

Patterns of Code-switching in Mandarin Chinese and English and Why Does It Happen

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Abstract: This research examines the phenomenon of code-switching between Mandarin Chinese and English, specifically focusing on the patterns of code-switching in Mandarin Chinese and English, and the underlying reasons. Code-switching is the phenomenon of switching languages within one conversation, or even within one sentence. It has become increasingly common, largely due to the influence of English in areas of academia, professions, and social life. The research studies the cognitive and social functions of code-switching in Mandarin and English. Through a review of existing literature, this paper examines how bilingual speakers manage linguistic diversity, and the implications for education and communication. Pedagogically, teachers employ CW strategically to convey clarity, especially when abstract concepts and terms are involved. Outside of classrooms, younger generations incorporate English words and phrases into everyday speech, influenced by media, global trends, and the need to express modern ideas or emotions more effectively. This paper suggests that further research is needed on the long-term linguistic and cognitive effects caused by code-switching between Mandarin and English, in particular for spontaneous, everyday situations, and across social groups.

Keywords: code-switching, bilingual, Mandarin, English, bilingual education

1. Introduction

1.1. Background

Code-switching is defined as the alternating use of two or more languages within a conversation, sentence, or discourse, has attracted significant scholarly interest across multiple fields, including linguistics, psychology, and education. This research studies the motivations, patterns, and implications of code-switching between these two languages.

In China, the mixing of Chinese and foreign words has become common nowadays. The phenomenon of code-switching (CW) can be observed across various population, from primary school students who just begun to learn English to middle-aged and elderly individuals who have limited foreign language proficiency. The integration of English words and phrases into everyday Mandarin conversations became popular. The trend is especially noticeable among individuals who have been exposed to English through education, profession, international studies, and global media.

Investigating code-switching between Mandarin Chinese and English can reveal how bilingual and multilingual speakers accommodate and manage linguistic diversity, emphasizing its role in both

social and cognitive dimensions. This is relevant within the context of China, especially in urban areas, where English is considered crucial for academic and professional success.

This research aims to identify common patterns of code-switching in Mandarin Chinese and English, and understand the reasons behind them.

1.2. Literature review

Investigations have been conducted on code-switching between Mandarin and English in bilingual environments. For instance, Chang and Huang [1] have looked into the use of "OK" in bilingual classrooms and its implications for code-switching. Their research also stresses that the individual acts of code-switching have specific functional roles in borrowed expressions and marking turns and boundaries in conversation. It reveals that code-switching is not just a spontaneous mixing of languages but about how lexical items are selectively borrowed across languages.

Similarly, San [2] observed Mandarin-English code-switching in Macau blogs and identified six linguistic categories in which code-switching occurs. Young people often switch language to convey tone, follow trends, or enhance their expressiveness. These studies suggest that code-switching is not random, but follows discernible patterns based on linguistic and contextual factors.

Some other research studied code-switching in classrooms. It is driven by pedagogical objectives, as teachers adapt their language use to match language levels of students to facilitate understanding and vocabulary acquisition.

1.3. Research question

Many of these studies are limited in scope, often focusing on very specific contexts or forms of communication. The sample sizes are generally small, and the research methodologies rely heavily on self-reported data, which introduce biases highly possibly. This research seeks to address some of these limitations by researching on the following research questions:

1. What are the patterns of code-switching for language education and communication in bilingual settings?
2. What are the primary motivations for Mandarin-English code-switching in different social contexts?

1.4. Prediction

Based on the literature, the prediction is that code-switching is mostly influenced by factors such as language proficiency, media exposure, and social environments. Exposure to English through media, such as movies, music, and social media, may drive younger generations to incorporate foreign language into their native language speech. Code-switching may be used creatively to develop new linguistic forms or expressions that better reflect modern experiences and concepts. This pattern illustrates how the global language affects local cultures.

2. Literature review

2.1. Theoretical framework of code-switching

The phenomenon of code-switching has been viewed through many aspects theoretically, one of which is the Markedness Model, proposed by Myers-Scotton [3] in his 1993 research. In this model, Myers-Scotton suggests that speakers switch codes to either conform to or deviate from social norms, depending on the context of their interactions. The author thinks that bilingual users make use of code-switching in such a way as to create a conversational or discourse effect, in not always but many cases.

The markedness model provides a general explanation for why communities tend to code-switch in various ways. The Matrix Language Frame (MLF) model, which accounts for the structural details of code-switching by providing a theoretical perspective.

The study provides factual evidence that performance in code-switching varies according to sociological or psychological factors and that these variations can be interpreted using the theoretical frameworks of both the markedness model and the MLF model.

2.2. Code-switching in Mandarin-English contexts

Several studies have focused on the use of code-switching in educational and informal settings within China.

In *The Use of OK by Native and Non-Native Teachers in Bilingual Classrooms: Mandarin, English and Code-Switching* [1], Chang and Huang examined the use of "OK" as a boundary marker in bilingual classrooms, suggesting that even simple lexical items can serve complex functions in facilitating communication across languages. The study compares the frequencies of OK in NS and NNS teachers' EFL classroom. As a result, the researcher summarized more than eight OK appearing scenarios, most of which were intended to mark a boundary. It is also indicated that teachers' L1s might influence the use of OK.

The shortcoming of this study lies in the small sample size, which only involves the language use of four teachers in one class each. In addition, the research can further explore the use of "OK" in other teaching Settings and the differences in the understanding and interpretation of "OK" by different teachers. This is a very specific example of a word related to code-switching, but it's also a very widely used word. It is very helpful to find out the where and why of code-switching happens in Mandarin and English.

In *Chinese-English code-switching in blogs by Macao young people* [2], the research results indicate that code-switching is a common phenomenon in the online personal journals. The patterns of code-switching were categorized into six linguistic units: nouns/noun phrases, verbs/phrasal verbs, adjectives/adjective phrases, adverbs/adverbial phrases, idiomatic expressions, and interjections. The study also analyzed the reasons behind code-switching, including factors such as convenience, language proficiency, expression of tone or thoughts, and following trends. This categorization indicates their linguistic flexibility of bilingual speakers who switch between languages based on convenience, proficiency, and social trends.

The study was conducted 15 years ago. While the habit of online blogging may have changed a lot, the research would still be considered valuable in the investigating code-switching in Mandarin and English. Besides, the study focused only on the written language in blogs and did not consider other forms of computer-based communication. Additionally, the study relied on self-reported data from the participants, which may cause biases or inaccuracies in the responses.

In *Research on Chinese college English teachers' classroom code-switching: Beliefs and attitudes* [4], the study analyzed the beliefs and attitudes of English teachers in Chinese universities toward the use of code-switching in their classrooms. Researchers found that while teachers tended to have negative attitudes toward it, code-switching was common in the classrooms studied. Teachers felt it disrupted their efforts to get students to be exposed to the target language as much as possible. Moreover, the most critical factor influencing teachers' code-switching was students' language proficiency. First language (L1) usage was primarily a tool for conveying grammar and teaching difficult or abstract vocabulary items. The author concluded that classroom code-switching in an EFL setting should be based on maximizing the use of the target language and that L1 should only be used cautiously to address difficult topics. This research reflects a broader debate in language education about the role of the first language (L1) in second language (L2) acquisition.

The research has a small sample size of 32 participating teachers, and this cannot fully represent the overall situation of English teachers in Chinese universities. Second, the study obtained self-report measures such as questionnaires and interviews, which may cause biases and inaccuracies in those responses the researcher collected. Third, this study focused on teachers' "beliefs and attitudes" toward code-switching, but did not provide direct evidence of the impact of code-switching on students' language learning and their outcomes.

In the article *Syntactic variations in Chinese-English code-switching* [5], by analyzing the syntactic structure of the Chinese-English mixed corpus, Wang and Liu discusses syntactic variation in Chinese-English code-switching, exploring the structural complexity of bilingual speech. The author calculates the mean Dependency Distance and Dependency Direction of mixed languages, and presents the corresponding calculation formulas. Researchers use the theory of Word Grammar to analyze the structure and cognitive mechanism of language. The authors also found that the dependency distance varies among languages, and Chinese has the longest dependency distance among the 20 language corpora, so Chinese is more difficult to process. In addition, the researchers also focused on word order variation in dependent directions, and calculated the distribution of dependent directions to determine the tendency of a language. The researchers also studied which grammatical relations were responsible for the variation and to what extent they were involved.

The findings indicate that the Chinese-English hybrid language shows both head-initial and head-final syntactic structures. Furthermore, the writer elaborates on various forms of code mixing and explains the notion of established loanwords. These results indicate that although code-switching permits linguistic flexibility. It also carries some cognitive challenges, all due to structural differences that exist between the languages where the code-switching happens.

In *Comparing the effect of teacher codeswitching with English-only explanations on the vocabulary acquisition of Chinese university students: A Lexical Focus-on-Form study* [6], the researcher conducted experiments to compare the effects on vocabulary acquisition of Chinese university students when teachers use only English and when they use code-switching in their teaching. The outcome demonstrates that both the teacher's code-switching and the use of English for explanations positively influence students' vocabulary learning process. However, the extent of this influence varies among language learners of different levels. The experimental data show that code-switching also has a lasting impact on students' retention of vocabulary. In addition, when teachers code switch, they provide their students with more language input and supplements to their multilingual explanations. These factors help students to comprehend and remember unfamiliar words more efficiently and to a greater degree.

In *How can you tell?* [7], this study explores code-switching in bilingual communication through a conversation analysis (CA) approach. The authors look at conversations from four bilingual children. They show the sequential character of code-switching and highlight the influence of the organization of actions in dialogue on language choice.

The process of code-switching in a conversation is orderly. It is influenced by the Rights-and-Obligations (ROs) that assumed by the speakers in the conversation. Wei's research argues that code-switching is not an event that occurs randomly, nor is it due to speaker's deficiency in language skills, but rather an ordered, structured process that follows a certain conversational logic. The analysis investigates the interactive and underlying mechanics of language choice, with a focus on how speakers use code-switching to accomplish particular conversational goals as well as to indicate shifts in context. For example, speakers may change language to emphasize a shift in subject, to indicate the beginning or end of a conversation, or to adjust their talking according to the audience's language level.

Wei's research also explores the cultural and cognitive factors of code-switching. The research indicates that the social identities and cultural expectations of the speakers influence the phenomenon

of code-switching. Bilinguals show their membership in certain social groups or communities by choosing the language in conversation. The society and values in which they live and have influence their choices.

The main challenges facing the research are theoretical fragmentation and insufficient number of empirical studies. Existing theoretical frameworks are fragmented and incomplete, making it difficult for researchers to comprehensively explain the complexity of the code-switching phenomenon. On the other hand, empirical studies tend to concentrate on particular languages or communities, without doing cross-linguistic and cross-cultural analysis comparatively that might reveal code-switching principles people follow across different contexts.

2.3. Comparisons with Spanish-English code-switching

In *¿Por qué estamos code-switching? Understanding language use in a second-grade classroom* [8], the author studies a bilingual second-grade classroom and analyzes the instructional methodology teachers used in bilingual education. The research found that in a free learning environment, students and teachers use bilingualism flexibly to develop and maintain relationships, increase sense of humor, interpret complex phenomena, and develop linguistic awareness. This linguistic flexibility helps students understand how what is known and understood in one language affects what is known and understood in another. In addition, students' social-emotional connections can be promoted as the results showed. These results similarly mirror the findings from Mandarin-English code-switching studies, in which speakers switch languages in order to express ideas more effectively or to adapt to the audience's linguistic abilities. Although this research does not have a focus on code-switching in Mandarin-English, but on Spanish-English, their methodology can be shared to other bilingual teaching circumstances, and patterns of code-switching happening is also revealed.

In *Functions of Code Switching in Schoolchildren's Conversations* [9], the study explores code-switching and its function among students in a primary school. The author gathered language background information from parents, teachers, and students themselves to have a better understanding of students' proficiency and language preferences in English and Spanish.

The results showed that younger students were more likely to use Spanish, while older students were more likely to use both languages. A high percentage of students in both age groups preferred to use English. Students use code-switching to achieve different functions in conversations. In addition, older students also make language adaptations according to the language ability of the other party to ensure the flow of the conversation. Children are more likely to have conversations in Spanish as a base language, even in English learning environments. This may be because in cognitive tasks, school-age children are more comfortable solving problems in their native language. Children consciously use both languages in internal and collaborative conversations for cognitive challenges. The switch between languages is influenced by the interlocutor's proficiency, reflecting a similar pattern in Mandarin-English conversations where speakers adapt their language use based on their audience's understanding of English.

3. Conclusion

3.1. Discussion

This study demonstrates that code-switching between Mandarin and English plays several linguistic, cognitive, and social roles: code-switching allows speakers to bring into their conversation's words or phrases from another language, which assists them in delivering messages across different settings, and it promotes fluency of communication in bilingual settings where language proficiency varies. The frequent use of English in Mandarin-dominant conversations shows the status of English as a *lingua franca*.

One key finding is that code-switching serves several important cognitive, communicative, and social functions. For instance, code-switching offers speakers a method to be more specific than what the words can allow in one language at the moment. Pedagogically, in educational settings, code-switching helps better understanding, developing vocabulary acquisition, and enables students to capture complex concepts more effectively.

The strategic use of code-switching is also important in constructing social identity. It enables an individual to show the belongings to a particular group or holds a certain attitude. Code-switching can be seen as a signal the degree of interaction between the local and the global. Such practices not only show adaptability of languages, but also focus on the impact of globalization on the use of language, especially in educational contexts or media-based environment.

These observed patterns in code-switching align with wide global trends, which include the use of code-switching on the part of bilinguals as a strategy in bridging the linguistic gap to further improve interaction in multilingual situations. It is also seen in other bilingual communities, such as Spanish-English speakers, which would therefore suggest that the primary functions of code-switching often remain constant across different cultural and linguistic boundaries.

3.2. Implication

For language educators, this study shows that code-switching can be a valuable tool in bilingual classrooms, especially when used strategically to help with comprehension and master vocabulary. However, teachers should also be aware of potential drawbacks, such as over-reliance on L1 may hinder the acquisition of the other language.

For language and communication, code-switching reflects the general trend of language adaptation to globalization. With the increasing involvement of English in daily life in China, understanding the motivations and patterns of code-switching helps to understand the evolution of language use in a multilingual society.

3.3. Limitation

The current literature sample size is small and focuses only on specific contexts, such as classrooms or online blogs. These limitations suggest that existing research does not fully capture the broad and complexity of Mandarin-English code-switching in everyday life. Also, as mentioned earlier, most studies rely on self-reported data, which can introduce bias and inaccuracies.

One of the primary limitations of this research is the lack of empirical data on the long-term effects of code-switching on language proficiency. Future studies could aim to conduct investigations with larger scale that include more diverse ranges of participants and communication contexts, such as face-to-face conversations, social media interactions, and professional settings.

3.4. Further study

Studies reviewed suggest that code-switching works in multiple linguistic and social functions. Code-switching is frequent among young people, possibly because they have greater access to English due to the media and education. This reflects the influence of English as a lingua franca and its integration into the daily lives of a significant proportion of Chinese speakers.

Studies have small sample sizes and limited scope, and mostly focus on very specific words, language use contexts, or forms of communication. This limits the generalizability of research findings. Future research should aim to address these gaps by using larger, more diverse samples and exploring code-switching across media and social groups.

Additionally, cross-linguistic studies comparing Mandarin-English and other bilingual contexts can help identify universal patterns and cultural differences in code-switching behaviour.

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