

Research on Domestic Linguistic Landscapes: Progress, Challenges and Future Trends (2013-2023)

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Abstract: In recent years, the linguistic landscape has become a research Hotspot in applied linguistics and sociolinguistics, attracting extensive attention from scholars. Through a systematic literature review on domestic linguistic landscape research from 2013 to 2023 on the platform of China Knowledge Infrastructure, and applying CiteSpace to visualize and analyse the data from three aspects of research object, research content, and research methodology, it is found that the research on linguistic landscape in China as a whole has made great progress, but still faces many challenges in the research object, research theory, research application and research methods. In the future, the research of linguistic landscape should develop towards the trends of diversified research objects, localization of research theories, deepening and transformation of research, standardization of research process as well as cross-disciplinary cooperation.

Keywords: Linguistic landscape, Research progress, Research challenges, Future trends

1. Introduction

In recent years, sociolinguistics has been on the rise, and the study of linguistic landscape has been paid great attention by scholars at home and abroad. Linguistic landscape has been integrated with sociology, anthropology, psychology, political science, philosophy and other disciplines, showing the trend of interdisciplinary development, and the concept of "linguistic landscape" was first proposed and defined by Landry and Bourhis in the field of sociolinguistics in 1997. "The language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings combines to form the linguistic landscape of a given territory, region, or urban agglomeration." (Landry & Bourhis, 1997:25) Since then, the study of linguistic landscape has gradually attracted academic attention.

Linguistic landscape is not only of great significance for the study of topics such as language policy, public signage, city image, and translation strategy, but also of increasing value in the study of multiple regional scopes such as cities, villages, and scenic spots. Based on the domestic linguistic landscape literature on the platform of China National Knowledge Infrastructure (CNKI) from 2013 to 2023, this paper systematically analyses it with the aim of clarifying the research object, research content, research methodology and other issues of linguistic landscape research, so as to provide insights for further deepening the theoretical research and practical application of linguistic landscape in China[1-3].

2. Literature Sources and Visual Analysis

2.1 Literature Sources

This study adopts the methods of literature search and content analysis to sort out the results of the research on linguistic landscape in China. A search was conducted through the China Knowledge Network (CNKI) in October 2023, with the following search criteria: "linguistic landscape" as the theme; the time range selected as "2013-2023"; the type of literature limited to "academic journal papers"; and the language selected as "Chinese". After screening, a total of 590 academic journal papers were obtained.

2.2 Data Visualization Analysis

1) Analysis of the Number of Papers Published

As shown in Figure 1, the domestic linguistic landscape research shows a continuous growth from 2013 to 2023. In the past 11 years, the research on linguistic landscape in China has gone through two stages: starting stage (2013-2018): the field of linguistic landscape research in China had just begun, but the number of papers published each year had been increasing; rapid development stage (2019-2023): research results about linguistic landscape continued to emerge, and the number of published papers increased significantly.

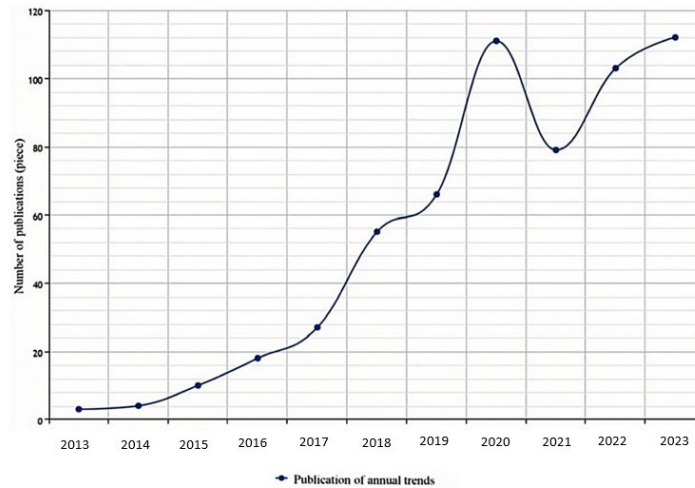


Figure 1: Number of academic journal papers published on linguistic landscape by year (2013-2023)

2) Keyword Co-occurrence Analysis

Based on the bibliometric analysis, the frequency of keywords is usually positively correlated with the hotspots of the research field. Using CiteSpace visualization software, a total of 300 randomly selected Chinese papers with the theme of "linguistic landscape" were analyzed for keyword analysis to generate a keyword co-occurrence knowledge graph of domestic linguistic landscape research from 2013 to 2023. The graph visualizes the hot topics of linguistic landscape research in China in the past 11 years.

As shown in Figure 2, the number of network nodes (N) is 244, the number of connections (E) is 407, and the network density is 0.0137, which indicate that the correlation between the keywords is high. Among them, the node "linguistic landscape" has the largest font, indicating that this keyword appears most frequently and has received extensive attention from scholars in China. In addition to the keyword "linguistic landscape", the keywords "multilingual phenomenon", "language policy", "symbolic function", "public space", "multimodality", etc. co-occur to a significant extent.

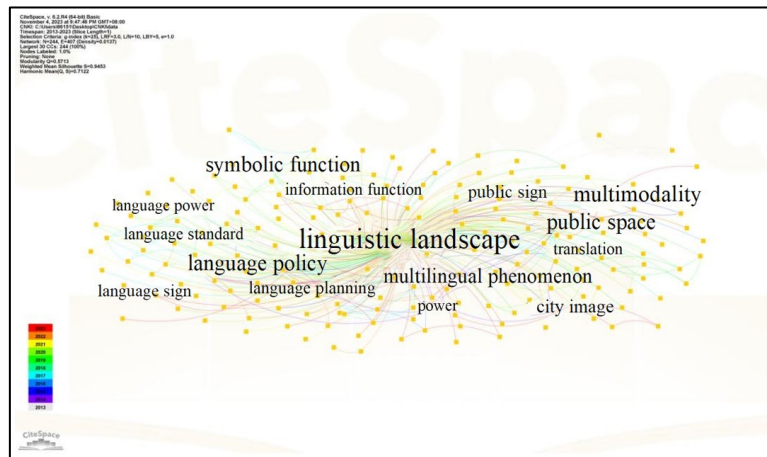


Figure 2: Keyword co-occurrence graph of domestic linguistic landscape research (2013-2023)

3) Keyword Emergence Analysis

Compared with the frequency of keywords, the emergence of keywords can clearly reflect the changes of research hotspots. As shown in Figure 3, among the top 10 emergent keywords in domestic linguistic landscape research from 2013 to 2023, the earliest emergent keywords include "public space", "translation", "multilingual phenomenon", "language sign" and "power", and all of them began to emerge in 2013, which reflects the main content of the early stage of domestic linguistic landscape research. Since then, domestic linguistic landscape research has begun to shift to new directions, such as "regional tourism", "information function", "language power" and "culture", etc. Since 2022, "culture" has become a research hotspot that continues to this day[4-6].



Figure 3: Top 10 emergent keywords in domestic linguistic landscape research (2013-2023)

4) Keyword Clustering Analysis

The keywords of domestic linguistic landscape research were analysed by algorithmic clustering, and 7 clusters, 244 node numbers and 407 connecting lines were obtained. As shown in Figure 4, the seven keyword cluster labels are "linguistic landscape", "multilingual phenomenon", "urban image", "multimodality", "globalization", "language planning" and "symbolic function".

Cluster #0 focuses on interpreting the linguistic landscape from the political dimension and analyses the status quo of the linguistic landscape in different regions and the optimization paths; Clusters #1 and #3 focus on the linguistic codes on signs in public spaces and make suggestions for language governance; Clusters #2 and #5 focus on translation strategies regarding the symbolic landscapes of public notices and multilingual signs; Cluster #4 focuses on the study of international tourism and urban planning; Cluster #6 analyzes the role of different urban linguistic landscape based on the informational and symbolic functions of languages.

Different colour blocks in the graph represent different clusters, the smaller the serial number, the larger the cluster represented by the colour block. In this study, the largest cluster is #0 linguistic landscape. The Q value of Modularity of the keyword clustering visualization graph is 0.57 (>0.30), which indicates that the delineated graph has a clear structure; and the S value of the average profile is 0.95 (>0.70), which indicates that the clusters are reasonable and have high homogeneity. Therefore, the obtained clusters have strong correlation and stability among themselves.

The keyword clustering graph shows the diversity and complexity of domestic linguistic landscape research, which helps to better understand the current situation and development trend of language linguistic research, and provides a useful reference for domestic linguistic landscape research.

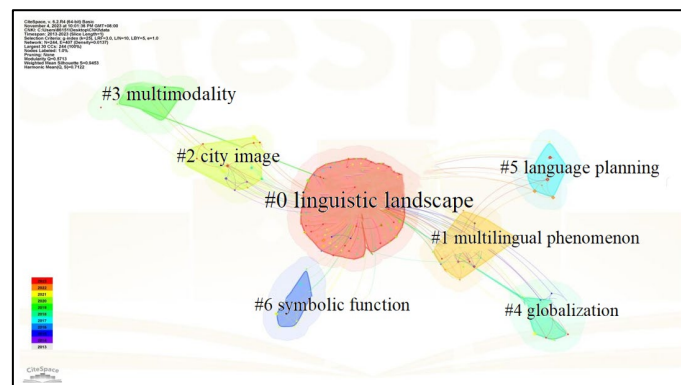


Figure 4: Keyword clustering graph for domestic language landscape research (2013-2023)

5) Keyword Timeline Analysis

The keyword timeline graph shows the interconnections between the keyword clusters and the publication time of each keyword cluster. As shown in Figure 5, in 2013, the most attention was paid to the holistic concept of "linguistic landscape", while from 2016 onwards, the research focus has gradually shifted to "multilingual phenomenon", "urban image", "multimodality", "Globalization" and "language planning". This change suggests that researchers' new understanding of the linguistic landscape continues to drive the development of the linguistic landscape.

In addition, the graph also reflects the current research hotspots in the field, such as "multilingualism", "official signage", "multimodality", "language policy", and future trends, such as "political dimension", "translation strategy", "urban planning" and so on.

The keyword timeline analysis provides researchers with a dynamic perspective that enables us to better understand the development history, current hotspots, and future trends of language landscape research.

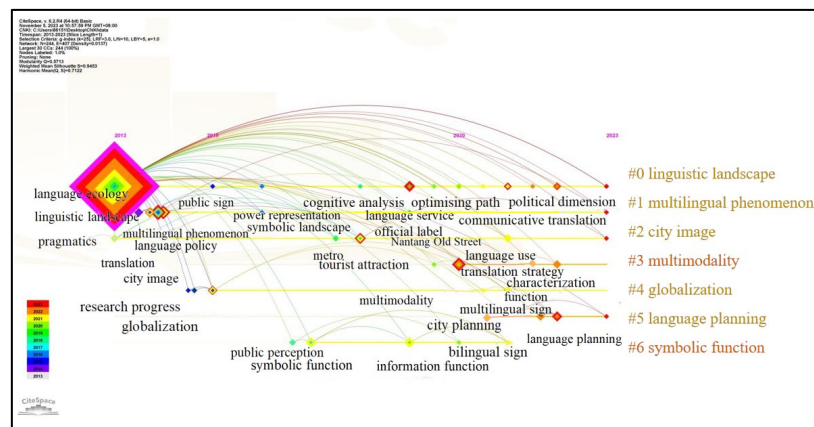


Figure 5: Timeline graph of keywords in domestic language landscape research (2013-2023)

3. Analysis of domestic research related to the linguistic landscape

3.1 Objects of linguistic landscape research

Depending on different establishers, the linguistic landscape can be categorised into official and private linguistic landscape.

"Official linguistic landscape is generally signs of an official nature such as road signs, street signs, notice boards, etc., set up by government agencies. These types of signs mainly reflect the language policies and ideologies of national and local governments."(Fu Li, 2023:13) For example, Qiu Ying (2016) analyzed the names of major attractions, road signs, traffic signs and relevant government departments in Shangrao City from the perspective of place semiotics.

Private linguistic landscape, on the other hand, covers shop signboards, billboards, and promotional posters. For example, Yang Han (2022) examined the composition rules and characteristics of signboard information composition, text categories, and font styles of shops in Taiyuan Food Street. In addition, some scholars have suggested research on atypical linguistic landscape, such as body advertisements and graffiti.

In addition, the research objects of linguistic landscape can also be divided into typical linguistic landscape and atypical linguistic landscape. The former covers the traditional elements in official and private linguistic landscape, and these research objects are usually fixed, with relatively standardized and stable language use, and are the main field of linguistic landscape research; the latter is more extensive, including other linguistic compositions in public space besides typical linguistic landscape, such as dynamically changing electronic screens, body advertisements, auditory and olfactory symbols, etc., and is becoming a popular topic in disciplines such as sociolinguistics, semiotics and applied linguistics[7-8].

3.2 Linguistic Landscape Research Content

The content of our linguistic landscape research can be summarized as follows:

(1) Theoretical Studies of Linguistic Landscape

Based on the existing theoretical results abroad, domestic scholars have begun to try to theoretically construct the linguistic landscape. For example, Xu Ming (2017) delineated the three stages of foreign linguistic landscape research and summarized the research trends in this field, laying a good foundation for conducting relevant research in China. Shang Guowen and Zhou Xianwu (2020) explained the types, functions and research perspectives of atypical linguistic landscape, compared the commonalities and differences of different linguistic landscape, and enriched and perfected the theoretical system of atypical linguistic landscape research in China, which is of great academic value and practical significance. Zhang Tianwei (2020) summarized new research ideas and methods on the basis of combing and analyzing the classic works and latest research results of linguistic landscape research in foreign countries, and points out that the theoretical development of this field also presents a diversified trend.

In addition, some scholars innovate sharply to provide a new paradigm for linguistic landscape research. For example, Min Jie (2016) adapted the three-dimensional analysis model and applied it to the empirical study of street name planning, providing new ideas for studying the spatial prominence of language planning in a certain region. Wang Lu (2021) combined the SPEAKING communication model proposed by Hymes to explore the intrinsic relationship between "author", "reader" and "sign text". This paper analyses the code distribution and orientation of the linguistic landscape, and interprets the deeper meanings of the linguistic landscape from a new perspective.

(2) Applied Research on Linguistic Landscape

According to the differences of research regions, the applied research on linguistic landscape in China in the past 11 years can be divided into four major categories: urban linguistic landscape research, rural linguistic landscape research, tourist scenic area linguistic landscape research and minority area linguistic landscape research. (Chen Min, 2022: 10)

1) Study of Urban Linguistic Landscape

The case studies of linguistic landscape in different cities reflect the characteristics of the linguistic landscape as well as the current situation of language use in each city. For example, Tang Lixin (2019) studied the shop signs on West Street, a historical district in Quanzhou, from various perspectives such as the use of morphemes, grapheme features, phonological features, and irregularities; Qian Yanqun (2019) used the relevant theories of place semiotics to study the historical and cultural districts of Ningbo; Xia Le (2020) took Hefei Railway as an example to study Hefei public space's linguistic landscape in terms of code orientation, morpheme transformation, and grapheme carving; Wang Teng (2023) and Shi Lingfeng (2023) took Changji as a case study respectively. to study the linguistic landscape of public space in Hefei; Wang Teng (2023) and Shi Lingfeng (2023) took Changji City and Huangshan City as research objects to analyse the irregularities in their linguistic landscape respectively.

2) Study of Rural Linguistic Landscape

Research on rural linguistic landscape focuses on the language use situation and linguistic landscape characteristics in rural areas. For example, Cheng Jiangxia (2021) used the field survey method and interview method to construct a corpus of linguistic landscape in Cotton Village and used the SPEAKING model to conduct a multi-perspective study of the linguistic landscape in Cotton Village; Cong Lin and Cheng Runfeng (2021) explored the differences in language expression, language attitudes, and the degree of socio-cultural development of six beautiful rural villages through a field research on the linguistic landscape of the villages; Fu Li (2023) analyzed the linguistic power relations and policy orientation of language signage in Hangzhou villages in terms of the distribution of linguistic landscape and the formal characteristics of linguistic landscape in two dimensions.

3) Study of the Linguistic Landscape in Tourist Scenic Areas

Scholars have thoroughly explored the issue of linguistic landscape in different tourist attractions. For example, Sun Chang, Zheng Zheng, and Wen Jing (2021) took Qingcheng Mountain Scenic Spot as the research object and conducted a field study on its linguistic landscape, focusing on the characteristics and distribution of its linguistic landscape; Wang Yali (2023) conducted a

comprehensive exploration of the linguistic landscape of Hangzhou's classic tourist scenic spots, analyzing the carriers of linguistic landscape, language types, and problems, and provided an in-depth analysis from the SPEAKING model, based on the four dimensions of scene, participant, target and media type; Fan Liqun and Peng Shijie (2023) conducted field research and data analysis on the linguistic landscape of Changsha's Chaozong Street Historical and Cultural Neighbourhood from the perspective of linguistic ecology and revealed its non-ecological phenomena; Yin Shulin and Wen Mahong (2023) examined the use of linguistic landscape in tourist attractions in Harbin from the perspectives of language types, language combinations, dominant codes, landscape types, and establishers[9-10].

4) Study of the Linguistic Landscape in Minority Areas

Li Lisheng and Xia Na (2017) found in their study of the ancient city Lijiang that multilingualism is a distinctive feature of its linguistic landscape, a phenomenon that not only reflected the multicultural background of the area, but also provided Chinese and foreign tourists with a rich linguistic experience; Fu Wenli (2020) carried out an in-depth study of the linguistic landscape of minority regions in Qinghai, analyzing in detail the distribution of the codes in the region, Fu Wenli (2020) conducted an in-depth study on the linguistic landscape of minority regions in Qinghai, analyzing in detail the distribution of language codes, the significance of multilingual coexistence in the region, and investigating the overall feelings of locals and Chinese and foreign tourists towards the construction of the linguistic landscape in the region. The study focuses on the construction of multilingual linguistic landscape, analyses the advantages and shortcomings of the linguistic landscape in this area, and provides useful references for the construction of the linguistic landscape in minority areas.

3.3 Research Methodology of the Linguistic Landscape

Linguistic landscape studies are mainly conducted as a combination of quantitative and qualitative studies.

Quantitative research mainly adopts field survey method to conduct field research, collect data, and classify, code and statistically analyse the text, symbols and other information in the linguistic landscape through content analysis method. Quantitative research on the linguistic landscape can ensure the objectivity of research results. The qualitative research focuses on the observation and analysis of sign language. Through the documentation method, relevant literature and materials are reviewed to understand the current status and development trend of the research; through questionnaires and interviews, the motivation for the design of the sign language, the implied language policy behind the slogans, and identity issues are explored. The corpus analysis method makes use of the corpus to conduct quantitative and qualitative analyses of the linguistic landscape, and explores the situation and characteristics of language use, also using statistical analysis of data as the main means. In the linguistic landscape research, quantitative and qualitative research have their own advantages, and usually need to be used in combination to achieve a comprehensive and in-depth research effect.

4. Challenges Facing Domestic Research on the Linguistic Landscape

Through the collation and analysis of related literature, it can be seen that in recent years China's linguistic landscape research has made great progress both in terms of the quantity of literature and the quality of research, however, the challenges faced should not be ignored.

1) In terms of research object. Most of the existing domestic research on the linguistic landscape takes cities and tourist attractions as the research area and interprets the textual information of various signs in public space; however, given that atypical signs are often marginalized in the urban linguistic landscape and are more convoluted in the collection of corpus and analysis of materials, China's research on atypical signs (e.g., parade slogans, web interfaces, car bodies, street art, etc.) and multimodal corpus (e.g. images, voice broadcasts, dynamic advertisements) are lacking.

2) In terms of research theory. As the research on linguistic landscape in China is still in the development stage, there are still problems such as rigidity of theory and weak research foundation. The theoretical basis of existing research mainly originates from foreign frameworks, such as the three major spaces of the linguistic landscape, construction principles, globalization and so on. These theoretical frameworks provide important guidance and support for linguistic landscape research, but in specific studies, they fail to propose their own theoretical frameworks and research paradigms in combination with the Chinese context.

3) In terms of research application. There is an imbalance in the research area, with most of the current studies focusing on the linguistic landscape of cities and tourist attractions, while relatively few studies have been conducted on the linguistic landscape of villages and minority regions. Besides, most of the existing research focuses on language ecology and multilingual phenomenon, while the analyses of the visibility of minority languages in public space, the dynamic change of context, and the interaction between language, society, identity and power are not deep enough, lacking innovative research results, and the results of the research are seriously homogenized.

4) In terms of research methodology. The current research methodology of the linguistic landscape also has certain problems, such as the lack of uniform standards and norms in research methodology, which leads to poor comparability and reliability among different studies, and large differences in research conclusions and lack of objectivity; the depth of data collection and analysis is insufficient, and some of the studies are too simple in data collection and analysis, and they lack the excavation of the deeper features and laws of the linguistic landscape; and the insufficient integration of cross-disciplinary limits the breadth and depth of the research.

5. Future trends of Domestic Linguistic Landscape Research

Challenges and opportunities coexist, and the future of domestic linguistic landscape research will show the following trends:

1) Diversification of research objects. In addition to cities and tourist attractions, more attention should be paid to the linguistic landscape of rural and minority regions to explore the uniqueness and differences of their linguistic landscape; expand the sources of corpus, increase the study of atypical markers and multimodal corpus; establish a comprehensive and balanced research system, integrate the research objects of the linguistic landscape of different types and regions, and carry out comparative analyses and comprehensive research.

2) Localization of theoretical frameworks. Taking into account the Chinese context and the characteristics of Chinese language and culture, they should explore the expressions and meanings of the linguistic landscape in different geographical, cultural and social contexts, and put forward a theoretical framework and research paradigm of the linguistic landscape with local characteristics.

6. Conclusion

As can be seen by summarizing a large amount of domestic research literature on the linguistic landscape, linguistic landscape research in China as a whole shows a continuous development trend and is gradually maturing. The number of academic journal papers on the theme of the linguistic landscape is steadily increasing, showing the vitality and development potential of the research field. However, we must also face up to the deficiencies and problems in the current research, which limit the depth and breadth of the research to a certain extent, and affect the reliability and application value of the research. Future research should actively expand the research area and object, promote theoretical innovation, improve research methodology, and increase the application of research, so as to promote the development of the linguistic landscape research to a higher level, and provide richer and more in-depth theoretical support and practical guidance for the research of linguistics, sociology, and other related fields.

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