

Representational, Interactional, and Organizational Meanings of the Tourism Linguistic Landscape in Dunhuang

Pengrui Feng¹, Pingjun Nie²

¹ College of International Cultural Exchanges, Northwest Normal University, Lanzhou 730070, China

² School of Humanities and Social Sciences, Beijing University of Civil Engineering and Architecture, Beijing, 100044, China

²Corresponding author. Email: niepj@bucea.edu.cn

ABSTRACT

The present study takes Mogao Caves and Mingsha Mountain Crescent Spring as sample cases to explore tourism linguistic landscape. This paper deals with the interacting mechanisms inherent in representational, interactional and organisational meanings, and analyses its structural aspects from the viewpoint of spatial discourse analysis. The results demonstrate that in terms of representational meaning, the language configurations reflect confluence of internationalisation and historical legacy, building a spatial narrative of "Sense of Community for the Chinese Nation". To interactional meaning, managers regulate the dynamic power exchange between visitors and hosts through the spatial placement. Signage of organisational meaning, the material composition and colour schemes of the signage functionally provide a consistent visual order and a logic for spatial diversion. Interaction of these three aspects is an important tool to promote spatial governance and cultural identity.

Keywords: *Tourism linguistic landscape, Spatial discourse, Spatial governance, Cultural identity.*

1. INTRODUCTION

Dunhuang is an important nodal city on the old Silk Road. Places like the Mogao Caves and Mingsha Mountain Crescent Spring not only make a field for domestic and foreign tourists to feel the Silk Road culture, but also a typical arena for cross-cultural contact. In these high-density interaction spaces the language landscape is an important tool for the localisation, modernisation and internationalisation of tourism beautiful places [1]. Landry and Bourhis described the linguistic landscape as the "collection of language on public road signs, advertising billboards, street names, shop signs, and government signs within a public space" [2]. Studies of tourism linguistic landscapes have largely concentrated on code statistics in the two-dimensional planes of texts [3-5]. Ravelli and McMurtrie (2016) projected the three meta-functions of Halliday's [6] systemic functional linguistics into three-dimensional space, arguing that spatial texts do not simply mirror

social reality, but co-construct it. For Dunhuang, a city on the Silk Road, the language environment is not just a tool for visitors to swiftly get information, but also a spatial medium of communication that connects current tourists with the imprints of the old Silk Road. Foucault, in his classic description of "heterotopia", points out that a real location might combine a number of diverse spaces or fields at the same time [7-8]. The picturesque spots of Dunhuang gather the grottoes and buildings of different ages in one place. The intervention of the tourism sector has reconfigured the meanings of local spaces and locations through the language landscape, and the coordination among the meanings is extremely significant.

2. RESEARCH STATUS AND THEORETICAL FRAMEWORK

2.1 *Research Status of Tourism Linguistic Landscapes*

The study of tourist linguistic landscapes developed from a change in sociolinguistic ideas on the role of language in tourism contexts. Dann (1996) suggested that the language of tourism is not a neutral transporter of information but an invisible device of social control [9]. Later academics, including Edensor and Coupland have defined tourism discourse as an overt device of social display and a highly performative operational mechanism [10-11]. In this sense, language is not a transparent window for information, but a performative resource purposely crafted to produce specific experiences. For example, the Palace Museum research shows that English has gone beyond the limit of daily conversation and has been transformed as a commodity with symbolic value [12].

Lefebvre introduced the triad of spatial production, spatial practice, representations of space and representational space. After that, the linguistic landscape was not considered as a simple means of disseminating information but rather as a synthesis of space and semiotics [13]. In parallel with the development of the "spatial turn", Leeman and Modan use political economy perspectives to the ways language is reconfigured as a commodity across the dimensions of context, history and geography, in order to suggest the ideologically charged nature of social production behind the landscape [14]. The tourism linguistic landscape is a kind of "virtual communication" between scenic area and tourists, and should be constructed balancedly between the many identities of tourists and the language rights of minority groups [15]. These findings show that academic research has steadily shifted its focus from the two-dimensional sign statistics to the three-dimensional spatial story, thus providing a theoretical framework for this study.

Although the previous researches have established a multi-dimensional framework, a horizontal comparison shows that the similarities in site selection and analytical frameworks still exist. First, the research objects are characterised by a distinct urban-centrism and the economic logic of developed cities in a globalised world [16-20]. Although some scholars have started to investigate multi-ethnic integration regions [21-25] and

campus linguistic landscape development [26-27], systematic research on complex cultural fields is still negligible compared to the large volume of urban studies. In terms of analytical dimensions, the main emphasis is on code statistics, official characteristics, and translation standards of signs [28-29]. They see the linguistic environment as a stable physical plane. However, in zones with deep historical history, the selection of code is no longer only a tool of present-day communication, but rather a potent expression of historical imprints recontextualised in contemporary space. In view of this, this study takes Mogao Caves and Mingsha Mountain Crescent Spring in Dunhuang as the target of the linguistic signals. This study starts with the three dimensions of representational, interactional and organisational meaning, based on two-dimensional research and the Spatial Discourse Analysis framework [30], to explore the recontextualization of tourism linguistic landscapes in complex spatial scenes, and analyse the interaction between linguistic symbols, historical memory and physical space from a three-dimensional perspective.

2.2 *Spatial Discourse Analysis Framework*

The Spatial Discourse Analysis framework is based on Halliday's three meta-functions of systemic functional linguistics [31]. It corresponds to the "ideational function" of representational meaning, and studies the transformation of static historical texts into dynamic spatial texts through linguistic signs and the representation of Dunhuang's distinctive historical identity through code configuration in physical space. Interactional Meaning Is Related to the "Interpersonal Function". It is concerned with the regulation of behaviour and construction of social ties using spatial symbols. This study mainly investigates how linguistic signs maintain order by different intensities of tone, and how they effect the shift from authoritative control to tourist-centered guided service by changing spatial arrangements. Organisational Meaning Also called "Compositional Meaning" it refers to the "Textual Function" and it refers to the internal structural coherence of spatial texts. This study shows how signs use visual information to show the discursive advantage of local culture through the combination of sign materials with the desert environment and the typographical design of codes. The representational, interactional and organisational meanings are not separate, but symbiotic, co-occurring and synergic.

3. RESEARCH DESIGN

3.1 Research Methods

The field examination region of this study is the two main scenic spots to the southeast of Dunhuang, namely, Mogao Caves and Mingsha Mountain Crescent Spring. Finally, we chose 268 viable samples, all of which were acquired by photographing every apparent linguistic indication in these places exhaustively. Because of the limitations of heritage conservation in the Mogao Caves, the data collection was limited to the external areas, and some modifications were made to the sparse distribution of signs in the desert landform of Mingsha Mountain. The captured dataset consists of public road signs, street markers, building numbers, billboards, large-scale posters and shop signs, all passed through three strict validity criteria: firstly, the completeness of the carrier, meaning that the physical media such as indicator boards or electronic screens must be photographed clearly to identify their shape and material; secondly, the completeness of language, which means that all the text content, including multilingual translations and annotations. After that, the samples were rigorously analysed using MAXQDA software, and a comprehensive coding system was created based on sign materials, code types and the relative proportions of different language codes.

3.2 Research Questions

Representational Dimension: How do the linguistic landscapes of the two major scenic places in Dunhuang rebuild the imprints of the Silk Road and portray their own historical character through the configuration of linguistic codes and content?

Interactional dimension: How does the linguistic environment regulate the placement of codes and

social distance to construct a service-oriented engagement between managers and tourists?

Organisational Dimension: How do the physical features of the linguistic landscape manage to separate private and official places through the design of visual coherence and salience?

4. ANALYSIS OF INTERACTIONAL RELATIONS IN TOURISM LINGUISTIC LANDSCAPES BASED ON THE SPATIAL DISCOURSE ANALYSIS FRAMEWORK

Apart from their informational and symbolic roles, signs may carry symbolic connotations such as exoticism, historical depth and hospitality in linguistic landscape activities. [32] "Table 1" shows the statistical distribution of sign functions in the two major scenic sites of Dunhuang, and it can be seen that the distribution of various types is unequal. Interpretive Signs Interpretive signs are in commanding lead taking up the largest share at 50.75%. This illustrates the focus on knowledge representation of iconic destinations in spatial arrangement. Relevant discourse reconstructs the physical space into a narrative field, which guides travellers from visual touring to participatory cognition. Fairly even in numbers are Directional (19.78%), Commercial (11.57%), Warning Signs (11.19%); That reflects the dual balance between the scenic areas in guidance services, commercial operations and disciplinary order has been reached. Political Propaganda Signs 6.72% The design of political propaganda signs adopts the layout technique of "small but refined". Their strong connection with the whole surroundings of the picturesque location indirectly makes a visual proclamation of national cultural sovereignty.

Table 1. Functional classification statistics of signs in Dunhuang's two major scenic areas

Classification	Typical Text Examples	Quantity	Percentage
Interpretive Signs	"Geological Formation of Crescent Spring"	136	50.75%
Directional Signs	"Camel Riding Point"	53	19.78%
Commercial Signs	"Dunhuang Specialty Products"	31	11.57%
Warning Signs	"No Drone Zone"	30	11.19%
Political Propaganda Signs	"The Chinese Nation as One Family"	18	6.72%

On a functional level, some signs are mainly employed to control tourists' behaviour and to guarantee safety in the picturesque regions (e.g.,

"No Drones" or "Caution: Steps"). In these signals, the use of imperative discourse is frequent. Other categories are related to spatial orientation and

location cues, such as “Entrance”, “Restroom”, and “Parking Lot”, where short text or symbols are used to convey spatial direction. As for the content aspects, the scenic locations have signs that are supposed to provide information about particular attractions. Some of the placards explain the historical background, dynasties and art features of the murals at Mogao Grottoes. Others describe the natural wonders such as the geological development of the Crescent Spring. beautiful sites also have couplets, such as, “Gathering drops of water to form a spring reflects great tolerance; Accumulating grains of sand to form a mountain signifies self-contentment”. The fundamental function is to impart the cultural and natural essence of the beautiful area. The signs in the private sectors of the beautiful regions are mostly for commercial information, such as the name of the shop, its business scope and real-time price, which directly serves the transaction operations. Moreover, a component of the linguistic landscape is to communicate mainstream societal ideals and beliefs. For instance, the signs in the Mingsha Mountain Crescent Spring area, such as “People have faith, the nation has hope, and the country has strength” (reflecting the idea of common prosperity) and “The ethnic groups are one family, building the Chinese dream together” (reflecting ethnic unity), have clear ideological guidance. The theoretical framework of this study is the spatial discourse analysis framework, and it explores the generative mechanism of the linguistic landscape of the two major scenic sites in Dunhuang from three dimensions: representational meaning, interactional meaning and organisational meaning.

4.1 Representational Meaning

4.1.1 Code Representation

The signs in the landscapes of the two major scenic sites of Dunhuang are divided into three categories: monolingual signs, bilingual signs and multilingual signs. These are indicative of a strong feature of Chinese domination with the supplement of multiple languages (“Table 2”). This evolution from monolingual to multilingual configurations corresponds to certain sign functions and is indicative of a hierarchical linguistic landscape system for language services. The signs are in four languages: Chinese, English, Japanese, and Korean. They appear in different forms: monolingual signs are Chinese or English; bilingual signs are Chinese-English; and multilingual signs are mainly all four codes

These language combinations have established a distinct hierarchy order that is highly correlated with linguistic strength. High-prestige cultures endow their languages with a force that exceeds the social standing of their speakers, whereas the linguistic strength of low-prestige cultures is reduced, and in some cases even supplemented by other powerful languages, to a less prominent position. [33] The linguistic dominance of English as a worldwide lingua franca is derived from the confluence of historical colonialism, international political-economic arrangements, and cultural hegemony. English occupies an absolute dominant position in the linguistic hierarchy of the two picturesque areas in Dunhuang, just inferior to Chinese. By contrast, Japanese and Korean have to borrow from Chinese and English to appear in the landscape, a notable difference in power from English. This ordering of codes is not only cultural ethnocentrism but also a spatial depiction of the cooperation between the global logic and the local tourist demography. Chinese is the national common language, English is the worldwide common language, the usage and choice of these two languages are apparent.

Table 2. Types of linguistic signs in Dunhuang’s two major scenic areas

No.	Category	Quantity	Percentage (%)
1	Monolingual Signs	161	60.1%
2	Bilingual Signs	85	31.7%
3	Multilingual Signs	22	8.2%
Total		268	100%

4.1.2 Content Representation

The linguistic indicators in Dunhuang's two major scenic places construct three sectors of "scientific discourse", "humanistic discourse" and "political discourse" to change the tourism space into a typical field integrating science instruction and political advice. Some of these signs break the mould of standard surface-level introductions by introducing expert discourses from subjects such as geology, physics and conservation science within this linguistic landscape system. The aim is to enable tourists to learn appropriate natural scientific knowledge throughout the visit. ("Figure 1," "Figure 2")



Figure 1 Digital imaging preservation technology.



Figure 2 Sandstone and mudstone profile of Crescent Spring.

In the relevant regions of the Mogao Caves, signs explain the microscopic intricacies of "Digital Imaging Preservation Technology", while at Mingsha Mountain Crescent Spring, signs offer in-depth interpretation of the geological structure of the "Sandstone and Mudstone Profile". Such dense technical terminology creates a high-context cognitive environment. Instead of seeing tourists as passive observers, it views them as curious learners. "Multimodality" is a channel and medium for the exchange of meaning in the process of communication through text, image, video and other forms, and refers to the comprehensive reaction of the human sensory system to the

objective world. Tourists have different educational backgrounds, and the abstract ideas on signage can present reading hurdles and feelings of isolation. So the linguistic signs resort to multimodal presentation strategies to unveil the digital technological innovations and geological evolution processes, pushing tourists to go beyond the traditional visual surfaces and to grasp the era-appropriate technological reforms behind the heritage through the combination of text and graphics.

In addition, the two beautiful spots' signage systems create markers of current guards' deeds in the physical realm with individual biographies. Special signboards have been erected to tell the history of Dunhuang guardians Chang Shuhong, Duan Wenjie, Fan Jinshi and others. For instance, the plaques that provide information on "The Daughter of Dunhuang," Fan Jinshi, discuss her six decades of dedication to the Northwest and her work in shifting Dunhuang from rescue-based protection to scientific and digital preservation. The presentation of content further lengthens the narrative timeline from the modern times to the present, successfully reifying abstract cultural heritage into the "Mogao Spirit" (perseverance in the desert, selfless dedication, courage to take responsibility, and pioneering progress) by narrating the stories of the older generation of guardians. Kress and van Leeuwen (2006, 2010) have argued colours and shapes affect human feelings directly psychologically. [34] Tourists experience the physical heritage, forming a trans-temporal emotional connection with the first generation of "Mogao people", an emotional intervention that successfully diminishes the social barrier between tourists and historical subjects. ("Figure 3", "Figure 4")



Figure 3 Signs detailing the deeds of modern guardians.



Figure 4 Signs detailing the deeds of contemporary guardians.

As a region of multi-ethnic integration in north-west China.[35] The political linguistic signage of Dunhuang further enhances this level of representative significance. Political linguistic indicators such as “The Chinese nation is one family; building the Chinese dream together with one heart” and “Socialist Core Values” are closely incorporated into the beautiful places. The combination of signs that introduce the deeds of Dunhuang guardians with traditional moral signage, such as “Twenty-four Filial Pieties” and “Twenty-four Sincerities,” makes the organic combination of politics and ethics. This representational method embodies Dunhuang’s active practice of bolstering the “Sense of Community for the Chinese Nation”. At the same time, it keeps reminding domestic and foreign tourists that the Dunhuang scenic areas are not only world-class cultural heritage places, but also bear the important task of creating national cultural sovereignty and cultivating national identity. (“Figure 5”, “Figure 6”)



Figure 5 Political signage.



Figure 6 Traditional moral signage.

4.2 Interactional Meaning

The way that spatial texts build social relationships between authors and users is called interactional meaning. In the beautiful areas around Dunhuang, the linguistic environment isn't just a static way to send information; it's also a living for people to talk to each other. Kress and van Leeuwen [36] came up with four dimensions of visual grammar: contact, power, social distance, and interest. Ravelli and McMurtrie [36] added a fifth system: control. This five-dimensional model is used to look at how scenic managers and tourists interact with each other by looking at two main factors: the layout and the height.

4.2.1 Code Hierarchy and Behavioral Discipline Under Vertical Height

Power relations in spatial texts are established not only through the content of the text but also via the vertical height of the signs in physical space. The higher the vertical position, the stronger the dominant force. This concerns the notion of code preference in Scollon & Scollon’s geosemiotics, where if there are two or more languages on a sign, one is the dominant code and the others are peripheral. [37] The priority of the code is based on the spatial position, such as the dominant code is in the center in the centred arrangement, at the top in the top-bottom layout, and on the left in the left-right layout.

In the linguistic signs of the two major scenic areas in Dunhuang, the distribution of vertical space is in strict hierarchical order, with the Chinese as the official language always in the top or central position, much larger than other peripheral codes in font size and visual salience. For example, on warning signs such as “No Photos” or “Do Not Touch”, Chinese is the dominant information in the most prominent upper position,

while English and Japanese are relegated to the bottom and periphery as foreign language translation, with purely instrumental and auxiliary roles. Behavioural regulation is reinforced using high-modality negative imperatives (e.g., “Prohibited” or “Strictly Forbidden”) and high-contrast warning colours such as red, white, and black to visually establish a sensation of an impassable border. This relationship of linguistic codes mirrors the power relationship between host and visitor in the physical space. Managers control the vertical ordering of codes, allowing international tourists to receive the information they need, but also maintaining the power to define and govern the scenic space.

4.2.2 Interactional Space and Flexible Inclusivity under Horizontal Layout

On the horizontal dimension, by shortening social distance, regulating involvement thresholds and increasing flexible contact, a “host-guest dialogue” is established. The physical gap closes slowly, such that the space of the discussion itself is redefined. Hall divides interpersonal distance into four zones in his proxemics. These zones are intimate, personal, social and public. [38] Social distance is also broken down into close and far phases. The close phase (around 1.2-2.1 meters) is typically used for casual social gatherings whereas the far phase (around 2.1-3.7 meters) is used for more formal business or social conversations, the former undoubtedly providing greater involvement. Personal distance (roughly 0.45-1.2 m) can also be seen as the minimal distance that a biological entity keeps for its own activities, a distance that is typically employed for close communication between acquaintances. The interpretative signage at the two major sites in Dunhuang are designed with high word counts, tiny font sizes and high information density to improve tourists’ understanding of the scenic landscapes. This design makes the tourists come close to the signs to read the text clearly putting them exactly within the range of personal distance. At this distance, the tourists’ field of vision is fully occupied by the sign. They lose their regimented group identity and interact with the cultural text individually, which enhances the immersion of knowledge transfer.

Second, involvement is an additional fundamental feature of spatial discourse. It refers to the method and extent to which the audience is engaged in the text. Most of the explanatory and direction signs in Dunhuang’s two major scenic

places are placed on the roadside or at road junctions, so their spatial posture is not disruptive. The layout is mainly due to the need of cultural relic protection and the limitation of pedestrian traffic. Objectively, such a placement strategy on the reality of the environment is the ‘Oblique angle’ articulated by Kress & van Leeuwen. [36] Unlike the “confrontational” aspect and “high involvement” of the frontal view, the side-on perspective is a kind of “detached engagement.” This spatial relationship ensures that the signs do not dominate the interactant’s center field of vision, but exist as companions to the surroundings. This design, with a high welcome and low involvement, enables tourists to choose not to read, thereby objectively honouring their subjectivity and autonomy of action, which shows a “people-oriented” logic in spatial government.

Third, the dimension of contact concerns whether there is “eye contact” between the image and the visitor. The use of multilingual methods and polite language reduces the psychological social gap between tourists and the picturesque environment. Although scenic signage does not include the literal exchange of sight, the choice of linguistic codes and tone of delivery directly influence psychological distance. The picturesque regions make great use of quadrilingual signs in Chinese, English, Japanese and Korean, thus shattering the monopoly of one language. In example, offering services in their native languages makes Japanese and Korean tourists feel accepted and welcomed at the psychological level. At the same time, most interpreting signs take a declarative or service-oriented tone such as “warm tips.” This method effectively turns managers into supervisors who are on equal footing with tourists and builds an emotional bridge for visitors from different cultural backgrounds.

4.3 Organizational Meaning

Organisational meaning is part of the production of meaning and the texture and integration of spatial texts. The organization of spatial texts is important because it gives coherence and a meaningful structure to the spatial arrangement (van Leeuwen). [39] The linguistic landscape unites disparate aspects within a region to create a consistent narrative structure. In the two major beautiful areas of Dunhuang, the linguistic landscape achieves the physical level of the joint building of modern amenities with the old Silk Road environment through particular material

selection and layout design. The texture of a sign is the basis of meaning production. Tourist attractions depend on the material, shape, colour, and visual effect of text on linguistic landscape signals to inform. This study can be extended to three dimensions, material, colour and integration.

4.3.1 Material

It can be seen from “Table 3” that aluminium alloy accounts for the largest amount in the material composition of the signage in the two major scenic locations in Dunhuang, accounting for 35.1%. However, at the semiotic level, treatments of wood-mimicry and stone-mimicry are used by managers so that modern industrial materials visually blend

with the beautiful surroundings. Thus, a “ecological isomorphism” is formed between the constructed facilities and the Gobi Desert or grotto ruins, and the continuity of the heritage space is maintained. Private signage, by contrast, relies on PVC plastic, LED screens, and glass — high-saturation materials with oppositional textures — to make commercial information extremely salient. Mimetic material signs, made of wood and stone, try to create a sense of permanence at the visual level. By contrast, the industrial material sign, composed of very contemporary materials, tends to produce a transitory commercial ambience, designed to stimulate customer desire as quickly as possible. These substantial variances are an effective diversion of spatial functions.

Table 3. Statistics of signage materials in the two major scenic areas of Dunhuang

Material	Count	Percentage (%)
Aluminum Alloy	94	35.1%
PVC Plastic	68	25.3%
Wood	53	19.8%
Marble	32	11.9%
Sandstone	9	3.4%
Electronic Displays	9	3.4%
Glass	3	1.1%

In addition, morphological bionics is applied. Field research shows that certain signs deviate from the usual rectangular form, following the outline of a camel. The insertion of the physical shape of the camel turns the signs from an information board into an integrated part of the landscape, as a symbolic icon of the silk road. The emphasis on the regional metaphor of the “ship of the desert” completes the deep integration of man-made items and natural environment within the morphological dimension. (“Figure7”)



Figure 7 Camel-shaped bionic signage.

4.3.2 Color

The colour selection of the official signage at these picturesque spots is different from the high saturation visual effect which is sought in commercial districts. Most signs are designed in a largely earth-tone colour pallet with high-contrast identification colours used as accents. The Mogao Caves and the rocks of Mingsha Mountain are brown, ochre, reddish-brown in colour and the lettering is white. This combination of dark backgrounds and light-colored codes preserves the visual harmony, while assuring the legibility of textual content in the intense outdoor light of Northwest China. A few directional and warning signs, on the other hand, are high-saturation in design with bright colours and white text. This move away from ambient tones aims to swiftly attract tourists' attention to deliver advice. The two approaches dialectically reconcile aesthetics and utility in terms of organisational meaning through precise manipulation of the figure-ground link.

4.3.3 Integration

In conclusion, the linguistic landscape of the two key scenic spots of Dunhuang achieves the profound visual integration through three ways, i.e. the mimicking of materials, the bionics of morphology and the isomorphism of colours. This integration is mainly reflected in two areas. The first is the de-industrialized integration of the spatial ecosystem. By taking advantage of earth-tone visual mimicry and the regional metaphor of camel forms, managers effectively erase the abruptness of modern artefacts inside the scenic environment. This makes it possible for the linguistic landscape to mix with the environment as a whole, to a certain degree maintaining the authenticity of the World Heritage site. The second is the discursive diversion and integration of geographical functions. The permanence of official signage is in opposition to the transience of private signage, creating a rigid functional order at the organisational level. This material dimension of organization combines disparate texts into a highly logical and functionally structured discourse space. It not only technically optimises the efficiency of information transmission in the Northwest under strong light circumstances, but also visually accomplishes an ecological synergy between man-made and natural landscapes. Therefore, linguistic signage goes beyond the mere transmission of information, and it becomes an essential mediator in the production of space. It realises the complete development of Dunhuang's spatial meaning through the standardisation and systematisation of material features.

5. CONCLUSION

This study takes the tourism linguistic landscapes of Mogao Caves and Mingsha Mountain Crescent Spring in Dunhuang as its subjects, and makes a systematic analysis from the dimensions of representational, interactional and organisational meaning in the framework of spatial discourse analysis. The findings reveal that the tourism language landscape is a means of intercultural communication but also a fundamental mechanism of historical imprinting and spatial construction. Specifically, in the dimension of representational meaning, the selection of linguistic codes and content on the signage constructs a spatial narrative of "Sense of Community for the Chinese Nation"; in the dimension of interactional meaning, the scenic areas rebuild the relationship between managers and tourists through the use of vertical

and horizontal spatial planes and the establishment of a corresponding code hierarchy; and in the dimension of organisational meaning, managers construct an orderly diversion between official and private spaces through differentiated integration of signage materials and colours to accurately adapt to different environments. In the tourism linguistic landscape of Dunhuang, the three dimensions are interrelated, collaborating to build the overall significance of the place.

ACKNOWLEDGMENTS

Funding: General Project of the Philosophy and Social Science Planning of Gansu Province "Research on the Ecology of Urban Linguistic Landscapes in Dunhuang from Multimodal Discourse Perspective" (Grant No.:2024YB048); Beijing Social Science Fund project "Language and Cultural Heritage along the Beijing Central Axis" (Grant No.: 22YYB007).

REFERENCES

- [1] Lai M L. The linguistic landscape of Hong Kong after the change of sovereignty[J]. *International Journal of Multilingualism*, 2013, 10(3): 251-272.
- [2] Landry R, Bourhis R Y. Linguistic landscape and ethnolinguistic vitality: An empirical study[J]. *Journal of Language and Social Psychology*, 1997, 16(1): 23-49.
- [3] Yu W Q, Wang T T, Sun Y N. A survey on the Multilingual Landscape of Foreign Resident Communities in International Metropolises — A Case Study of Wangjing, Beijing and Gubei, Shanghai[J]. *Applied Linguistics*, 2016, (1): 36-44.
- [4] Qiu Y. An Investigation on the Linguistic Landscape of Shangrao City[J]. *Applied Linguistics*, 2016, 25(3): 40-49.
- [5] Li L S, Xia N. The linguistic landscape in a multiethnic region: The case of Lijiang's Old Town[J]. *Chinese Journal of Language Policy and Planning*, 2017, 2(2): 35-42.
- [6] Halliday M A K. How Do You Mean?[A]/Davies M, Ravelli L. *Advances in Systemic Linguistics: Recent Theory and Practice*[M]. London: Pinter Publishers, 1992: 20-35.

- [7] Shang J. The philosophy on spaces: The theory of Foucault's heterotopias[J]. Journal of Tongji University Social Science Section (Social Science Section), 2005 16(3): 18-24.
- [8] Yang S P. Heterotopia and Space, Order--Foucault's Heterotopian Thought and Revelation[J]. Journal of Huazhong University of Science and Technology (Social Science Edition), 2023, 37(4): 10-18, 60.
- [9] Dann G M S. The Language of Tourism: A Sociolinguistic Perspective[M]. Wallingford: CAB International, 1996.
- [10] Edensor T. Performing tourism, staging tourism: (Re) producing tourist space and practice[J]. Tourist Studies, 2001, 1(1): 59-81.
- [11] Coupland N. Style: Language variation and identity[M]. Cambridge University Press, 2007.
- [12] XIAO R, PANG C. The Commodification of English Language in Chinese Tourism: A Case Study of the Palace Museum[J]. 3L: Language, Linguistics, Literature, 2024, 30(1): 120-136.
- [13] Lefebvre H. The Production of Space[M]. Oxford: Blackwell, 1991.
- [14] Leeman J, Modan G. Commodified language in Chinatown: A contextualized approach to linguistic landscape 1[J]. Journal of Sociolinguistics, 2009, 13(3): 332-362.
- [15] Shang G W. Tourism linguistic landscape study: A macro sociolinguistic perspective[J]. Journal of Zhejiang International Studies University, 2018, 18(3): 46-56.
- [16] Backhaus P. Linguistic Landscapes: A Comparative Study of Urban Multilingualism in Tokyo[M]. Clevedon: Multilingual Matters, 2006.
- [17] Ruzaitė J. The linguistic landscape of tourism: Multilingual signs in Lithuanian and Polish resorts[J]. Journal of Estonian and Finno-Ugric Linguistics, 2017, 8(1): 197-220.
- [18] Zhang Y Y, Zhang B H. Multilingualism in the linguistic landscape of Macau[J]. Applied Linguistics, 2016, (1): 45-54.
- [19] Huang X L. Reflections on the three-dimensional construction of Japanese language landscape in Shanghai[J]. Chinese Journal of Technology Enhanced Foreign Language Education, 2018, (5): 57-63.
- [20] Yang R H, Sun X. Linguistic landscape in urban historic and cultural districts based on the theory of interaction order: The case of Nanjing[J]. Technology Enhanced Foreign Language Education, 2018, (6): 100-105.
- [21] Cenoz J, Gorter D. Linguistic landscape and minority languages[J]. International Journal of Multilingualism, 2006, 3(1): 67-80.
- [22] Yan D. Linguistic Landscape of Multilingual Inscriptions in Dunhuang Mogao Caves: Linguistic Evidence of Cultural Integration along the Silk Road[J]. Forum for Linguistic Studies, 2025, 7(11): 373-393.
- [23] Xu H G, Ren Y. Tourism impact on the Naxi Dongba linguistic landscape[J]. Tourism Tribune, 2015, 30(1): 102-111.
- [24] Fu W L. Study on the Meaning of Multilingual Coexistence in Linguistic Landscape — Based on the survey in Qinghai minority areas[J]. Journal of Qinghai Normal University(Social Sciences), 2020, 42(4): 132-139.
- [25] Wu Y Z, Zhou X E. Service, Culture and Aesthetics: A New Way to Build the Linguistic Landscape of Rural Tourism in Guizhou Ethnic Areas[J]. Guizhou Ethnic Studies, 2024, 45(1): 135-141.
- [26] Liu Y L. A Brief Analysis of the Linguistic Landscape on the Campus of Kashi University[J]. Teaching and Research of National Common Language and Script, 2024, (1): 58-60.
- [27] Zhang T W, Zhang M L. Exploring the Promotion Mechanism of Linguistic Landscape for Autonomous Language Learning from the Perspective of Agency[J]. Foreign Languages Research, 2025, 42(5):68-77+113.
- [28] Nie P, Reha M. An investigation of the linguistic landscape of Yi characters in Xichang City[J]. Applied Linguistics, 2017, (1): 70-79.
- [29] Dai C H. An Exploration of Translanguaging Practices in Linguistic Landscape Translation — Take Shanghai Tourism Landscape as an

- Example[J]. Shanghai Journal of Translators, 2024, (3):31-35.
- [30] Ravelli L J, McMurtrie R J. Multimodality in the Built Environment: Spatial Discourse Analysis[M]. London, New York: Routledge, 2016.
- [31] Halliday M A K. An Introduction to Functional Grammar[M]. 2nd ed. London: Arnold, 1994.
- [32] Shang G W. Theory and Practice of Linguistic Landscape Research[M]. Beijing: The Commercial Press, 2023.
- [33] Su J. Language power and culture power of bottom-up signs in urban Shanghai[J]. Chinese Journal of Language Policy and Planning, 2017, 2(2): 27-34.
- [34] Kress G, van Leeuwen T. Reading Images: The Grammar of Visual Design[M]. London: Routledge, 2006.
- [35] Yang F X. Multi - nationalities Contributions to the Ancient Dunhuang Culture[J]. Journal of Dunhuang Studies, 2005, (2): 85-99.
- [36] Kress G, van Leeuwen T. Reading Images: The Grammar of Visual Design[M]. 3rd ed. London: Routledge, 2021.
- [37] Scollon R, Scollon S W. Discourses in Place: Language in the Material World[M]. London: Routledge, 2003.
- [38] Hall E T. The hidden dimension[M]. Garden City: Doubleday, 1966.
- [39] Van Leeuwen T. Introducing Social Semiotics[M]. London: Routledge, 2005.