

Exploring the Applicability of the Push-Pull Theory to Understand the Spread of the Chinese Language

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Yu Liang

Beijing Language and Culture University, Beijing, China
Email: ly15810819668@163.com
ORCID: <https://orcid.org/0009-0007-7598-8147>

Deping Lu

Beijing Language and Culture University, Beijing, China
Email: dplu_dplu@163.com
ORCID: <https://orcid.org/0000-0003-1203-4905>

Abstract:

This article discusses the application of the push-pull theory from migration studies to explain the global spread of the Chinese language. Employing a qualitative analytical research method, we first identify the push and pull factors related to the language spread and analyze how these factors influence the transition from language users' communicative demands to real language practice. We then summarize the elements that affect the push-pull relationship and reveal how the push-pull factors affect the macro, meso, and micro levels of language spread. Finally, this paper highlights policy implications for optimizing language spread and puts forward suggestions that promote the balance of the push-pull relationship. We believe that the application of the push-pull theory has helped illuminate the intricacies of language spread and serves as a theoretical foundation for future empirical research on language spread.

Keywords: language spread, push-pull theory, language education, language policy

1. Introduction

Cooper (1982: 5) noted that “studies of language spread, which have been marked by differing substantive preoccupations and methodological orientations, lack a common frame of reference”. This observation remains pertinent, as many existing theoretical models addressing language spread tend to either rely on an unidirectional perspective or address a specific aspect. For instance, Cooper (1982) drew on the “diffusion of innovations” theory from communication studies and emphasized language spread through diffusion in communication networks for specific communicative functions. Quirk (1988) proposed three models of language spread, namely the demographic model, the econocultural model, and the imperial model, each elucidating different ways in which languages are disseminated, driven by population migration, knowledge transfer, and political promotion. Phillipson (1992; 2009; 2024) introduced the model of “linguistic imperialism” that highlights the structural and cultural disparities created between dominant and minority languages through conscious policy promotion and ideological manipulation. Conversely, another model named “selectivism” focused on the language choices made by individuals and institutions, as shaped by global language ecology and market demands (Clayton, 2006; Spolsky, 2004). While these existing models offer valuable insights, they primarily adopt a unidirectional perspective that emphasizes either the language disseminator or the recipient. This study introduces the “push-pull theory” to present a novel bidirectional perspective on



language spread, to underscore the interplay between supply and demand relationship, thereby deepening our understanding of the complexities of language spread phenomena.

The push-pull theory, originally formulated in social demography, serves as a framework for explaining and predicting population migration. It uncovers the driving and attracting forces behind migration decisions, challenging the notion that migrations are random and unpredictable occurrences. Ravenstein (1889) was among the first to articulate migration patterns, asserting that migration follows certain rules, with underlying factors operating regularly. Bogue (1960) further developed this theoretical intuition and formally proposed the “push-pull theory” to illustrate migration through the cooperation between forces that “push” individuals away from their origin and “pull” them toward their destination.

In this article, we argue that the push-pull theory can also be effectively used to analyze language spread. Just as migration decisions are influenced by conditions in both origin and destination, the success of language spread hinges on the interaction of push and pull factors. The push-pull theory is characterized by its dual nature (push and pull), bilateral interaction (the push side facilitates the language moving toward the pull side, and the pull side actively attracts the language), as well as emphasis on maintaining a dynamic balance between push and pull forces. In practice, the push-pull relationship can manifest between countries (the transmitting country and the receiving country), communicative networks (the originating network and the adopting network), individuals (“advocator and acceptor”), or other entities (Fliegel & Kivlin, 1966: 235-236). “Push” and “pull” should be taken as an analytical tool for in-depth exploration, rather than simply a linear dichotomy of factors (Bogue, 1960), although it can encompass all elements that influence language spread. Thus, the push-pull theory offers an explanatory framework for analyzing the features and patterns of language spread by focusing on the complexity of facts. Besides, it facilitates identifying and optimizing the interactions between the push factors on the transmitting side and the pull factors on the receiving side, thus offering new perspectives on the scope and limitations of language spread.

Essentially, the push-pull relationship is driven by the underlying social forces that are gradually cultivated and become the default consensus. On the one hand, these social forces, constructed through ideologies, underpin individuals’ decisions regarding the “functional and social selection” of language (Spolsky, 2004: 7). On the other hand, the social forces are impacted and shaped by various push-pull factors at macro, meso, and micro levels. In the context of population migration, the social forces stem from the evaluations toward conditions of the state, society, and family, which provides the basis for conceptualizing the push and pull factors. In terms of language spread, individuals can form the perceptions of the status and the function of languages they encounter, leading to a consensus known as language ideology. The ideology constructs social realities and generates implicit social forces that further shape individuals’ language choices. Just as linguistic imperialism is “imposed by force or through a combination of push and pull factors” (Phillipson, 2024: 3470), the economic, political, cultural, and imperial contexts highlighted by Quirk (1988), Clayton (2006), and Spolsky (2004) are also critical indexes that contribute to the social forces impacting language spread.

Regarding the international spread of the Chinese language, the effectiveness relies not only on the push forces from the Chinese government, institutions, networks, and the native speakers, it also depends on the reception demand for the language on the receiving side. The global spread of the



Chinese language can be seen as a hierarchical process that originates from native Chinese-speaking regions to other regions. For one thing, the hierarchical process is characterized by the interactions between push-pull sides at macro (state), meso (institutions and organizations), and micro (individuals) levels; for another, the Chinese language, involving both the spread of standard Chinese and its dialects, can be disseminated across levels in diverse pathways, methods, and channels. This paper primarily focuses on the push-pull relations related to the spread of standard Chinese driven by official policies and institutional promotion from mainland China, with occasional mentions of the spontaneous transmission of dialects through diaspora movements.

In this paper, we employ a qualitative analytical research method to focus on deducing the theoretical application of push-pull theory to explain the spread of the Chinese language. The main data sources include policy documents, government websites, as well as related literature. In what follows, we will first attempt to summarize the push-pull factors driving the spread of the Chinese language, and then compare the relationship between population migration and language spread through the lens of push-pull relations to validate the applicability of the theory. Next, we will scrutinize the factors affecting the push-pull relationship in the spread of Chinese, and how those factors impact language users' actual language choice. Then, we will address the routes, levels, and domains of the Chinese language spread from the perspective of push-pull relations. Finally, we will explore policy implications for effective language spread by addressing the balance of the push-pull relations, and we conclude that the ideal way for language spread should be driven by the desire to blend meaningful worlds of different languages, rather than merely serve as a tool or a means to an end.

2. Push-Pull Factors and Language Spread

While the original studies by Ravenstein (1889) and Bogue (1960) advanced beyond the simplistic view of migration as merely a flow of social resources, with the recognition that migration is shaped by the combination of the push-pull factors, they still confined to identifying these factors without investigating the dynamic push-pull interactions and diverse choices of individuals (Bansal, 2005). Lee (1966: 50) built on this foundation by reframing the discussion from “push factors in the origin area” and “pull factors in the destination” to a more integrative view of “factors associated with the origin/destination”. This refinement acknowledges the dual roles of both regions in attracting and promoting migration, moving away from a simplistic linear correspondence. Lee (1966) also introduced two variables of “intervening obstacles” and “personal factors” to illustrate that push-pull relations are more nuanced than Bogue's assertion of them as “the opposite sides of the same coin” (1960: 376).

Push-pull factors are external forces affecting migration behaviors, while “intervening obstacles” and “personal factors” respectively act as resistance and internal forces that shape individuals' choices. While research mainly focuses on external conditions, internal factors such as personal demands and motivations also impact decision-making. When the combined forces of internal personal factors and external push-pull factors surpass the resistance forces posed by intervening obstacles, individuals make their choices. Regarding the spread of the Chinese language, understanding this mechanism



involves analyzing the operation of push-pull factors in the dissemination process and the balance established between them.

Given that the social forces driving language choices are shaped by various push-pull factors, we present some prototypical instances of push-pull factors that affect language spread. Referring to the push-pull factors in migration studies, combined with our research experience and data gathered from websites (see Bogue, 1960 pp. 373-377), Table 1 below lists the push-pull factors affecting language spread at macro, meso, and micro levels (Baldauf, 2008; Zhao & Baldauf, 2012). The specific variables of the push-pull factors in the table are partially derived from Fishman et al. (1977), who discussed the status of the transmitting country and the degree of linguistic diversity of the receiving country. Cooper (1982: 21), on the other hand, identified the potential factors impacting language spread, including “initial cost, extent of anticipated profitability, divisibility for trial, complexity, and pervasiveness”.

Table 1. Push and Pull Factors Affecting Language Spread

Levels	Push Factors	Pull Factors
I. Macro-Level	a. Policy promotion b. Economic support c. Outward-oriented diplomacy d. Open and inclusive language ideology	e. Policy support f. Economic ties g. Friendly diplomatic relation h. Harmonious linguistic, cultural, and ethnic atmosphere
II. Meso-Level	a. Establishing language learning institutions, organizations, and programs b. Providing language resources c. Supportive education system d. Conducting external exchange initiatives	e. Sufficient institutions, organizations and programs f. Accessible language learning materials and resources g. Valuable knowledge carried by the language h. Wide application in social domains
III. Micro-Level	a. Population migration b. Social ties from families and communities c. Individual communicative demands	d. Gathering of immigrant and diaspora communities e. Cultural bond with the heritage language f. Broad prospects and opportunities of development

Macro-level factors generally pertain to the state and government, meso-level factors are associated with social domains, institutions and organizations, while micro-level factors are linked to individuals, groups, and communities (Baldauf, 2008; Zhao & Baldauf, 2012). At the macro-level, the PRC



government, as the transmitting side, has shown strong push factors through institutional arrangements, such as promoting language policies (Ia), dispatching language teachers and volunteers, developing Chinese Proficiency Tests (HSK), organizing global Chinese language competitions, and setting up scholarships¹. In addition, openness and friendliness in economic (Ib, If), diplomatic (Ic, Ig), and ideological facets (Id, Ih) also facilitate language dissemination, contingent upon the specific circumstances of the receiving country.

At the meso-level, the availability of sufficient learning resources and institutions (IIa, IIb, IIe, IIc) is a key factor. Beyond this, the capital value embedded within the language (IIg) (Bourdieu, 1991) and its importance of use in various social domains (IIh) are relatively indirect but more decisive factors. At the micro-level, population migration (IIIa) and individuals' communicative demands (IIIc) serve as the core driving forces. These factors require a certain language being used for pursuing higher education, accessing development opportunities (IIIb), preserving bonds to heritage language (IIIe), and integrating into new speech communities and groups (Lyu & Huang, 2024). Heritage language bonds are primarily aimed at overseas diaspora groups (IIId), who, despite their assimilation into new communities, still retain close transnational connections and cultural affiliations with their homelands (Santasombat, 2022).

The dissemination of different languages varies in push and pull factors, and the impact of these factors can also differ among individuals due to two reasons: the alignment of push-pull factors with individuals' language learning objectives, and the language's effectiveness in achieving these goals. For instance, if someone learns a language to pursue career opportunities in the financial sector, the pull factor of "high demand in international trade" would be crucial. This individual would consider languages that are in demand in this field and that offer promising job prospects. On the other hand, someone aiming to use the language for intercultural communication would prioritize factors that enhance communicative skills other than those related to international trade.

Overall, the push-pull theory provides a methodological approach to an in-depth dissection of language spread, and its theoretical significance is as follows. First, the spread of language, akin to population migration, can be conceptualized as the movement of resources driven by supply and demand relationships. This conceptualization forms the substantive characteristics of push-pull theory and underpins its application to language spread. The next section will further discuss the rationality of this application from the perspective of the relationship between population migration and language spread.

Second, striking a balance between push and pull factors helps form a proper scope and boundary of language spread and fosters a harmonious linguistic ecology between the transmitted language, indigenous languages of the receiving country, and global lingua franca (Van der Worp et al., 2018). A harmonious linguistic ecology signifies a structured and sustainable coexistence of languages within a specific environment, where each language fulfills its role without causing disruption or imbalance (Haugen, 1972; Pattanayak, 1988; Mühlhäusler, 2003). Disrupting the ecological balance can lead to resistance from the receiving country and hinder the effect of language spread.

¹ The information is taken from the official website of the Center for Language Education and Cooperation, Ministry of Education, PRC, website address: <http://www.chinese.cn/page/#/pcpage/mainpage>.



Finally, achieving a push-pull balance facilitates the design of targeted language dissemination strategies to improve effectiveness in diverse receiving countries. By considering the unique characteristics and needs of these countries, customized strategies and evaluation metrics can be developed to assess the effectiveness of language spread throughout the process.

3. Push-Pull Relations in Population Migration and Language Spread

Population migration and language spread are closely interrelated, both characterized by the flow of resources. Population migration is often accompanied by language spread (Trudgill, 1986; Thomason & Kaufman, 1988; Kerswill, 2006; Blommaert, 2010), and language spread also requires individuals and social groups as carriers. The growing prominence of China² has led to increased demand for learning Chinese, attracting international students to China and driving the movement of human resources (Lyu & Huang, 2024). The PRC government also actively sends language teachers and volunteers abroad to promote the Chinese language, further fueling the transmission of language resources overseas.

In applying the push-pull theory to explain the spread of Chinese, it is necessary to compare their features to test the feasibility of this approach. Population migration and language spread exhibit similarities in supply-demand relation, individual behaviors, and feedback effects. First, both seek balance in supply-demand relation, which is a core aspect of push-pull relations. While population migration concerns the flow of human resources, the spread of Chinese involves the flow of language resources. Both rely on the balance between supply from the transmitting side and demand from the receiving side. A successful push-pull relationship necessitates ample supply from the transmitting side and strong demand from the receiving end.

Second, both of these phenomena ultimately manifest in individual behaviors. Individual demands and preferences can lead to diverse choices. Migration frequently arises from spontaneous individual actions, resulting in dispersed destinations, diverse distributions, and varied mobility rates (Bogue, 1960). Although the international spread of Chinese is governed by language policies³ and promoted by national organizations⁴ at the macro-level, it ultimately hinges on the behaviors of individual language users.

Third, both the outflow of human and language resources produces counter forces, namely “counter currents” in migration laws, which can produce a feedback effect on the place of origin. These counter currents, though weaker than the forward flow, bring about positive outcomes (Ravenstein, 1889). The return of migrants can foster development in their home countries. Similarly, the continuous use of Chinese enhances its value, prompting the transmitting country to develop high-quality education resources and cultural products for dissemination, thus establishing a virtuous circle.

² All subsequent occurrences of “China” refer to mainland China.

³ For example, these sources offer information on international language policies in China: “Several opinions on strengthening and improving Chinese-foreign humanities exchanges”, 2017-12-21, http://www.gov.cn/zhengce/2017-12/21/content_5249241.html, “Chinese Language Proficiency Level Standards for International Chinese Language Education Released”, 2021-3-31, http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/202103/t20210329_523304.html

⁴ Organisations mainly include educational, research, and leadership institutions for teaching Chinese as a foreign language; some examples include the Center for Language Education and Cooperation, Ministry of Education (formerly Hanban), World Association for Chinese Language Teaching, Confucius Institutes.



However, there also exist differences between population migration and language spread. Migration is a self-contained process focusing primarily on individuals. Once individuals have relocated, their migration usually concludes without triggering further chain reactions. In contrast, language spread involves broader behavioral triggers, as language resources possess enduring utility when language teachers and proficient language learners⁵ transmit the language across generations, resulting in sustained dissemination over time.

Furthermore, population migration and language spread differ in the value orientation of push factors. Push factors of migration are often negative, including economic hardships, high taxes, adverse climates, and social oppression, with the primary aim of improving living conditions (Ravenstein, 1889). Conversely, pull factors of migration are typically positive, manifesting as demand for human resources. In the context of Chinese language spread, push-pull factors are predominantly positive. The demand for Chinese in receiving countries acts as a pulling force, along with the pushing efforts from the transmitting side, collectively promoting the spread of Chinese. Collaboration between both sides is crucial for effective push-pull relations.

Push factors in migration stem from policy regulations, natural disasters, or individual material needs to improve living conditions. Similarly, push factors in language spread arise from organized practices via language policies and individual demands for language use. Pull factors can be induced by push factors or emerge independently based on individual needs. In migration, pull factors stem from superior conditions of the destination compared to the origin, drawing value from the comparison with push factors. In the case of the Chinese diaspora, their motivation to learn Chinese stems from personal beliefs related to ethnic and cultural identity, making external push factors secondary rather than fundamental drivers (Santasombat, 2022).

In fact, push-pull factors that affect language spread are not as simple as those mentioned above. Extensive sociolinguistic research has examined the interplay between language spread and extra-linguistic factors of political, geographic, cultural, ethnic, as well as socio-demographic features of language users (see e.g., Fishman, 1965; 1989; 1991; 2006 Gumperz, 1962; 1982a; 1982b; Spolsky, 1989; 2004; 2009; Hymes, 2004). For instance, Hymes (2004) highlights how linguistic diversity in the receiving countries complicates the integration of a new language into the target speech community. The spread of the Chinese language leads to profound changes in the functional distribution of languages, requiring local adaptation to the evolving linguistic ecology. In the meantime, Chinese immigrant communities tend to adopt Chinese as the dominant language of communication (Blommaert, 2010; Pennycook, 2017). Against the backdrop of superdiversity and globalization, translanguaging practices have become commonplace in everyday communication (Garcia & Li, 2014), incorporating Chinese into linguistic repertoires and generating pulling forces. However, these pulling forces may weaken as indigenous languages gain precedence (Li & Milroy, 1995), and the frequency of Chinese usage may decline over time due to generational shifts and local socio-cultural influences.

⁵ Language learners discussed in this paper refer to learners of Chinese as an additional language, either in mainland China or overseas. The migration of diaspora is often self-initiated, not driven by institutional arrangements, especially after the reform and opening-up policies (Lee, 2022). The push factors by which they were driven are completely different from those of non-native Chinese speakers. The focus of this paper is primarily on the latter aspect.



4. Influencing Factors

Theoretical progressions from Ravenstein, Bogue, and Lee have indicated that migration is stimulated not only by the external conditions of push and pull factors, but the motivation of migrants also plays a role. Individuals are often driven by a strong desire to improve their current circumstances, which leads them to make spontaneous decisions to migrate (Ravenstein, 1889; Bogue, 1960; Lee, 1966). Similarly, if learning Chinese offers tangible benefits that enhance life quality, it will create a pull effect for potential language users and facilitate its spread.

The primary advantage of language learning lies in its assessment as a resource, encompassing political, economic, historical, cultural, and social values. This perspective resonates with Bourdieu's (1991) concept of various forms of capital as valuable resources. In terms of Chinese, its instrumental value in different social domains serves as the main source of its perceived worth, as learning a language is viewed as acquiring a practical skill for future development. In such cases, "language becomes an important form of human capital, and language learners as human resources, possess potential human capital value" (Wei, 2021: 99-100). The increase in language learners as human resources paves the way for the perceived worth of the language.

However, if the enhancement of perceived worth relies mainly on the historical, cultural, or political factors, there is a risk of ideological biases surpassing their instrumental value. Once push factors exceed the push-pull balance and overburden the demand side, the effectiveness of pushing forces diminishes. In the case of Confucius Institutes, learners often perceive the imposition of policy actors during the dissemination process (Stambach, 2015), which will overstep the policy boundaries and disrupt the push-pull balance. It is thus essential to facilitate effective reception on the receiving side through natural permeation of the inherent values of the language without overtly emphasizing the involvement of policy in achieving organic dissemination.

In more direct terms, the comparative advantage of a language is intrinsically linked to the comprehensive strength of the transmitting country. The global spread of English showcases the likelihood of universality and continuation of language spread (Crystal, 2003), which exemplifies through its horizontal expansion across regions and vertical development into diverse hierarchical variants, culminating in the structured "World Englishes" system (Kachru, 1996; Phillipson, 2009). The global lingua franca status of English stems from the historical influence of Britain and the economic dominance of the United States (Crystal, 2003). Proficiency in English opens doors to advanced information and technology (Phillipson & Skutnabb-Kangas, 2018), which reinforces its instrumental value through application in various social domains (Rao, 2019). With the process of globalization, English transcends mere instrumental value, evolving into a form of "linguistic capital" with symbolic power (Bourdieu, 1991), while also conveying ideological messages that raise concerns about linguistic imperialism (Phillipson, 1992; Spolsky, 2004, 2009; Shohamy, 2006).

The hegemonic spread of English, driven by its instrumental value as a linguistic capital, can overcome barriers caused by cultural and ideological gaps. In other words, the push factors associated with English can surpass the resistance caused by intervening obstacles. When a transmitting country possesses strong power and status, less intentional push effort is required for its language spread. In extreme cases, absolute global dominance may allow a language to spread spontaneously without



institutional intervention. However, the widespread adoption of English also marginalizes indigenous languages, squeezing communication space and impacting the knowledge diffusion, way of life, and social status of indigenous communities (Dasgupta, 1993; Roche, 2024). The balance between push and pull factors does not aim to suppress the usage of other languages but to foster collaboration and complementary roles among languages, leading to a harmonious linguistic ecology.

The ideological and cultural gaps encountered during the spread of Chinese pose obstacles to the balance of push-pull factors. The intrinsic value of the Chinese language, its status, historical and cultural implications, and ideological aspects, are deeply embedded within its symbolic system, which is constantly reflected in the language dissemination practices (Blommaert, 2010). When exporting Chinese as a symbolic system, the extra-linguistic factors are involved in the dissemination process and impact its effectiveness. In navigating the relationship between language spread and the export of ideology, learners need to understand and respect the cultural and ideological backgrounds behind language use and adapt them to the specific contexts of the receiving country. No matter how language spread is affected by the collaborative endeavor of various push and pull factors at the macro, micro and micro levels, ultimately, it must be driven by individual motivation to adopt the language. Just as individuals migrate to improve their living conditions, if the instrumental value of learning Chinese meets personal needs for learners, it will generate strong pull factors in receiving countries and transform motivation into real language practices.

Initially, motivation among second language (L2) learners was categorized into instrumental and integrative types (Gardner, 1985). However, recent theorization suggests that motivation is a more complicated socio-dynamic construct (Dörnyei & Ushioda, 2011). According to Ushioda (2006), the role of integrative motivation has rapidly diminished, while instrumental motivation has been further divided into “instrumentality-promotion” and “instrumentality-prevention” types, offering a more nuanced classification for motivation. Learners with instrumentality-prevention motivation seek short-term benefits from the practical value of language, often utilizing the instrumental value to achieve clear purposes. They focus on immediate practical applications of the language, often lacking long-term commitment to continue learning beyond achieving their initial goals (Dörnyei & Ushioda, 2011; Fishman, 1977). While those with instrumentality-promotion motivation, driven by deeper spiritual needs, such as ethnic-cultural ties or strong interests, tend to engage in more autonomous and in-depth learning (Dörnyei & Ushioda, 2011). Not only do they “know” and “use” Chinese, but they also develop “like” attitudes toward the language while contributing to its secondary transmission (Fishman, 1977). In practical terms, the motivation of L2 learners is not static, which evolves over time (Dörnyei, 2000; 2009), and usually exhibits mixed motivations (Zheng, 2010).

While motivation reflects the potential for behavioral choices, it must be translated into action, which is also a process influenced by external push-pull factors. Languages with comparative advantages are more likely to produce strong pull effects, attracting learners and acting as an investment in human capital. The comparative advantages are reflected not only in the intrinsic value of the language but also in the “return on investment (ROI)” of language learning (He, 2008), which refers to the ratio of benefits gained to costs incurred during the learning process. Tailoring teaching methods to match learners’ motivation and their considerations for ROI can enhance learning efficiency. For learners with instrumentally-prevented motivation, the optimal choice is to acquire basic Chinese language



skills in a cost-effective manner. For those with instrumentally-promoted motivation, experiencing Chinese within its local context can better fulfill their needs (Dörnyei & Ushioda, 2011).

Overall, the impetus for learners to engage in learning practice stems from the interaction of internal and external forces, which can be encapsulated into two main aspects. First, external push-pull factors stimulate motivation when they meet learners' demands. Second, when the combined forces of internal personal factors (e.g., communication demands, experiences, behavioral habits) and external push-pull factors exceed the resistance from intervening obstacles (e.g., cultural and ideological gaps), motivation can transform into tangible actions and finally into dissemination outcomes.

5. Routes, Levels, and Domains

The international spread of Chinese operates across macro, meso, and micro levels, with the push-pull factors shaping their interactions. While macro-level forces set broad conditions, meso-level social domains mediate these influences, which are ultimately enacted in micro-level language practices. A thorough analysis of the push-pull relations in Chinese language spread can be made along two opposing routes. The top-down route moves from macro to meso and then to micro, which pursues theoretical deduction, while the bottom-up route progresses from micro to meso and macro, which appeals to empirical induction. In the broader context of Chinese language spread, macro-level factors differ across various meso-level social domains, playing distinct roles in each and influencing micro-level individual practices.

At the macro-level, examining the pull factors in receiving countries provides valuable insights into the status of the Chinese language spread in different contexts. Based on the countries involved in the Belt and Road Initiative (BRI)⁶, we categorize these countries into two main groups, namely those with close cultural ties to China and strong pull factors, primarily represented by the East and Southeast Asian nations, and those with fewer connections to China and weaker pull effects, such as the former Soviet republics and certain Eastern European countries. Previous research mainly describes the language status in these countries (Wang, 2015; 2017; 2019), without explaining how such situation can assist China in aligning its push-pull relations with those of the receiving side (Gao, 2020).

In East and Southeast Asian countries linked to the BRI, there are strong pull factors for the spread of the Chinese language. These countries share historical affinity with Chinese culture, incorporating Chinese characters into their writing systems and having elites well-versed in the Chinese language and culture. However, geopolitical tensions, territorial disputes, as well as contemporary political and diplomatic relations can dampen these traditional pull factors (Johanon et al., 2019). By actively promoting folk communications, leveraging traditional Chinese culture, and cultivating new pull factors, it is possible to counterbalance negative geopolitical influences and facilitate the dissemination of the Chinese language (Xu, 2021).

In contrast, former Soviet republics and certain Eastern European nations associated with the BRI have historically been influenced by Russian politics and culture, with Russian as the primary language

⁶ The Belt and Road Initiative is China's major significant strategic endeavor to engage with the international economic law after its World Trade Organization accession. It involves 70 countries and over two-thirds of the global population and is intended to improve trade and investment relationships with many of China's economic partners (Wang, 2019).



(Ren, 2023). Unlike the aforementioned countries, these nations have limited exposure to Chinese culture, complicating the establishment of cultural pull factors for Chinese spread. These countries' strong adherence to former Soviet language policies and their emphasis on the "principle of territory" in language planning impose institutional constraints on the reception of the Chinese language into their societies (Schutter, 2010). However, proactive efforts on the part of the pushing side, i.e., China, in creating trade and employment opportunities that require Chinese language skills can generate pull factors to promote its spread to a certain extent.

In practice, many BRI countries face constraints on the spread of the Chinese language, including entrenched support for indigenous languages and the pervasive influence of English. Several strategies can be considered to address these constraints: 1) adjusting the pace of Chinese language spread to emphasize its supporting multilingual role next to the mainstream or indigenous languages to prevent conflicts and promote inclusiveness; 2) highlighting the instrumental benefits of learning Chinese for enhanced business opportunities, trade collaboration, and intercultural communication in an increasingly multilingual and multicultural world; 3) designing tailored resources and methods based on the specific conditions of the receiving countries to cultivate pull factors.

At the meso-level, the focus shifts to understanding how the push-pull factors operate in various institutional and non-institutional environments of Chinese language use, and how they affect learners' actual language practice. Institutional environments encompass higher education institutions, schools, Confucius Institutes, and other institutions offering Chinese language education. These domains are subject to institutional arrangements and have prestigious conditions of qualified teachers, established curricula, and teaching materials. Non-institutional learning settings, categorized as linguistic domains by Fishman (1965), include family, school, workplace, social gatherings, and other daily communication contexts. Investigating these learning environments necessitates analyzing which topics, participants, and strategies in communication trigger the use of Chinese, which will help to identify the advantageous domains of Chinese language spread.

Considering various settings at the meso-level also helps determine whether the challenges in language learning arise from individual limitations or broader social conditions within these domains. External push-pull factors affecting the spread of Chinese often manifest during the dissemination process, acting as "gravitational forces" (Blommaert, 2010: 17). What may initially appear to be issues of motivation, interest, or difficulties with specific pronunciation, grammar, and pragmatic use in the learning process, may, in fact, be rooted in hidden macro or meso push-pull factors (Zhang, 2024).

At the micro-level, the focus is on individual language learners and specific social groups. Research should target diverse social groups, including students, professionals, politicians, artists, athletes and other professional groups, to understand their learning demands, processes, and experiences in social domains. Investigating these groups aims to uncover the conditions, the pathways, and the barriers to Chinese language spread among different social groups and segments. While policymakers often prioritize college students in receiving countries, other social groups also warrant attention.

Further research on the learners group also requires assessing the network density of learners within various social groups to identify the key targets. For instance, adolescents could be the main group of language learners, who represent a crucial demographic for the international spread of the Chinese



language. Investigating adolescent learners can illuminate most of the micro-level issues related to Chinese language learning and dissemination practices. Effective strategies developed for adolescent learners can also be experimentally applied to other social groups.

6. Discussion

Current theoretical frameworks on language spread primarily focus on the modes of transmission, classification categories, and motivations triggering the phenomenon (see e.g., Schmidt, 1872; Cooper, 1982; Quirk, 1988; Phillipson, 1992; Kachru, 1996; Clayton, 2006; Spolsky, 2004). To the best of our knowledge, very few seem to have touched upon the fundamental question concerning why language spread becomes necessary.

At its core, language spread lies in the transmission of the “meaningful world” through language. From a philosophical perspective, language reflects the world it denotes, and thus, the manner in which language portrays the world is intricately tied to its dissemination. Each language embodies a unique meaningful world, leading speakers to perceive and interpret reality in diverse ways (Whorf, 1956; Brown, 1976). Therefore, language spread goes beyond transferring linguistic elements across contexts but also the dissemination of diverse meaningful worlds across regions, with the convergence of meaningful worlds fueling the process of language spread.

Consequently, the study of language spread should extend beyond merely deciphering the transmission of linguistic expressions across space but also explore how individuals interpret and make sense of these expressions through their unique meaningful world. Meaning begins from perception and the understanding of the external world is rooted in difference (Derrida, 1982). The rich tapestry of meaningful worlds emerging from language spread provides a valuable lens for reflectively comparing them, underscoring the importance of examining diverse modes of thought to understand the nuances of daily life in various settings.

The intersection of diverse meaningful worlds necessitates a dynamic interplay of the push-pull factors. When individuals encounter a new language, they are exposed to an unfamiliar meaningful world that is distinct from their own. This prompts a challenging process of being simultaneously propelled by the desire to explore the new meaningful world (pulling forces) while also being compelled to adapt and integrate this “new world” into their pre-existing framework (pushing forces). The ongoing interaction between pushing and pulling forces facilitates a merging of meaningful worlds, enriching individuals’ cognitive and meaning resources.

The push-pull relations embedded in the language dissemination process provide valuable insights for optimizing policy orientations. Policymakers should consider how push and pull factors interact and adapt to the evolving circumstances of language. On the one hand, policymakers should maintain clear policy boundaries. The push side aims to promote the language and expand its reach, while language users seek to satisfy diverse communicative needs. Harmonizing these different stances requires subtle strategies to bridge cultural and ideological gaps with receiving countries (Shohamy, 2006). It is also crucial to strike a balance between the effectiveness of pushing forces and the subjective will of policymakers, since their stance and intentions are closely related to the effect of language spread. Instead of imposing a one-size-fits-all policy approach, a flexible and adaptive



approach to policy formulation is essential to address the specific demands of language users within ever-evolving linguistic environments.

On the other hand, it is crucial to minimize the discrepancies between the “given” linguistic rules from the push side and the “received” linguistic rules of language users. Previous research indicates that linguistic distance between language rules negatively correlates with transnational population movements, and consequently, with language spread (Belot & Hatton, 2012; Adsera & Pytlikova, 2015; Lyu & Huang, 2024). To mitigate this distance, concrete measures should be taken and some include dispatching mother-tongue language teachers, providing firsthand teaching materials, and optimizing teaching strategies. Mother-tongue language teachers can help learners overcome geographical barriers and connect with native speech communities.

However, it must be pointed out that in today’s multilingual and multicultural world, mother-tongue language teachers must be mindful of L2 learners’ socio-cultural backgrounds. This mindfulness can prepare them to develop the teaching approaches that consider the diversity of the learners and their specific needs and goals (see e.g., Cruickshank & Tsung, 2011; Xu, 2024). Firsthand materials can ensure direct access to the given rules, while optimized teaching strategies will create better contextualized interaction conditions (Sperber & Wilson, 1995), which can be realized through oral communication practices in offline settings or utilizing AI-mediated informal digital learning (Lee, 2021; Liu et al., 2024).

Overall, these policy countermeasures would help establish a more balanced relationship between push and pull factors, aiming to avoid restrictions on language users. Ideally, language spread should achieve a harmonious equilibrium between these forces, which is driven by the motivation to share meaningful worlds rather than purely utilitarian objectives.

7. Conclusion

This article is among the first attempts to apply the push-pull theory from migration studies to explain the spread of the Chinese language by identifying the push and pull factors of language spread at macro, meso, and micro levels. The application of the push-pull theory enables nearly all factors that potentially influence language spread to be incorporated into a cohesive analytical framework, which sheds light on the driving forces underlying the language spread phenomena.

The core tenet of the push-pull theory is the flow of resources driven by supply and demand relationship, which we have relied on to elucidate the Chinese language spread. The agents involved in push-pull relations can be nations, social networks, speech communities, or individuals. The spread of language results from the combined conditions on the push side—where the language is initiated—and the pull side—where it is received. The process by which push-pull factors influence language spread involves two main steps. First, external conditions of push-pull factors stimulate motivation by satisfying learners’ communication demands. Second, motivation is transformed into action when the combined forces of internal personal factors and external push-pull factors exceed the resistance posed by intervening obstacles.



Regarding the factors affecting push-pull relations in language spread, a primary consideration is the value of the language as a resource, which depends on extra-linguistic factors on the push side. Additionally, the comprehensive strength of the transmitting country plays a crucial role. Ideological and cultural gaps pose obstacles to the coupling of push-pull factors, necessitating the exploration of strategies to prompt effective reception by language learners. Striking a balance between the push and the pull factors helps maintain policy boundaries and enhance the effectiveness of dissemination efforts. Excessive push factors can lead to resistance from learners, whereas insufficient push factors also reduce dissemination effects.

This paper has further explored how push-pull factors interact among the macro, meso, and micro levels of language spread. At the macro-level, aligning language spread strategies with various pull factors in receiving countries should be considered. At the meso-level, it is crucial to consider the operation of push-pull factors in various social domains and their influence on learners' actual language practice. The micro-level focuses on the specific social groups, investigating their learning demands, processes, and experiences to uncover the conditions, pathways, and barriers to language spread within different social domains. Finally, policy implications for language spread based on push-pull relation are proposed, including maintaining policy boundaries, aligning language rules, and optimizing relevance to learners, which can assist policymakers in developing forward-looking language policies that achieve more favorable outcomes of language spread.

We hope that our application of the push-pull theory has helped illuminate the intricacies of language spread. Put another way, by tracing the clues from external interventions to internal motivations, from objective conditions to subjective choices that lead to behavioral outcomes, this theoretical groundwork can be considered to have laid a foundation for future empirical investigations into national and regional variations in language spread.

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References

- Adsera, A., & Pytlikova, M. (2015). The role of language in shaping international migration. *Economic Journal*, 125(586), 49–81.
- Baldauf, R. B. (2008). Rearticulating the case for micro language planning in a language ecology context. In A. J. Liddicoat & R. B. Baldauf (Eds.), *Language Planning and Policy: Language Planning in Local Contexts* (pp.18-44). Clevedon: Multilingual Matters Ltd.



- Bansal, H. S. *et al.*, (2005). "Migrating" new service providers: Toward a unifying framework of consumers' switching behaviors. *Journal of the Academy of Marketing Science*, 33(1), 96-115.
- Belot, M. V. K. & Hatton, T. J. (2012). Immigrant selection in the OECD. *The Scandinavian Journal of Economics*, 114(4), 1105-1128.
- Blommaert, J. (2010). *The Sociolinguistics of Globalization*. Cambridge: Cambridge University Press.
- Bogue, D. J. (1960). The use of census data to study factors affecting migration. *Ekistics*, 9(55), 373-378.
- Bourdieu, P. (1991). *Language and Symbolic Power*. Cambridge: Polity Press.
- Brown, R. (1976). Reference: in memorial tribute to Eric Lenneberg. *Cognition*, 4, 125-153.
- Clayton, T. (2006). *Language Choice in a Nation Under Transition: English Language Spread in Cambodia*. New York: Springer.
- Cooper, R. L. (1982). A Framework for the study of language spread. In R. L. Cooper (Ed.), *Language Spread: Studies in Diffusion and Social Change* (pp.5-36). Bloomington: Indiana University Press.
- Cruikshank, K., & Tsung, L. (2011). Teaching and learning Chinese: A research agenda. In L. Tsung & K. Cruikshank (Eds.), *Teaching and learning Chinese in global contexts: Multimodality and literacy in the New Media Age* (pp. 213-224). Continuum.
- Crystal, D. (2003). *English as a Global Language*. Cambridge: Cambridge University Press.
- Dasgupta, P. (1993). *The Otherness of English: India's Auntie Tongue Syndrome*. New Delhi: Sage Publications.
- Derrida, J. (1982). *Margins of Philosophy*. Brighton: The Harvester Press.
- Dörnyei, Z. (2000). Motivation in action: Towards a process-oriented conceptualization of student motivation. *British Journal of Educational Psychology*, 70(4), 519-538.
- Dörnyei, Z. (2009). *The Psychology of Second Language Acquisition*. Oxford: Oxford University Press.
- Dörnyei, Z. & Ushioda, E. (2011). *Teaching and Researching Motivation (2nd Edition)*. London: Longman.
- Fishman, J. A. (1965). Who speaks what language to whom and when? *La Linguistique*, 1(2), 67-88.
- Fishman, J. A. (1977). Knowing, using and liking English as an additional language. *TESOL*. 11(2), 157-171.
- Fishman, J. A. (1989). *Language and Ethnicity in Minority Sociolinguistic Perspective*. Clevedon: Multilingual Matters Ltd.
- Fishman, J. A. (1991). *Reversing Language Shift: Theoretical and Empirical Foundations of Assistance to Threatened Languages*. Clevedon: Multilingual Matters Ltd.
- Fishman, J. A. (2006). *Do Not Leave Your Language Alone*. Mahwah: Lawrence Erlbaum Associates, Inc.
- Fliegel, F. C. & Joseph, E. K. (1966). Attributes of innovations as factors in diffusion. *The American Journal of Sociology*, 72, 235-248.
- Gao, Y. (2020). How the Belt and Road Initiative informs language planning policies in China and among the countries along the road. *Sustainability*, 12, 5506. <https://doi.org/10.3390/su12145506>.
- García, O. & Li, W. (2014). *Translanguaging: Language, Bilingualism and Education*. London: Palgrave Macmillan.
- Gardner, R. C. (1985). *Social Psychology and Second Language Learning: The Role of Attitude and Motivation*. London: Edward Arnold.
- Gumperz, J. J. (1962). Types of linguistic communities. *Anthropological Linguistics*, 4(1), 28-40.
- Gumperz, J. J. (1982a). *Discourse Strategies*. Cambridge: Cambridge University Press.
- Gumperz, J. J. (1982b). *Language and Social Identity*. Cambridge: Cambridge University Press.
- Haugen, E. (1972). *The Ecology of Language*. Stanford: Stanford University Press.



- He, Y. (2008). Motivation of Chinese learning and the international spread of Chinese language. *Language and Literature Application*, 66(2), 23-31.
- Hymes, D. (2004). *Ethnography, Linguistics, Narrative Inequality: Toward an Understanding of Voice*. London: Taylor and Francis Ltd.
- Johanson, K. *et al.* (2019). Controversy, uncertainty and the diverse public in cultural diplomacy: Australia China relations. *Australian Journal of International Affairs*, 73(4), 397-413.
- Kachru, B. B. (1996). World Englishes: agony and ecstasy. *The Journal of Aesthetic Education*, 30(2), 135-155.
- Kerswill, P. (2006). Migration and language. In K. Mattheier, U. Ammon & P. Trudgill (Eds.), *Sociolinguistics/Soziolinguistik. An International Handbook of the Science of Language and Society* (pp. 2271-2284). Berlin: De Gruyter.
- Lee, E. S. (1966). A theory of migration. *Demography*, 3(1), 96-115.
- Lee, J. S. (2021). *Informal Digital Learning of English: Research to Practice*. New York: Routledge.
- Lee, K. C. (2022). Re-conceptualizing Chinese in Bangkok: Embeddedness, mobilities and folk diplomacies. In Y. Santasombat (Eds.), *Transnational Chinese Diaspora in Southeast Asia: Case Studies from Thailand, Malaysia, and Singapore* (pp.49-80). Singapore: Springer.
- Li, W. & Milroy, L. (1995). Conversational code-switching in a Chinese community in Britain: A sequential analysis. *Journal of Pragmatics*, 23(3), 281-299.
- Liu, G. *et al.* (2024). Exploring AI-mediated informal digital learning of English (AI-IDLE): a mixed-method investigation of Chinese EFL learners' AI adoption and experiences. *Computer Assisted Language Learning*, 1-29. <https://doi.org/10.1080/09588221.2024.2310288>
- Lyu, J. J. & Huang, Y. (2024). Language learning opportunities abroad and international student mobility in China. *Sage Open*, 14(4), 1-23.
- Mühlhäusler, P. (2003). *Linguistic Ecology: Language Change and Linguistic Imperialism in the Pacific Region*. New York: Routledge.
- Pattanayak, D. P. (1988). Monolingual myopia and the petals of the Indian lotus: Do many languages divide or unite a nation? In T. Skutnabb-Kangas & J. Cummins (Eds.), *Minority Education: Shame to Struggle* (pp. 379-389). Clevedon, PA: Multilingual Matters.
- Pennycook, A. (2017). Translanguaging and semiotic assemblages. *International Journal of Multilingualism*, 14(3), 269-282. <https://doi.org/10.1080/14790718.2017.1315810>.
- Phillipson, R. (1992). *Linguistic Imperialism*. Oxford: Oxford University Press.
- Phillipson, R. (2009). *Linguistic Imperialism Continued*. New York: Routledge.
- Phillipson, R. & Skutnabb-Kangas, T. (2018). Linguistic imperialism and the consequences for language ecology. In F. F. Alwin & H. Penz (Eds.), *The Routledge Handbook of Ecolinguistics* (pp.121-134). New York: Routledge.
- Phillipson, R. (2024). Linguistic Imperialism. In C. A. Chapelle (Ed.), *The Encyclopedia of Applied Linguistics* (pp.3470-3476). Chichester: John Wiley & Sons, Ltd.
- Quirk, R. (1988). The question of standards in the international use of English. In P. H. Lowenberg (Ed.), *Language Spread and Language Policy: Issues, Implications World English and Case Studies* (pp. 153-164). Washington, DC: Georgetown University Press.
- Rao, P. S. (2019). The role of English as a global language. *Research Journal of English*, 4(1), 65-79.
- Ravenstein, E. G. (1889). The laws of migration. *Journal of the Royal Statistical Society*, 52(2), 241-305.
- Ren, J. (2023). Estonian language policy: A perspective of the Belt and Road Initiative. *Forum for World Literature Studies*, 15(3), 384-395.



- Roche, G. (2024). We need a global language rights movement: confronting the global language crisis with insights from social movement studies. *Global Social Challenges Journal*, 1-15. <https://doi.org/10.1332/27523349Y2024D000000029>.
- Santasombat, Y. (2022). Transnational Chinese diaspora in Southeast Asia: An introduction. In Y. Santasombat (Ed.), *Transnational Chinese Diaspora in Southeast Asia: Case Studies from Thailand, Malaysia, and Singapore* (pp. 1-22). Singapore: Springer.
- Schmidt, J. (1872). *Die Verwandtschaftsverhältnisse der indogermanischen Sprachen*. Weimar: Hermann Böhlau.
- Schutter, H. D. (2010). The linguistic territoriality principle—a critique. *Journal of Applied Philosophy*, 25(2), 105-120.
- Shohamy, E. G. (2006). *Language Policy: Hidden Agendas and New Approaches*. London: Routledge.
- Sperber, D., & Wilson, D. (1995). *Relevance: Communication and Cognition*. Oxford & Cambridge: Blackwell.
- Spolsky, B. (1989). *Conditions for Second Language Learning: Introduction to a General Theory*. Oxford: Oxford University Press.
- Spolsky, B. (2004). *Language Policy*. Cambridge: Cambridge University Press.
- Spolsky, B. (2009). *Language Management*. Cambridge: Cambridge University Press.
- Stambach, A. (2015). Confucius Institute programming in the United States: Language ideology, hegemony, and the making of Chinese culture in university classes. *Anthropology & Education Quarterly*, 46(1), 55-70.
- Thomason, S. & Kaufman, T. (1988). *Language Contact, Creolization and Genetic Linguistics*. Berkeley: University of California Press.
- Trudgill, P. (1986). *Dialects in Contact*. Oxford: Basil Blackwell.
- Ushioda, E. (2006). Language motivation in a reconfigured Europe: Access, identity, autonomy. *Journal of Multilingual and Multicultural Development*, 27(2), 148-161.
- Van der Worp, K., Cenoz, J., & Gorter, D. (2018). Multilingual professionals in internationally operating companies: tensions in their linguistic repertoire. *Multilingua*, 37(4), 353-375.
- Wang, H. (2015, 2017, 2019). *The Language Situation and Language Policy in the "Belt and Road"* (Vol. 1-3). Beijing: Social Sciences Academic Press.
- Wang, H. (2019). China's approach to the Belt and Road Initiative: Scope, character and sustainability. *Journal of International Economic Law*, 22(1), 29-55.
- Wei, H. (2021). Revisiting language resources, language resource view and language resource management. *Jiangnan Academic*, 40(4), 98-105.
- Whorf, B. L. (1956). Science and linguistics. In J. B. Carroll (Ed.), *Language, Thought and Reality* (pp. 207-219). Cambridge, Massachusetts: The M.I.T. Press.
- Xu, J. (2024). Rethinking language, culture and identity in international Chinese education. Conference presentation at the 21st International Conference of BCLTS, Critical Perspectives on International Chinese Education: Synergising Language, Culture, and Technology in the Era of Digital Intelligence, 4th – 6th of July 2024, Newcastle University, UK.
- Xu, R. (2021). *Translation, Cultural Diplomacy and China's "Going out" Strategy: Official Storytelling through the Translation of Contemporary Chinese Literature in Pathlight*. Doctoral dissertation, University of Ottawa.
- Zhang, P. (2024). Experiences of learners of Chinese as a foreign language in Spain through online classes in times of emergency. *Porta Linguarum*, 65-82. <https://doi.org/10.30827/portalin.viX.27422>.
- Zhao, S. H. & Baldauf, R. B. (2012). Individual agency in language planning: Chinese script reform as a case study. *Language Problem and Language Planning*, 36(1), 1-24.
- Zheng, X. Q. (2010). On the effects of "integrative motivation" and "instrumental motivation" on learning efficiency and test taking performance. *China Science and Education Innovation Journal*, 567(19), 145.



About the Authors

Yu Liang is a MA student in the School of Linguistics and Language Resource (Institute of Linguistic Sciences), Beijing Language and Culture University, Beijing, China. Her research interests include language spread, sociolinguistics, as well as language policy and planning.

Deping Lu is a full professor in the School of Linguistics and Language Resource (Institute of Linguistic Sciences), Beijing Language and Culture University, Beijing, China. His research interests mainly include language spread, semiotics theory, as well as sociolinguistics.

