

Study on the Language Environment of Xi'an's Construction of "Dual center City"

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Keywords: A "dual-center" city; Xi'an; language environment

Abstract: Xi'an has been approved as the fourth "dual-center" city in China, which not only helps to enhance the country's core competitiveness and showcase the city's scientific and technological capabilities as a hub of cutting-edge innovation but also presents an excellent opportunity for local innovation and transformation. Against this backdrop, an examination of the significance of language environment construction, investigation of the current status of linguistic environments in public services, technology districts, and emerging industrial areas, and the implementation of targeted optimization strategies will effectively promote publicity, attract investment, and bolster the construction of Xi'an's "dual-center" city image. In turn, the city's future development prospects will be vastly improved.

1. The Significance of Language Environment Construction in Xi'an

The 2023 Shaanxi Provincial Government Work Report states that Xi'an's approval as a "dual-center" city, following in the footsteps of Beijing, Shanghai, and the Guangdong-Hong Kong-Macao Greater Bay Area, marks a significant milestone in the development of high-quality technological innovation in western China. This designation signifies a new phase in the development of the region's technology industry.

Xi'an is one of China's leading centers of scientific and educational innovation, boasting a research and development industry with a scale and quality of cutting-edge technology that is at the forefront of both national and international levels. This solid foundation provides a strong basis for its aspirations to become a "dual-center" city. However, in order to achieve a comprehensive integration of commerce, enhanced technological exchange, and cooperation, it is imperative to develop and optimize Xi'an's language environment^[1]. This effort involves sharpening governmental and public awareness, improving services, and elevating overall linguistic quality. Taken together, these measures are crucial to the city's continued development and future success.

High-quality language environment construction facilitates accurate and effective information transmission, providing individuals with efficient services and promoting intercultural exchanges between individuals from different countries and regions. It also enables professionals to collaborate effectively across different fields^[2] and aids the government in promoting mainstream ideological concepts. Under the "Belt and Road" initiative, building a strong language environment in Xi'an can effectively accelerate the city's economic growth and showcase China's cultural depth to the world. Against the backdrop of Xi'an's recognition as a "dual-center" city, enhancing the technological linguistic environment is especially critical. Therefore, establishing a high-standard, high-quality

language environment is foundational to promoting the internationalization process of Xi'an^[3] and is a necessary condition for building a successful “dual-center” city.

2. Present Situation of Language Environment Construction in Xi'an City

In March 2012, Xi'an implemented the *Opinions on Strengthening the Construction of Xi'an's International Language Environment*, which aimed to improve the linguistic environment in the city. In May 2016, the Shaanxi Provincial Government Foreign Affairs Office, Xi'an International Studies University, GTCOM Beijing, and the Qinhan New City Management Committee in Xixian New Area of Shaanxi signed the *Framework Agreement on Language Services and Big Data Platform Cooperation for Shaanxi Province's Belt and Road Initiative*. Through the joint efforts of the government, universities, and enterprises, significant progress has been made in the language environment construction in Xi'an^[4]. However, there are still some outstanding issues that need attention:

2.1. To-be-improved citizens' Language Awareness and Foreign Language Proficiency

In recent years, Xi'an has increasingly engaged in international trade and other exchange activities, with both their scale and frequency growing year by year. However, the learning awareness and foreign language proficiency among ordinary citizens is far from satisfactory. Surveys have revealed that one-third of the population considers foreign language learning “necessary”, whereas more than half deems such pursuit “unnecessary”. Thus, a widespread phenomenon of inadequate motivation exists, as illustrated in Fig. 1: Survey of Xi'an residents on their foreign language learning motivation.

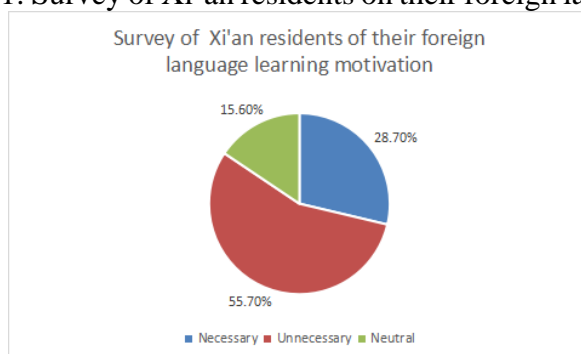


Figure 1: Survey of Xi'an residents on their foreign language learning motivation

The insufficient motivation for foreign language learning will inevitably hinder the improvement of individuals' foreign language proficiency. In today's society, educated citizens may be able to conduct business or engage in daily communication with specific individuals due to work or lifestyle needs. However, the technology industry involves an increasing number of specialized terminologies, such as aerospace, information technology, artificial intelligence, and new materials. These technical foreign languages pose greater challenges. The accurate translation of relevant terminologies and the exploration and research of specialized fields are issues that merit deep thinking. This will drive citizens to improve their foreign language proficiency. Therefore, it is crucial to attract large numbers of “hard technology” professionals who are proficient in foreign languages to invest in the construction of Xi'an as a “dual-center” city.

2.2. The Relatively Single Language Environment Style in Xi'an

As the ancient capital of thirteen dynasties, Xi'an boasts a cultural tourism industry as a pillar industry with core competitiveness. During the Spring Festival period in 2023, a series of events were

crafted to showcase the region’s celebratory culture and customs, including the “Changan Fireworks Celebration for New Year” and the “Poetic Changan, Transcending Ancient and Modern” immersive tourism experience. Such undertakings comprehensively unveiled a local festival culture and folk customs to the greater populace. Of significance, the “Tang Poetry Lantern Group” within the Datang Furong Garden has become a favored destination for those holding sway in the virtual realm, featuring a unique language landscape that showcases the cultural connotation of the ancient capital. Additionally, the diverse language landscapes fashioned by businesses contribute to infusing Xi’an with a strong commercial aura that lends itself to a sense of vibrancy and active commerce.

In recent years, Xi’an has been dedicated to establishing itself as the “city of hard technology”, crafting a definitive business card that aims to encourage investment from venture capital firms while delivering “running water” to the development of emerging industries. Guided by these policies, numerous areas have striven to establish a hard tech innovation block - one that is research-oriented, green, efficient, livable, and driven by artificial intelligence - steadily improving its image “from point to plane”. It is easy to foresee that, as an important carrier of a city’s external appearance, the development of language environment calls for a breakthrough from the conventional “stereotype”, one that showcases the distinctive characteristics of an integrated national science center and technological innovation center, alluding to a trend towards technological innovation and contributing to building a “dual-center” city.

2.3. The Varied Quality of Language Environment Construction

Despite the creation of an enchanting language environment, there still exist some issues plaguing Xi’an. In March of 2023, Professor Warner from Germany stated during an interview, “Having lived in Xi’an for 12 years, I have been able to observe the current state of many international language landscapes and foreign language signs in the city. These days, bilingual signs are ubiquitous throughout the city, and it is beginning to take on an increasingly global, metropolitan feel. However, I have also observed some incorrect signage in public spaces such as the city walls and the subway system, such as spelling errors, mechanical translations, translation errors, grammatical errors, and formatting errors, among others”. For example, Table 1 provides an example of erroneous translation.

Table 1: Translation examples

Signage in Chinese	Accurate translation	Incorrect translation
Gengyi Ting	Leisure Pavilion	Dressing Pavilion
Qing zai yimixian wai denghou	Please Wait Behind the Yellow Line	Please wait outside a noodle
Youke zhibu	Staff Only	Guest Go No Further
Xiaoxin pengtou	Watch Your Head	Care Meet
Bu liu zuji, bu liu laji	Keep off the grass and no littering!	Don’t keep a footmark, don’t keep a rubbish!

Today, international exchanges have become increasingly frequent, making foreign language signage all the more important. However, observations indicate that in service-oriented venues such as transportation hubs and hotels, the coverage of foreign language signage remains inadequate in Xi’an. Furthermore, even within the same scenic spot or public facility, multiple translations emerge for the same signage language. For example, the Xi’an International Horticultural Exhibition’s sign for “Gonggong Weishengjian” was translated into several English versions such as “Toilet”, “Bathroom”, “Restroom”, and “Public Bathroom”.^[5] Presently, foreign language signage providing basic services and daily necessities almost exclusively employs English, failing to meet the communication needs of individuals from various countries. Nevertheless, Japan currently leads the world in fields such as automotive manufacturing, medical technology, robotics, environmental

protection technology, and chemical technology, while Korea holds a dominant position in industries such as shipbuilding, chipset production, communication, architecture, and semiconductors. “A gem cannot be polished without friction, nor a man perfected without trials”, to better foster technological progress we must uphold an open and mutually beneficial attitude, actively attracting foreign investment and talent to promote the continual development of science and technology in China. From a language environment perspective, diversifying languages such as Japanese and Korean in service windows and public areas facilitates deeper exchanges and collaborations.

3. Conclusion

Xi'an is set to fuse the principle that “technology is the prime productive force, talent is the foremost resource, and innovation is the leading impetus” into its high-standard, pragmatic approach to innovative, technological work, cultivating a soaring system of technological innovation. As the adage goes, “a workman must first sharpen his tools”, and language constitutes a sine qua non for communication and exchange^[6]. In the context of Xi'an's “dual-centered” urban development, an imperative mantle falls upon us to consider the cultivation of a well-crafted language environment, fashioning a “tool” of communication with the technological vanguard capable of propelling Xi'an's meteoric progress forward.

3.1. Coordinating and Standardizing through Policies at the Government Level

In view of Xi'an's quest to establish a “dual-centered” urban image, the municipal government must undertake a fresh examination of language environment construction challenges, comprehensively acknowledging the inevitable relationship between technological innovation and national development, and leveraging the roles of managers, publicists, and supervisors alike. Collaborating with top-tier universities, government departments can establish language service research centers, referencing and drawing inspiration from the language environment development policies of developed cities such as Beijing, Shanghai, and Guangzhou, providing effective guidance and support for the international language environment construction in Xi'an.

Government departments may devise corresponding systems and establish language work groups, regulate and publicize foreign language translation services in the market, improve language self-service facilities, advance the development of multilingual service platforms, and diminish language barriers encountered by foreigners living in Xi'an. This would not only showcase Xi'an's deep historical and cultural heritage but also promote the city's internationalization efforts, enhancing its soft power.

3.2. The Use of “multimodality” to Increase the Sense of Science and Technology and the Sense of the Future of the Language Landscape

Multimodality refers to the use of different modes of symbols in a sign or event, such as images, text, gestures, gaze, speech, posture, and so forth.^[7] Within language environment, text, color, size, shape, style, and other attributes correspond to different perceptual multimodal symbols, thereby facilitating the transfer of information and the construction of “discourse”. In coastal regions, the combination of text, sound, and images is a prevalent mode of expression and presents a colorful modern urban landscape. For example, the use of a multi-language translation text mode consisting of “Chinese + English + Arabic” can imbue signboards with exotic and international features that cater to the needs of individuals from different mother tongues. By supplementing with exquisite images, exciting videos, relevant links, and so forth, the multimodal format that combines video, images, and audio can provide people with an abundance of information^[8], unveiling a multifaceted and multidimensional language landscape.

In the process of constructing a “dual-center” city, Xi'an can incorporate various materials,

language codes, sounds, graphics, and even light and shadow into its signage or public symbols, designing a range of “multimodal” language landscapes that exude a sense of science and future. This can help to create a unique urban image that showcases Xi'an's innovative and forward-looking side.

3.3. Promoting the Popularization of Language Services for Science and Technology

Currently, the intelligence quotient of information products is perpetually elevating, and various smart services delivered through human-machine language dialogues are increasingly prevalent. Human-machine interaction has delved into the territory of linguistic research, and the actualization of functionalities such as speech recognition, semantic analysis, and scene recognition is inextricably linked to the sustenance of linguistics. Against the backdrop of the rapid evolution of China's technological product industry, product designers are eager to optimize the number of users and consumer value, which has resulted in the creation of an unwieldy amount of commercial terminologies and concepts within the linguistic architecture of technological products. As a consequence, ordinary users exert themselves in comprehending and deploying them. For instance, translation of technological vocabulary, dialectal quandaries within human-machine dialogues, and linguistic identifications during operations are the actual conundrums that technology companies should take into account when designing technological products for routine use. Inculcated within a thorough study of the linguistic hindrances that ordinary users encounter in technology, relevant companies ought to analyze and generalize the specific needs of users concerning technological vocabulary, expression modes, communication skills, among other pertinent facets, in different scenes such as travel, medical assistance, consumption, entertainment, and administration services, among others. The democratization of technological language services has the potential of bestowing upon technology companies the ability to seize the market, affix more economic benefits, engender a virtuous cycle while furthermore promoting the overall development of Xi'an's vigor.

Acknowledgment

This work was supported by the Project of Xi'an Social Science Planning Fund in 2023 “Issues and Countermeasures for Xi'an's Construction of a Language Environment as a ‘Dual-center’ City from the Perspective of Language Services” (Project No.: 23YZ44); the School-level Scientific Research Project of Xi'an Peihua University in 2022 “The Study of Linguistic Landscape in Urban Villages of Xi'an Using the Three-Dimensional Analytical Model Theory” (Project No.: PHKT2208).

References

- [1] Fan Wenjuan. (2011). *Research on the language environment construction of the Shanghai Expo in 2010*, Liaoning Normal University.
- [2] Ge Li, Li Suli, Zhao Wei, and Tian Xiaojun. (2011). *Construction of the language environment of tourist cities from the mistranslation of public signage at the Xi'an International Horticultural Exhibition*. *New West*, 11, 54.
- [3] Han Hongjian, Jiang Yue, and Li Tingyan. (2019). *Construction of the International Language Environment in Xi'an under the Belt and Road Initiative*. *Journal of Xi'an University of Electronic Science and Technology (Social Sciences Edition)*, 3, 88-94.
- [4] Jewitt C. (2009). *The Routledge Handbook of Multimodal Analysis*. London & New York: Routledge.
- [5] Li Wanli. (2013). *Empirical research on international language service environment of public transportation in Chinese tourist cities*. *Science and Technology Innovation Herald*, 2, 16-18.
- [6] Shang Guowen, Zhao Shouhui. (2014). *Perspectives, theories, and methods of language landscape research*. *Foreign Language Teaching and Research*, 2, 214-223+320.
- [7] Zhao Kang. (2023). *Construction of the International Language Environment in Xi'an under the Belt and Road Initiative*. *Academy*, 5, 78-80.
- [8] Zhao Xueqing and Liu Jielin. (2022). *Multimodal study of the language landscape of Macau*. *Journal of Shaanxi Normal University (Philosophy and Social Sciences Edition)*, 11, 123-136.