market, requires prompt action by relevant government departments to ensure linguistic accuracy.

The billboard at Mai Xiang Pasta Shop combines text and picture modes: the center introduces purple rice cake in text, with additional information highlighted in yellow font below. Picture modes on both sides showcase video screenshots of the Internet-famous exploration shop. Self-promotion is a primary principle in linguistic landscape design, where unique features and innovative elements attract public attention and enhance visibility amidst competition. Many shops augment homemade signs with additional information like contact numbers or QR codes, maximizing the signs' information function and audience engagement.

There are identical language signs under the desks of each calligrapher and painter in Eight Major Bureaus Gallery in the grocery market, sponsored by Geely Holding Group. The billboard combines the text mode and the picture mode, located in the center is the 'eight major bureaus gallery' written in the calligraphy font, which not only highlights the information function of the language sign, indicating that the main function of the place is the book gallery, but also meets the symbolic function of the language sign, reflecting the cultural taste of the sign designer, but also harmonizes with the antique atmosphere of the book gallery. Under normal circumstances, the calligraphy font in the sign uses more herbs, running books, and thick lines, because the style of these two calligraphy fonts is smart, lively, and personalized, and can attract the attention of consumers. The upper left corner is marked with the brand name, and the lower right corner adds the slogan with affinity 'radar car, made in Zibo' and 'Zibo people buy Zibo cars, buy cars and send drones', which connects the image of Zibo with the brand, helps to shape the brand image, and supplements relevant information using QR codes. The background adopts the traditional Chinese painting form - ink painting, the content contains drones, and the product drone is creatively integrated into the fresh and elegant ink painting.

The sign of a beverage store uses a combination of text mode and picture mode. The text 'corn juice' is written in red art font. The bottom right corner and right side of the sign are matched with pictures of corn and corn juice to supplement product information. The designer of the sign uses warm colors of red and yellow to attract attention, stimulate appetite and increase the desire to buy. However, due to the limited education level of the sign maker, the text corn in the center of the sign is

mistranslated as 'jade rice', the correct translation of corn is 'corn' and the correct translation of corn juice is 'corn juice', and the merchant should choose the latter translation. The Chinese-English code translation is not accurate, the foreign language on the sign fails to express the meaning of the language sign correctly, affecting the function of the linguistic landscape information transmission in Zibo city. Therefore, the sign designer can consult foreign language professional learners or teachers when designing foreign language signs. Zibo City government also needs to pay attention to the linguistic landscape. Supervise private language signage and urge the correction of problematic signage to avoid unnecessary misunderstanding and trouble for foreign tourists. The deeper correction is that the government takes measures to strengthen the language literacy of the whole society.

3.2.3 Linguistic Landscape Combining Text, Picture, and Sound Modes

The pearl jewelry shop sign adopts the combination of text, pictures and sound modes, and the sign indicates the characteristics of 'opening clam on the scene'; The picture of pearl jewelry is displayed below the text, and the real pearl jewelry is displayed under the shop sign; The merchant opens the clam on the spot, and makes a sound when opening the pearl clam to attract potential consumers. The sign of the shop uses the combination of text, pictures and sound modes, and the sign indicates the characteristics of 'origin direct'; The picture mode of Buddha heart fruit and other sales products is displayed above the text mode, and the products are displayed under the shop sign; The sound of polishing jade on site allows customers to experience the linguistic landscape through multiple modes. Signage at the flower tea shop also utilizes a combination of text, pictures, and sound modes. The text features the line 'Zibo meeting you is the most beautiful accident!' complemented by colorful flowers in the picture mode and a warm yellow background, creating a warm and inviting ambiance that reflects the image of Zibo City. Shop assistants promote their products using a loudspeaker, inviting people to taste while utilizing sound mode to attract attention.

3.2.4 Linguistic Landscape Combining Text, Picture, and Tactile Modes of Physical Movements

The signage at Qi Pin Good Things store combines text, pictures, and tactile modes of physical activity to meet participants' emotional needs and foster high interaction levels, making it more appealing to consumers. The center of the store sign features 'Qi Pin Good Thing' written in Chinese calligraphy, with English used as a secondary code to explain the store name. On the left side, a red icon depicts a distorted version of the ancient Chinese character 'Qi'. Zibo barbecue mascots 'Meizizi' and 'Xiangbobo' are placed at the store entrance to attract visitors for photos, enhancing interaction and tourism experience. The multimodal linguistic landscape incorporates dynamic sound and live experiences, enhancing its appeal compared to single-modal landscapes. The signs of the Eight Major Bureaus Gallery are combined with text, pictures and physical activities. For example, the painter paints and writes on the fan, and the fan contains both text and picture modes. Consumers can feel the material technology of the fan, and the painter paints the calligraphy and painting on the spot as well as the sales of Zibo cultural and creative products. It is convenient for customers but also shows human concern. The multimodal linguistic landscape adds a dynamic sound and live experience component, making it more attractive than a unimodal linguistic landscape.

4. The Promoting Effect of Linguistic Landscape on Zibo City Image

Out of the 634 language signs collected, 586 were private signs, making up 92.4% of the total, while only 48 were official signs, accounting for 7.6%. The abundance of private signs compared to official ones indicates active participation from the masses in constructing the linguistic landscape of Eight Major Bureaus Grocery Market. This highlights both the freedom and encouragement from the government for citizen involvement in shaping Zibo's city image. Zibo is perceived as a city

embodying values like honesty, simplicity, enthusiasm, and happiness, with every resident dedicated to upholding the city's reputation. The linguistic landscape mirrors the local political economy and social culture. Zibo uses its city image to attract tourists and promote its development. The Zibo brand and linguistic landscape mutually benefit and develop together.

A plethora of private signs reflects active citizen-government cooperation in shaping Zibo's warm, hospitable, politically harmonious, and vibrant city image. Many shops feature 'Zibo', 'Eight Major Bureaus Grocery Market Picture', and 'Network Red' in their signage, symbolizing the friendly atmosphere and collective identity within the community, aligning with linguistic landscape principles. For instance, the signage at the cultural and creative shop 'Datong Society, the Most Beautiful Zibo' expresses both aspirations for a better life and praise for Zibo as an exemplary city.

Qi Shochu's advertising brand, using the text 'Zibo Temperature, You and I Help', embodies the brand's sense of responsibility and pride as a representative of Zibo. Likewise, official signage actively contributes to shaping Zibo's beautiful linguistic landscape. At the entrance of Eight Major Bureaus Grocery Market, the language sign at the New Era Civilizational Practice Volunteer Service Station bears the message 'Zibo, a City with Love' in red; meanwhile, the propaganda bar on the west side of Eight Major Bureaus Grocery Market Picture entrance utilizes a multi-modal linguistic landscape with text and picture combinations. Its text reads 'Every Citizen Is a Spokesperson for Zibo's Image', complemented by an image showing a family of three walking amidst grass, under a blue sky with white clouds and tall buildings.

5. Conclusion

From the multi-modal perspective, this paper makes a quantitative and qualitative analysis of the linguistic landscape of Zibo City, and the following conclusions can be drawn. First, the multilingual phenomenon of the linguistic landscape of Zibo city is not obvious, and the characteristics of Chinese as the dominant code are obvious and have an absolute dominant position. Under the influence of globalization, English has a certain impact on the emerging commercial streets, but there is no third language besides Chinese and English. Second, private signs are more diversified in modal distribution, and there are a large number of multi-modal linguistic landscapes. The government encourages the masses to actively participate in the construction of Zibo city image, but there are also some problems in the linguistic landscape of Zibo city, such as irregular spelling in the form and inaccurate translation of signs, unclear semantic expression in the content and serious wear. Third, the linguistic landscape plays a promoting role in the construction of the city image of Zibo. There are a large number of private signs, and there are language signs with Zibo characteristics.

Eight Major Bureaus Grocery Market serves as Zibo city's emblem, showcasing its distinct cultural essence. Linguistic landscape, as a crucial cultural symbol, acts as a canvas portraying the city's image. The urban linguistic landscape significantly influences the formation of the urban image. There is room for improvement in the development and planning of multimodal linguistic landscape within Eight Major Bureaus Grocery Market. The rich and diverse multimodal linguistic landscape plays a vital role in advancing the modern service industry and shaping the urban image and temperament. Visitors experience the charm of Qi culture, the prosperity and vitality of Zibo city, and witness the collective efforts of the government and citizens. Relevant departments should address research challenges, bolster the city's cultural heritage, improve its image, and develop a linguistic landscape aligned with Zibo's promotional phrase 'Taste the Fireworks of the World, Explore Zibo's Charm'. Likewise, linguistic landscape construction in every city should showcase cultural and regional characteristics.

References

[1] Landry, R. & Bourhis, R.Y. Linguistic landscape and ethnolinguistic vitality: An empirical study[J]. Journal of language and social psychology, 1997, (1)23–49.

[2] Alexander, N. Mapping the linguistic landscape of Athens: The case of shop signs[J]. International Journal of Multilingualism, 2016, (5)1-21.

[3] Yusuf, K., Rohmah, Z., & Alomoush. O. I. The commodification of Arabic in the commercial linguistic landscape of Leipzig[J]. Social Science and Humanities, 2022, (4)1703-1722.

[4] Lawrence, B. C. The Korean English linguistic landscape[J]. World Englishes, 2012, (1)70-92.

[5] Alomoush, O. I. English in the linguistic landscape of a northern Jordanian city: Visual monolingual and multilingual practices enacted on shopfronts[J]. English Today, 2018, (5)1-7.

[6] Trumper-Hecht, N. Constructing national identity in mixed citizen Israel: Arabic on Signs in the Public Space of Upper Nazareth[A]. Linguistic Landscape: Expanding the Scenery[C]. Edited by Shohamy, E. & Gorter, D. London: Routledge. 2009, 238-253.

[7] Zhang Tianwei. New Approaches, Methodologies and Theoretical Developments of Linguistic Landscape Studies [J]. Chinese Journal of Language Policy and Planning, 2020 (4): 48-60.

[8] Yao Xiaofang. Theoretical Perspectives and Research Methods of Linguistic Landscape Studies [J]. Journal of Beijing International Studies University, 2021(4): 101-115.

[9] Fu Jiaqian & Liu Min. A review of domestic linguistic landscape research [J]. Journal of Capital Normal University, 2023 (5): 88-95.

[10] Chen Rui. The multi-dimensional orientation of linguistic landscape research hotspots [J]. Jianghuai Tribune, 2021(6): 187-192.

[11] Su Jie. Language Power and Culture Power of Bottom-Up Signs in Urban Shanghai [J]. Chinese Journal of Language Policy and Planning, 2017(2): 27-34.

[12] Yuan Yuan. A Study on Urban Linguistic Landscape in Internationalized Metropolis: The Case of Beijing [J]. Journal of Ningxia University, 2018(4):8-13+24.

[13] Chen Rui. Multi-dimensional Research on Linguistic Landscape in Hefei City[J]. Journal of Hefei University of Technology, 2022(3): 56-63.

[14] Li Lisheng & Xia Na. The Linguistic Landscape in a Multiethnic Region: The Case of Lijiang's Old Town [J]. Chinese Journal of Language Policy and Planning, 2017(2): 35-42.

[15] Liu Hui. Linguistic Landscape and Ethnic Identity of Chinese Ethnic Communities in Indonesia—A Study in Batam, Pontianak, and Pekanbaru [J]. Chinese Journal of Language Policy and Planning, 2016(1): 42-49.

[16] Nie Peng & Munai Reha. An Investigation of the Linguistic Landscape of Yi Characters in Xichang City [J]. Applied Linguistics, 2017(1):70-79.

[17] Liu Lifen, Liu Xiujuan, & Huang Zhonglian. Exploring Russian Linguistic Landscape Patterns: A Case Study of Sanya City [J]. Foreign Languages in China, 2021(6):51-57.

[18] Zhang Hongjun & Lv Mingchen. Research on linguistic landscape of small and medium-sized cities in China from the perspective of language planning [J]. Social Science Front, 2019(6):267-271.

[19] Qiu Ying. A survey on linguistic landscape in Shangrao City [J]. Applied Linguistics, 2016(3):40-49.

[20] Shohamy, E. & Waksman, S. Linguistic landscape as an ecological arena—modalities, meanings, negotiations, education[A]. Linguistic Landscape: Expanding the Scenery [C]. Edited by Shohamy, E. & Gorter, D. London: Routledge. 2009, 313-331.

[21] Manan, A. S., David, K. M., Dumanig, P.F. et al. Politics, economics and identity: Mapping the linguistic landscape of Kuala Lumpur, Malaysia[J]. International Journal of Multilingualism, 2015, (1)31-50.

[22] Backhaus, P. Signs of multilingualism in Tokyo: A linguistic landscape approach [M]. Clevedon: Multilingual Matters, 2006.

[23] Ben-Rafael, E. A sociological approach to linguistic landscape study[J]. Linguistic Landscape: Expanding the Scenery. New York: Routledge, 2009, 40-54.

[24] Zhang Jingni & Wang Jiahe. Culturality, locality and modernity: Functions and planning of multimodal tourism linguistic landscapes [J].Social Science, 2022(3):56-63.

[25] Scollon, R. & Scollon, W. S. 2003. Discourse in place: Language in the material world[M]. London: Routledge.