



## BRIDGING THE LINGUISTIC GAP: TEACHING HINDI TO CHINESE-SPEAKING LEARNERS

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### ABSTRACT

The growing educational, economic, and cultural cooperation between China and India has increased the demand for Hindi language learning in Chinese universities. However, Hindi is one of the most challenging foreign languages in terms of linguistic relativity for Chinese-speaking students. Such difficulties as phonetics and tonality, orthographic and morphological dissimilarity, and cultural or pragmatic misunderstanding are some of the hindrances to achieving proficiency in Hindi as a foreign language. The research explores the phenomenon of difficulties in learning Hindi by Chinese-speaking learners through the lens of linguistic distance and provides theoretical foundations for further empirical studies. It compiles the current state of the theory of contrastive analysis of linguistic elements, interlanguage development, cognitive competence, and language learning strategies. Thus, the present paper offers a conceptual basis for research into Chinese students' perception of difficulties in learning Hindi as a foreign language. It identifies three central theoretical approaches to second language acquisition which may be used as a framework for further investigation of the relationship between linguistic dissimilarity and language learning challenges. The paper argues that traditional grammar-based methodologies are ineffective for distant language pairs such as Hindi-Chinese due to their insufficient consideration of learner variables. It concludes with a discussion of pedagogical strategies which may be utilized in teaching Hindi to Chinese-speaking students.



**KEYWORDS :** growing educational, economic, and cultural cooperation, orthographic and morphological dissimilarity.

### INTRODUCTION

The twenty-first century has been characterized by growing educational cooperation between China and India. With the rapid development of economic, diplomatic, cultural, and academic ties between the two countries, proficiency in each other's languages has become an increasingly valuable skill. As a result, Chinese universities have seen a gradual rise in demand for Hindi language courses that would prepare students for effective communication in a wide range of professional contexts. Despite the growing interest in learning Hindi, this language remains one of the most rare in China. Compared to English, Japanese, Korean, French, or Russian, Hindi is less common both in terms of academic research and teaching resources. Most available materials are designed using the principles of language-specific similarity, which makes them inadequate for addressing the needs of Chinese

learners. As a result, both teachers and students face significant challenges that hinder the process of language learning.

Linguistic distance is a term that refers to the degree of dissimilarity between languages or language variants. The greater the distance is, the more challenging the task of language learning and translation becomes. One of the reasons for this is the fact that positive and negative language transfer from one's native language to the target language is greatly determined by similarity or lack thereof between the languages. Chinese and Hindi are some of the most distant languages in terms of linguistic distance. First of all, they belong to different language families, which makes interlingual connections unclear. Chinese is a member of the Sino-Tibetan language family while Hindi belongs to Indo-European. Chinese is an analytic language while Hindi is inflected. Chinese is characterised by its lexical tones while Hindi does not possess this feature. Finally, the two languages use substantially different writing systems: Chinese uses pictographic characters while Hindi uses the Devanagari script.

The linguistic distance between Chinese and Hindi has an effect on every stage of the language learning process. First of all, students have to learn new phonemes that do not have equivalents in Chinese. Then, they have to adapt to substantial differences in morphology and grammar. In addition, they also have to learn a new way of representing language, which is fundamentally different from the one they are used to in Chinese. Finally, students also have to learn new cultural codes and norms of communication. It is important to note that the difficulties of language learning are not limited to memorization and practice. Since Chinese and Hindi are very different from each other, students have to rebuild many cognitive structures associated with language learning. This presents with challenges that are not typical of language learning in general.

The literature review will provide a detailed overview of the most important phenomena associated with language learning. It will also highlight the most common challenges associated with learning Hindi by Chinese-speaking students. The review will focus on the following three areas: phonology and intonation, script and orthography, and cultural differences. The findings will serve as the basis for the discussion of the most common pedagogical issues associated with learning Hindi by Chinese students.

Linguistic distance plays a major role in language learning. Scholars have devoted considerable attention to the phenomenon of linguistic distance as it is one of the factors that determine the ease or difficulty of the process of language learning. Researchers often define it as the degree of dissimilarity between languages or language variants. The greater the distance is, the more challenging the task of language learning and translation becomes. One of the reasons for this is the fact that positive and negative language transfer from one's native language to the target language is greatly determined by similarity or lack thereof between the languages.

It is common for language learners to experience greater difficulties when learning languages that are distant from one's native language. For example, it is generally easier to learn English for an English-speaking person than to learn Hindi. According to Rod Ellis, second language development is a process during which learners attempt to restructure their existing linguistic system so that it can accommodate new data (Kearney & Ellis, 1995). Another scholar, Terence Odlin, proposed the language transfer theory, which states that positive and negative language transfer from one's native language to the target language plays a major role in language learning. The greater the similarity between languages is, the greater the positive transfer is, and the easier it is to learn the target language.

When it comes to language learning in Asia, Chinese-Hindi language acquisition presents with greater difficulties for students because there is little similarity between these languages. Compared to many European languages, Hindi and Chinese differ in terms of phonology, morphology, syntax, and writing systems. As a result, students have to learn many linguistic features that do not have equivalents in Chinese. Compared to English, Hindi presents with more difficulties because of substantial differences in terms of morphology, syntax, and writing systems.

Foreign language teaching and learning in China has been undergoing a number of reforms over the past several years. The goal of these reforms was to ensure that students acquire functional proficiency in a foreign language so that they can communicate effectively and efficiently. The current trends in foreign language learning in China are learner-centred, communicative, and technology-

driven. However, many classrooms are still dominated by examination-oriented teaching practices. Hindi is a relatively rare language in China, which is why resources, teacher training, and research are limited compared to other languages. As a result, many teachers tend to rely on methods that have been successfully used for teaching other languages, including English. However, these methods may be ineffective for teaching Hindi because of substantial differences between Hindi and Chinese. The findings of recent studies suggest that many researchers have devoted their efforts to understanding language learning in general. However, there is a need for greater understanding of how linguistic distance affects language learning, especially in the case of Chinese-Hindi language acquisition.

### CHALLENGES IN HINDI ACQUISITION

Phonology is one of the most important elements of language learning. According to the Speech Learning Model proposed by James Emil Flege, the process of language learning involves transformation of phonological representations of sounds in order to accommodate new phonemes that are not present in one's native language. The main point of the model is that learners use their existing phonological representations as a basis for perceiving and producing new sounds. One of the most common challenges in learning Hindi by Chinese students is related to phonology and intonation. The major challenge is presented by aspirated and retroflex consonants that are not present in Chinese. Another issue is presented by voiced aspirated consonants. In addition, Chinese is a tone-based language while Hindi is not, which creates additional difficulties.

Research has shown that practice and explicit instruction play a significant role in developing phonological awareness. In addition to regular practice, computer-assisted instruction can also be effective. It is especially important to pay attention to phonology when learning a language that is distant from one's native language.

Orthography is a relatively recent area of research. Researchers have found that learning to read is a complex process that involves transformation of cognitive representations. Reading Chinese is fundamentally different from reading English because these languages use substantially different writing systems. The major challenge in learning to read Hindi is presented by the writing system that is used in this language. Reading Hindi involves decoding sounds of the language using a writing system that is substantially different from the one used in Chinese. Devanagari script has its own set of rules that need to be mastered by students.

The literature review has found that it is important to provide learners with explicit instruction and sufficient practice when it comes to reading in a foreign language. The use of new technologies can be beneficial in terms of developing orthographic awareness. It is also important to provide students with appropriate reading materials that will allow them to develop their skills.

The concept of communicative competence was introduced to the scientific community by Michael Canale and Merrill Swain. It suggests that language learning involves developing several interrelated competencies. These include grammatical competence, sociolinguistic competence, discourse competence, and strategic competence. The major challenge in terms of communicative competence is presented by sociolinguistic competence. This component of communicative competence is related to the ability to communicate appropriately in accordance with social norms and expectations. Hindi and Chinese are substantially different from each other in terms of sociolinguistics. When communicating with native Hindi speakers, students have to take into consideration different sociolinguistic norms that are not present in Chinese. One of the major challenges is presented by politeness strategies that are used in Hindi to demonstrate respect towards others.

Research has shown that it is important to raise students' awareness of sociolinguistic norms and provide them with opportunities to practice communicating in accordance with these norms. It is especially important to provide students with authentic materials and organize various activities that will allow them to develop their communicative competence.

### RESEARCH GAP

Although there has been a considerable amount of research into second language acquisition, there are still many questions that require further investigation. One of the main challenges presented

by the current research is the fact that it is difficult to design effective pedagogical interventions due to the complexity of the phenomenon. In addition, many scholars tend to use the same approach regardless of the languages involved. Another challenge is presented by the fact that many studies have been conducted from the perspective of second language acquisition, which does not consider the impact of linguistic distance on language learning.

Another research gap that has been identified is the fact that most studies do not take into consideration the impact of phonology, orthography, and sociolinguistic competence on language learning. Although these areas have been investigated separately, there is a lack of research that would identify the ways in which these areas interact.

## THEORETICAL FRAMEWORK

### Contrastive Analysis Hypothesis

Contrastive Analysis Hypothesis (CAH) was advanced by Robert Lado and it suggests that similarities and differences between a learner's first language (L1) and the target language (L2) affect language learning (Walsh & Lado, 1957). More specifically, similar features contribute to positive language transfer while dissimilar features contribute to negative language transfer. In many cases, the task of language learning can be made easier if learners can identify similar and dissimilar features of their L1 and L2.

When it comes to Chinese-Hindi language acquisition, the value of contrastive analysis is explained by the fact that these languages belong to different language families. This implies that they have little or no similar language features. In terms of grammar, Chinese is an analytic language while Hindi is an inflected language. In terms of word order, Chinese is mostly Subject-Verb-Object (SVO) while Hindi is mostly Subject-Object-Verb (SOV). Chinese is a tonal language while Hindi is not. Finally, the two languages use substantially different writing systems.

It is important to note that contrastive analysis can be used to predict potential difficulties experienced by language learners. For example, learners of Hindi who are native speakers of Chinese are likely to have difficulties with the following linguistic features: aspirated and retroflex consonants, gender agreement, verb agreement, postpositions, Devanagari script, and honorific distinctions. By identifying these difficulties, teachers can address them directly instead of assuming that these language features are easy to learn.

### Interlanguage Theory

Interlanguage theory was developed by Larry Selinker and it suggests that language learners develop an intermediate language system that serves as a model for target language acquisition (Selinker, 1972). This theory attempts to explain the process of language learning by taking into consideration learners' perceptions of the target language. Interlanguage is characterized by several key features, including systematicity, variability, permeability, fossilization, and developmental sequences.

One of the major challenges that Chinese students who are learning Hindi face is related to substantial differences between Chinese and Hindi. These differences affect the learners' interlanguage, which can be manifested by the following features: retention of native language features, overuse of target language features, and avoidance of difficult linguistic elements. For example, learners of Hindi may retain certain features of Chinese, such as SVO word order. They may also overuse certain grammatical constructions that are not present in Chinese, such as postpositions. In addition, they may avoid difficult linguistic elements, such as honorific distinctions.

### Linguistic Distance Theory

Linguistic Distance Theory attempts to explain why language learners find certain language pairs more difficult to acquire than others. Linguistic distance refers to the degree of dissimilarity between languages or language variants. The greater the distance is, the more challenging the task of language learning and translation becomes. One of the reasons for this is the fact that positive and

negative language transfer from one's native language to the target language is greatly determined by similarity or lack thereof between the languages.

Linguistic Distance Theory can explain why it is more difficult for Chinese students to learn Hindi compared to English. There are several factors that contribute to this phenomenon. First, Chinese and Hindi belong to different language families while English and Chinese belong to the same language family. Second, Chinese and Hindi are inflected languages while English is an analytic language. Third, Chinese is a tonal language while Hindi is not. Finally, Chinese and Hindi use substantially different writing systems. These factors make the linguistic distance between Chinese and Hindi greater than the distance between Chinese and English.

### Cognitive Load Theory

Cognitive Load Theory (CLT) was developed by John Sweller and it is based on the assumption that the effectiveness of learning is determined by the amount of cognitive load that is imposed on the learner. Cognitive load refers to the amount of mental effort that is required to process and store information. Cognitive Load Theory suggests that working memory capacity is limited, which means that it is important to reduce the load imposed on working memory.

There are three types of cognitive load: intrinsic, extraneous, and germane cognitive load. In terms of Hindi language learning, intrinsic cognitive load refers to the amount of effort that is required to process the material. Extraneous cognitive load refers to the amount of effort that is imposed on the learner by the instructional design. Germane cognitive load refers to the amount of effort that is required to construct schemas.

When learning Hindi, students have to learn a wide range of phonological, grammatical, and orthographic features. This imposes a substantial cognitive load on the learners, which may hinder the language learning process. In addition, the traditional approach to teaching languages is largely ineffective because it imposes a significant extraneous cognitive load on the learners. Modern pedagogical practices suggest that it is important to reduce the extraneous cognitive load by using the right instructional design. For example, multiple modes of instruction can be used in order to reduce the cognitive load imposed on working memory.

### Communicative Competence Theory

Communicative Competence Theory was developed by Michael Canale and Merrill Swain and it focuses on the ways in which language learners can become competent users of the target language. According to this theory, language learning involves developing several interrelated competencies, including grammatical competence, sociolinguistic competence, discourse competence, and strategic competence. These competencies have to be developed simultaneously in order to achieve communicative competence.

One of the challenges of learning Hindi for Chinese students is related to sociolinguistic competence. This component of communicative competence refers to the ability to use language appropriately in accordance with social norms and expectations. Hindi and Chinese are substantially different from each other in terms of sociolinguistics. When communicating with native Hindi speakers, students have to take into consideration different sociolinguistic norms that are not present in Chinese. One of the major challenges is presented by politeness strategies that are used in Hindi to demonstrate respect towards others.

The findings of this study can be used to develop effective pedagogical interventions for teaching Hindi to Chinese students. The findings suggest that the process of language learning can be facilitated by focusing on the following areas: phonology, orthography, and sociolinguistic competence. Explicit instruction and practice are essential in order to develop these competencies.

### FINDINGS AND DISCUSSION

Based on the review of the literature, it is possible to conclude that the challenges of learning Hindi by Chinese students are multifaceted and complex. They go beyond the phonological differences between Chinese and Hindi and affect the language learning process on multiple levels. The findings of



the review can be organized into three major themes: (Walsh & Lado, 1957) phonology and intonation, (Kearney & Ellis, 1995) script and orthography, and (3) cultural differences. Each of these themes represents one of the major challenges of learning Hindi by Chinese students.

### Phonological and Tonal Difficulties

The literature underlines that one of the most frequent challenges in learning Hindi is connected to phonology as one of the main language barriers. In spite of being two phonetically rich languages, Chinese and Hindi have substantial dissimilarities in terms of segmentation and phoneme inventory. Being a tonal language, Chinese utilizes pitch to differentiate lexical meaning, whereas Hindi relies on distinctive features of consonants. According to Flege's Speech Learning Model, "initial classifications of novel phonemes are mapped onto the listener's existing phonological inventory resulting in perceived assimilation of target phonemes," (Flege, 1995). As a result of such mapping process, aspirated phonemes in Hindi are perceived as their non-aspirated counterparts and retroflex ones are substituted for dental, since there are no equivalent phonemes in Chinese. Additionally, the literature reveals that Chinese learners experience severe challenges in perceiving phonemes at the level of contrast. As learners accustomed to parsing lexical information from pitch tend to neglect subtle differences of consonants that are crucial for Hindi, their receptive skills in terms of listening become dysfunctional.

Moreover, learners face difficulties in producing Hindi sounds. They are used to comparatively simple syllable structure of Chinese, while Hindi allows consonant clusters both within one syllable and across syllables. They tend to add extra-vowel to facilitate pronunciation, which makes their language production less accurate. The literature confirms that the problem of phonetics in Hindi learning is not covered effectively enough by mere repetitive practice. It could be beneficial to complement traditional drill-based methodology with explanation of articulatory processes involved, demonstrations of respective tongue positioning, and computer assisted pronunciation training. The latter in particular would benefit learners due to possibility of constant self-monitoring via comparing their performance to that of a native speaker, while getting corrected by means of automated feedback. Another helpful strategy is contrastive analysis enabling learners to perceive phonetic differences from descriptive comparative phonology perspective. It allows them to build mental inventory of what is different about target language and tackle down negative transfer.

It could be concluded that phonological competence plays an essential role in language learning and needs to be given enough attention in order to prevent its interference. Particular attention should be given to pronunciation practice as well as listening comprehension. It was revealed that early phonetic awareness helps to develop receptive skills at a later stage, while phonology-focused practice facilitates vocabulary acquisition.

### Script and Orthographic Distance

The second issue of concern is related to script and orthography. Transition from Chinese pictographic script to Devanagari alphasyllabary in Hindi is yet another significant challenge faced by Chinese learners of Hindi. Since Chinese characters represent morphemes, while Devanagari consonants encode vowel information, one has to adjust to simultaneous processing of linguistic and orthographic information in Hindi. Such adjustment is particularly beneficial in early stages of language learning, while one gets more accustomed to reading than spending much effort on memorizing characters. As the literature underlines, there seems to be ample empirical evidence of increased orthographic distance between Chinese and Hindi which significantly complicates language learning and writing acquisition process. It could be noted that orthographic distance entails increased number of potential pitfalls and mistakes. According to literature review, there are three types of orthographic difficulties:

- Visual Confusion of Similar Looking Characters;
- Incorrect Positioning of Vowels;
- Difficulty in Processing Conjuncts.

These difficulties stem from increased difference between left-to-right character reading in Chinese language and complex positional coding of vowel-consonant combinations in Devanagari. The literature review highlights the problem of conjunct consonants as the most prominent one due to learners' limited experience with ligatures. Additionally, learners of Hindi have to acquire yet another writing system that presupposes simultaneous reading of character and processing of embedded meaning. It is particularly difficult for beginners as they need to exert extra effort to recall characters' writing pattern and spelling rules. As a result, beginners tend to allocate more processing capacity to script than to message, which makes their writing less fluent and lexical choices more cautious.

Literature review recommends to pay sufficient attention to orthographic instruction prior to advancing to more complex language learning material. To promote orthographic awareness while reducing writing anxiety, it is beneficial to implement multi-sensory methods ranging from hand-writing to tracing applications, animated characters writing and phonics-based instruction. These instructional practices help learners to build orthographic literacy while getting more confident with reading. Additionally, the literature review makes a point of applying technology-based practices that facilitate orthographic development. With a number of mobile applications designed for character writing practice that incorporate multiple-choice tests and handwriting recognition, learners are able to get extra practice outside the classroom. With constant individual practice, learners get accustomed to character writing, which liberates extra processing capacity for more complex cognitive processes of reading comprehension.

Accordingly, it could be stated that orthography plays a pivotal role in language learning and needs to be given enough attention. Particular effort should be made to practice letter formation, correct placement of diacritics and ligature writing. With enhanced orthographic literacy, learners gain ability to read more efficiently and subsequently build lexical and communicative competencies.

### Cultural and Pragmatic Misinterpretations

The last issue of concern is one of sociocultural differences. The literature review highlights the fact that language learning involves becoming familiar with cultural particularities of the target language and acquiring intercultural communicative competence. Cultural differences could manifest themselves in numerous ways from variations in social interactions to differences in politeness strategies and usage of honorifics. One of the most salient cultural differences between Chinese and Hindi is connected to usage of deference markers. Hindi makes extensive usage of honorifics that reflect social hierarchy and degree of respect, whereas Chinese has limited set of such constructions. According to the literature, learners tend to make pragmatic errors due to overuse of particular honorifics that are perceived as overly familiar or, on the contrary, overly formal. Overuse of particular form of address could lead to either rejection from peers due to perceived impoliteness or, on the other hand, unwanted familiarity. Another cultural particularity connected to pragmatics is one of indirectness. Hindi language tends to utilize indirect speech acts and constructions of politeness that are absent in Chinese. While both languages presuppose use of polite language, Chinese politeness strategies are different and could lead to use of constructions that are deemed impolite in Hindi. Cultural differences also impact idiomatic expressions.

Numerous proverbs and sayings in Hindi are sourced in religious texts, historical context, history and local culture that are unfamiliar to Chinese learners. According to the literature, one of the most frequent mistakes of Chinese learners is to take idioms at face value, which limits their language production and fluency. The literature review also notes that learners are often hesitant to participate in spontaneous communication due to fear of making cultural or pragmatic mistakes. According to the literature review, intercultural competence should be explicitly taught. To develop such competence, it is beneficial to use target language authentic materials, such as movies, newspapers, radio stations, literature, social media and so forth. Additionally, students could practice pragmatic skills via role-play and case studies. Due to enhanced access to technology, learners could benefit from online communication tools, online forums and international collaboration projects for practicing intercultural competence. The literature review notes that such practice would enable students to acquire sufficient intercultural communicative competence of target language.

In spite of language learning being mostly verbal, sociocultural particularities of target language have significant influence on effectiveness of communication. It is crucial to equip learners with intercultural competence to operate comfortably within cultural norms and values of the host community.

### Pedagogical Framework and Implications

The findings of the literature review contribute to growing body of theoretical knowledge regarding language learning by Chinese learners. They could be utilized by educational institutions offering Hindi courses to Chinese students. First and foremost, it is pivotal to acknowledge fundamental distances between Chinese and Hindi as two unrelated language isolates. According to the literature review, learners benefit from explicit phonological, orthographic and intercultural instruction prior to advancing to more complex topics. Therefore, educational programs teaching Hindi to Chinese learners should be designed in such way to include these components at an early stages of learning.

Moreover, it is beneficial to implement communicative based strategies alongside traditional grammar based ones. While the latter are important, they should complement more practical aspects of language learning. Role-play, projects, presentations, collaborative problem solving all assist in developing procedural knowledge of the language. It is also crucial to utilize technological advancements in language learning to enhance students' performance. Mobile assisted language learning, AI tutors, digital corpora, blended learning all serve as useful instrumental support. It is beneficial to utilize technology as pedagogical tool in conjunction with traditional teacher-led instruction. Equally important is to provide teacher training for teaching Hindi to Chinese students. Literature review underlines that language instructors could benefit from enhanced pedagogical knowledge in terms of contrastive linguistics, intercultural competence, educational technology and so forth. Lastly, it is vital to promote collaborations between Chinese and Indian educational institutions to facilitate language learning among students and faculty members alike.

### CONCLUSION

In conclusion, the literature review examines pedagogical issues faced by Chinese students in learning Hindi through phonology, orthography and intercultural competence perspectives. All three areas pose significant challenges due to substantial linguistic distance between Chinese and Hindi. The review makes a point of highlighting the necessity to provide explicit phonological instruction, introduce students to Devanagari script, and raise their intercultural awareness. The literature reveals that linguistic distance negatively impacts language learning by creating additional barriers that interfere with language acquisition process. Chinese learners find it particularly challenging to acquire phonology with its complex distinctions of aspiration and retroflexion, transition from pictographic to alphasyllabary orthography, as well as develop intercultural competence in terms of pragmatics and cultural differences. The literature review supports the claim made by researchers that it is vital to implement communicative language learning, task-based learning, explicit contrast, bilingual mediation and technology assisted methodologies to enhance language learning outcomes. This literature review is the first step in developing more empirical studies aiming at improving language learning among Chinese students. Following up research should be dedicated to examining language learning outcomes, implementing technology-assisted strategies and compiling a representative corpus of data related to Hindi language learning by Chinese learners.

By developing innovative approaches to language learning, international collaboration projects, and enhanced student support, Chinese educational institutions will be able to facilitate language learning of both students and faculty members while supporting broader academic engagement.

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