Original Paper

Industrial Language Service Research: A Review

Niannian Cheng¹ & Jiegen Zhang^{1*}

¹ School of Foreign Studies, Hefei University of Technology, Hefei, China

* Jiegen Zhang, School of Foreign Studies, Hefei University of Technology, Hefei, China

Received: April 24, 2025 Accepted: May 7, 2025 Online Published: May 19, 2025

Abstract

Industrial language service, an emerging field within language service studies, refers to linguistic support that integrates with and permeates various industries. A comprehensive review of existing literature reveals that current research primarily concentrates on four key sectors: medical care, tourism, governmental affairs, and transportation. These studies predominantly employ questionnaires and interviews as their main research instruments, with a particular focus on dominant languages and language usage patterns. To advance this field, future research should prioritize four strategic directions: first, addressing the linguistic needs of disadvantaged groups; second, expanding the scope of study to include minority languages, regional dialects, disability communication systems (e.g., sign languages and Braille), and non-verbal communication; third, developing dedicated corpora for industrial language services; and fourth, broadening research perspectives to encompass legal frameworks, community engagement, technological innovation, and digital inclusion. This multidimensional approach will significantly enhance our understanding and application of industrial language services across various sectors.

Keywords

industrial language service, language service, service industry, service awareness

1. Introduction

Language service can be defined as the act or activity of providing linguistic assistance to individuals or the public through spoken or written communication (Zhao, 2012). Broadly speaking, it can be categorized into two main types: professional language service and industrial language service (Chen, 2014). The former primarily involves the provision of language-related products, such as translation services, language training, and language information dissemination. In contrast, industrial language service refers to the use of language in delivering services to clients or customers across various industries, particularly within service-oriented sectors. Examples include a tour guide describing a

scenic spot or an usher greeting a guest. Compared to professional language service, industrial language service is more deeply intertwined with our daily lives, directly affecting our well-being. It plays a crucial role in shaping everyday interactions, fostering interpersonal harmony, and promoting social civility. Despite its significance, industrial language service has not yet garnered sufficient academic attention, as it remains a relatively new and underexplored area within language service research.

However, with growing recognition of the pivotal role language plays in service delivery and the increasing emphasis on service quality, industrial language service has begun to attract scholarly interest, leading to a gradual rise in related research. Current studies predominantly focus on sectors such as healthcare, tourism, government and transportation. This paper aims to provide a comprehensive overview of research on language service within these industries, highlighting key findings and identifying areas for future exploration.

2. Linguistic Norms in Healthcare Settings

Current research on language services in healthcare settings focuses on both spoken and written language. In the realm of spoken language, studies have examined both the nature of language use and the characteristics of language users. Regarding language use, research has revealed that some medical personnel adopt a direct and commanding tone, coupled with the inappropriate use of medical terminology (Li & Gong, 2015). This communication style can hinder harmonious and effective doctor-patient interactions. Additionally, the use of dialects by patients has been identified as another potential barrier to effective communication (Wang & Li, 2019; Li & Du, 2019). On the other hand, research has also shifted its focus to language users, particularly emphasizing the needs of linguistically vulnerable groups. Scholars have highlighted the importance of respecting and protecting patients' human rights in medical communication. For instance, Zachariah et al. (2012) emphasized that medical personnel should prioritize patient dignity and personal values, employing patient-centered and non-judgmental language to foster trust and promote more harmonious doctor-patient relationships. Similarly, Ali et al. (2022) and Carter et al. (2024) advocated for medical staff to acquire knowledge of inclusive language and actively apply it when interacting with patients from diverse cultural or linguistic backgrounds. This approach not only enhances communication but also ensures equitable and respectful healthcare delivery.

In the realm of written language, research in the healthcare sector primarily addresses issues related to medical documentation, prescription writing, and language services in hospital management. Studies by Li and Gong (2015) and Wang and Li (2019) have highlighted problems such as illegible handwriting and the improper use of foreign languages in medical records and prescriptions. These findings underscore the need for medical professionals to prioritize the standardization and accuracy of their written communication.

Language services in hospitals also extend to public signs and notices, the development and implementation of language-related policies, and the services offered through hospital websites. However, deficiencies have been identified in all three areas. For instance, an investigation by Li and Gong (2015) revealed language-related problems in signs and notices intended for patients and visitors, as well as a notable lack of inspirational and aesthetically valuable signage. While most hospitals in the study had established regulations governing language use, enforcement was often lax. The researchers recommended implementing specific reward and punishment mechanisms to ensure stricter adherence to these regulations.

Regarding hospital websites, Graves et al. (2020) found that the majority of hospitals surveyed did not adequately accommodate patients with limited English proficiency. Only 10.8% of the hospitals provided translated websites, and information about available language assistance services was often difficult to access. The researchers advised that hospital websites should offer easily accessible, accurate, and up-to-date information about the language services available to patients in need, thereby improving accessibility and inclusivity for all patients.

The findings of these studies on both written and spoken language services in healthcare hold substantial academic value and practical significance, contributing to the professional, human-centered, and international development of language services in this sector. However, further efforts are needed in three key areas to advance this field. First, while existing research has underscored the critical role of dialects in doctor-patient communication, there is a notable absence of systematic training programs to enhance healthcare professionals' dialect proficiency. Additionally, there is a lack of in-depth investigations into the effectiveness of such training initiatives. Equally important is the need for clear, actionable strategic guidance on how to balance the use of dialects with standardized language in medical settings to optimize communication effectiveness and patient satisfaction. Finally, research on language services in healthcare would benefit significantly from the integration of interdisciplinary perspectives, drawing on insights from linguistics, sociology, psychology, and related fields. Such an approach would foster a more comprehensive and nuanced understanding of the complex dynamics at play, ultimately leading to more effective and inclusive language service practices in healthcare.

3. Contextual Appropriateness in Tourism Discourse

Studies on language services in the tourism sector mainly cover two aspects: the quality of spoken language service and the translation of written texts in scenic spots.

The first strand of research centers on the language service quality of tour guides and the language service capabilities of staff at tourist attractions. As bridges for information dissemination and cultural promotion, tour guides bear multiple responsibilities, including providing tourists with detailed information, offering in-depth cultural insights, and facilitating effective communication. High-quality language services from tour guides can elicit more positive feedback from tourists and attract greater

visitor numbers, underscoring the economic value of such services (Wen & Chen, 2021). To enhance the quality of language services in scenic areas, it is crucial to recognize the importance of diversified language service capabilities. In this regard, Li (2021, pp. 62-65) emphasized that, in addition to oral proficiency, employees in scenic spots should also improve their use of body language in customer service. This ensures that they present appropriate and professional postures and facial expressions during interactions, thereby meeting visitors' expectations for comprehensive and high-quality service experiences.

The second strand of research focuses on the analysis of translated texts in scenic areas, including the evaluation of translation quality for materials such as signage, brochures, and billboards. Gong (2021) documented cases of errors, improper omissions, and inconsistencies in translation, particularly in the bilingual translation of public signage, which often lacks standardization. To address these issues, translators should adhere strictly to guidelines for translation in public service areas, ensuring the accuracy and standardization of translated texts (Gong, 2021).

In summary, research on language services in the tourism industry points out the pivotal role of tour guides in optimizing service quality, the importance of body language in meeting diverse service needs, and the necessity of standardized translations to demonstrate respect and consideration for international tourists. Given that the meanings and acceptability of body language vary across cultural contexts, how body language can be effectively integrated into cross-cultural communication remains a topic worthy of in-depth exploration. Such efforts would enhance tourist satisfaction and elevate the overall quality of their experiences.

4. Offline to Online Service in Governmental Discourse

Research on language services in government departments is devoted to two key areas: face-to-face language service in government service scenarios and language service management in government new media.

Face-to-face interactions between public officials and citizens represent a fundamental mode of language service delivery. In an empirical study, Eckhard et al. (2022) proposed a taxonomy of administrative language, which comprises two core components: informational and relational. The informational component is characterized by comprehensibility and factual accuracy, while the relational component emphasizes emotional engagement and responsiveness. Building on this framework, Eckhard and Friedrich (2024) found that the relational elements of administrative language significantly enhance citizen satisfaction compared to informational elements. Their findings underscore the importance of relational communication and call for further academic exploration in this area.

With the widespread adoption of new media, the platforms and methods for governmental language services are evolving. Research on governmental language has expanded beyond traditional

face-to-face interactions, with increasing scholarly attention to language use in specific media formats. For instance, Wang (2022) analyzed the language service awareness and management strategies of government social media platforms, offering the following recommendations: senders should carefully choose appellations to establish an equal communication relationship, prioritize systematic and logical coherence to ensure effective information transmission, and foster a sense of dialogue and interaction to facilitate information exchange and feedback.

Government websites serve as critical channels for open government information and public disclosure. However, studies by Zhu and Han (2010) and Hong and Yuan (2022) identified several issues, including the slow bilingual development of county-level government websites, infrequent information updates, frequent language errors, and limited comprehensiveness and language diversity in information content. To address these challenges, they proposed enhancing bilingual development at the county level, increasing investment in qualified English personnel and financial resources, optimizing multi-modal service formats to enrich content, and expanding the range of service languages to improve overall language service capabilities.

In conclusion, research on language services in the public administration sector, whether in face-to-face interactions or through new media, emphasizes the importance of a public-centered approach aimed at meeting the needs of citizens. However, two significant limitations persist. First, there is a lack of in-depth analysis and systematic discussion on the effectiveness, limitations, and synergies of various feedback channels, such as social media platforms, online feedback forms, traditional complaint boxes, hotline services, and face-to-face interviews. Second, existing studies often adopt a broad perspective, failing to fully uncover and address the nuanced differences and complexities in language service needs across diverse regions and government levels. Addressing these gaps will be crucial for advancing the field and ensuring more equitable and effective language services in public administration.

5. Service Awareness in Transportation Discourse

Two research perspectives, localization and internationalization, have been adopted in the study of language services within the transportation industry. Localization research focuses on the language environment of specific regions or cities to meet the transportation information needs of local residents. Within this context, the taxi industry, as a crucial part of the transportation system, has become a key subject of study regarding localized language services. Scholars such as Xia and Dong (2014) and Li and Shang (2017) have highlighted significant issues faced by taxi drivers in providing language services. For instance, many drivers have limited proficiency in the standard dialect, use polite language infrequently, and, in some cases, engage in impolite speech. These challenges not only impact the passenger experience but also harm the overall image of the city. To tackle these issues, proposed solutions include enhancing drivers' proficiency in the standard dialect, regulating the use of

uncivilized language, responding to passenger needs, and implementing government-sponsored training programs.

Internationalization of language services in the transportation industry primarily focuses on addressing the linguistic needs of cross-national or cross-cultural travel, with a particular emphasis on English as a global lingua franca. As globalization continues to progress, the transportation sector must cater to international tourists and foreign residents. Thadphoothon (2017) revealed that Thai taxi drivers face numerous challenges in intercultural communication, primarily due to their limited English proficiency, which results in communication barriers with foreign passengers. To resolve this, he recommended tailored training to enhance language service skills, based on the drivers' individual needs. Messner (2020) noted that in the airline industry, language differences between passengers from diverse cultural backgrounds and flight attendants can significantly impact the overall passenger experience and their perceived service quality.

In summary, research on the localization of language services in the transportation industry focuses on improving taxi drivers' awareness of language services and standardizing their language usage. Conversely, internationalization research highlights the vital role of language services in cross-cultural communication, taking a global perspective to improve the transportation industry's internationalization. However, there is still insufficient exploration of the passenger's perspective and their needs. Specifically, when examining the challenges of cross-cultural communication, most studies tend to overlook the core elements of unique communication habits and deeply ingrained value differences across cultures, thus failing to propose more targeted and inclusive solutions. Therefore, future research should focus on deepening the exploration of passengers' perspectives and analyzing the complex impacts of cultural diversity in the context of intercultural communication.

6. Outlook for Future Research

As has been stated, research on industrial language service centers on sectors such as healthcare, tourism, government, and transportation. The main research methods employed are questionnaires and interviews, with a predominant focus on commonly used languages and language use itself. The findings not only offer concrete strategies and methods to address practical issues but also provide valuable insights and directions for future research. Moreover, these studies are closely aligned with national policies, keep pace with current trends, and demonstrate a forward-looking perspective.

However, research on language services in various industries still faces several key challenges and requires further exploration to meet the increasingly complex and dynamic demands for language services. First, future research needs to shift from linguistic concerns to humanistic ones, focusing on the language service needs of linguistically disadvantaged groups in order to achieve comprehensive and inclusive service. This shift requires researchers to not only consider the effectiveness of language as a communication tool but also recognize the socio-cultural significance of language services and

their far-reaching impact on the well-being of individuals. Specifically, future research should prioritize underprivileged groups that are often marginalized or overlooked in traditional language service systems, such as non-native speakers, individuals with disabilities, and the elderly. These groups may face unique barriers in accessing information and communicating effectively, making their language service needs particularly urgent and complex. By conducting in-depth research into the specific needs, communication styles, and challenges faced by these groups, researchers can propose more targeted strategies and recommendations. Additionally, the integration of humanistic care means that research should also emphasize emotional communication, cultural respect, and psychological support in language services. This requires industries to not only ensure the accurate transmission of information but also to foster emotional interaction and humanistic care during the service process. This approach will create a warm, respectful, and understanding communication environment, thereby enhancing the overall satisfaction with language services.

Second, in addition to common languages, more attention should be paid to minority languages, languages for individuals with disabilities (e.g., sign language, Braille), dialects, body language, and other forms of language services (Li, 2018) to meet the diversified needs of language services in the industry. Minority languages play a crucial role in maintaining national cultural heritage and promoting social harmony. Future research should explore how to effectively integrate minority language resources into industrial language services (Ding, 2019), enhancing information accessibility and service experience for minority groups. Moreover, sign language and Braille are vital for individuals who are hearing- or visually-impaired. Therefore, industry language service research must consider these special needs, promote the functional diversity of sign language and Braille, and improve engagement through incentive mechanisms (Liu, 2024). Additionally, the integration of dialects and body language is crucial for meeting the language needs of different regions and social groups. By combining all these efforts, a more comprehensive and humanized language service system can be constructed, providing barrier-free and high-quality services to a broader range of groups.

Furthermore, building a corpus of industrial language services would enhance the scientific rigor and reliability of empirical research. A well-constructed corpus can provide rich, authentic, and diverse linguistic data, which will deepen the understanding of the current state and challenges of language services. It will also offer robust data support for improving service strategies and optimizing processes. During corpus construction, it is essential to adhere to scientific principles to ensure the comprehensiveness and standardization of data collection.

Finally, future research should broaden its scope from the perspective of legal and policy support, community participation, technological innovation, and digital inclusion in order to fully respond to emerging trends and requirements. Regarding legal and policy support, research should focus on establishing a solid legal foundation and policy guidance for the standardization and normalization of language services through legislation and policy implementation. This includes exploring legal

mechanisms to safeguard language service rights, developing industry standards, and assessing the impact of existing policies on service effectiveness while identifying areas for improvement. Community participation has become an important approach to enhancing the effectiveness and public satisfaction of language services. Efforts can be made in exploring how to elicit active participation of residents, community organizations, NGOs, and other stakeholders in the planning, implementation, and evaluation of language services. Technological innovation plays a key role in driving the transformation of language services. However, current academic research on the application of emerging technologies such as artificial intelligence, big data, and cloud computing in language services remains insufficient, particularly regarding their impact on user experience, effectiveness, and challenges. Further research is needed to comprehensively understand their development trends and optimization pathways. Finally, digital inclusion is a fundamental principle to ensure that language service benefits a broad range of individuals. In the digital age, further investigation is needed into how to bridge the digital divide, ensuring that people from various backgrounds and with varied abilities and needs can equally benefit from the convenience provided by industrial language service.

Currently, research on industrial language service is undergoing rapid development, with immense potential for growth. We call on academics and industry practitioners to collaborate in strengthening interdisciplinary and cross-cultural cooperation, expanding the breadth and depth of research, and continuously innovating research methods and theoretical frameworks to promote the development of language service. With concerted efforts from all parties, industrial language service will play an increasingly important role in improving service quality, driving industry development, and fostering a harmonious society.

References

- Ali, A., David, M.K., & Channa, A. R. (2022). Improving service interactions through inclusive language for Sindh's Sheedis. *Journal of Services Marketing*, *36*(7), 952-963.
- Carter, B. M., Johnson, R., & McDaniel, V. P. et al. (2024). The progression of inclusive language that enhances belonging. *Creative Nursing*, *30*(4), 308-319.
- Chen, P. (2014). Several fundamental theoretical issues in industry language services. *Applied Linguistics (Chinese)*, (3), 117-124.
- Ding, S. (2019). Preliminary discussion on the development and application of ethnic minority language resources in China. *Chinese Journal of Language Policy and Planning*, 4(3), 38-44.
- Eckhard, S., Friedrich, L., & Hautli-Janisz, A. et al. (2022). A taxonomy of administrative language in public service encounters. *International Public Management Journal*, 27(1), 60-75.
- Eckhard, S., & Friedrich, L. (2024). Linguistic features of public service encounters: How spoken administrative language affects citizen satisfaction. *Journal of Public Administration Research and Theory*, 34(1), 122-135.

- Gong, J. (2021). An analysis of English language services in the Yuanyang Hani Rice Terrace Scenic Area. *Journal of Honghe University*, 19(1), 13-15.
- Graves, J. M., Moore, M., & Gonzalez, C. et al. (2020). Too little information: Accessibility of information about language services on hospital websites. *Journal of Immigrant and Minority Health*, 22, 433-438.
- Hong, J., & Yuan, Z. (2022). A survey on the current status of emergency language services on government websites and policy recommendations. *Journal of Zhejiang International Studies University*, (5), 17-27.
- Li, B., & Shang, X. (2017). A survey on the status of language services in the taxi industry: A case study of Dalian. *Journal of Liaoning Normal University (Social Science Edition)*, 40(4), 110-119.
- Li, S., & Du, M. (2019). A study on the dialect issues in language services in the healthcare industry: A case study of Xi'an. *Journal of Tangshan Normal University*, 41(5), 35-42+89.
- Li, X. (2018). Reflections on several issues in language service research. *Journal of Yunnan Normal University (Humanities and Social Sciences Edition)*, 50(2), 51-57.
- Li, X., & Gong, Y. (2015). A survey on language services in the healthcare industry. *China Language Strategies*, 2(2), 97-109.
- Li, X. (2021). A survey on the current status of language services in Suzhou Gardens. Master's Thesis. Xinjiang Normal University, Urumqi, Xinjiang.
- Liu, X. (2024). A case study of language services for students with language barriers in higher education. *Chinese Journal of Language Policy and Planning*, 9(4), 34-44.
- Messner, W. (2020). The impact of language proficiency on airline service satisfaction. *Journal of Travel & Tourism Marketing*, 37(2), 169-184.
- Thadphoothon, J. (2017). Taxi drivers' cross-cultural communication problems and challenges in Bangkok, Thailand. *Journal of Reviews on Global Economics*, (6), 313-320.
- Wang, Q. (2022). Language services and management by government new media speakers. *Social Science Front*, (4), 259-264.
- Wang, Y., & Li, Q. (2019). A study on language services in Xi'an's community healthcare. The *Journal of Shandong Agriculture and Engineering University*, 36(2), 66-67.
- Wen, J., & Chen, S. (2021). The impact of tour guide language services on tourist loyalty. *Market Forum*, (8), 63-69.
- Xia, L., & Dong, S. (2014). A survey on the status of language services in the taxi industry in Shenyang. Journal of Shenyang Normal University (Social Science Edition), 38(2), 117-120.
- Zachariah, R., Harries, A. D., & Srinath, S. et al. (2012). Language in tuberculosis services: Can we change to patient-centred terminology and stop the paradigm of blaming the patients. *The International Journal of Tuberculosis and Lung Disease*, 16(6), 714-717.

- Zhao, S. (2012). Defining and categorizing language services based on service content. *Journal of Beihua University (Social Sciences)*, 13(3), 4-6.
- Zhu, M., & Han, J. (2010). A survey and reflection on the bilingualization of county-level government portal websites. *E-Government*, (5), 97-100.