ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-515-x, Impact Factor: 9.23

American Academic publishers, volume 6, issue 01,2026

Journal: https://www.academicpublishers.org/journals/index.php/ijai

INTERFERENCE IN THE SPEECH OF A BILINGUAL PERSON: A COMPLETE SYSTEMATIC ANALYSIS OF PHONETIC, LEXICAL, GRAMMATICAL, AND PRAGMATIC CHANGES

Nurmamatova Zarifa Abdiraup kizi
English language teacher of Navoi State University
independent researcher of Navoi State University
mrs.zara0202@gmail.com

Abstract

This article provides a systematic analysis of interference phenomena in the speech of bilingual individuals, examining changes at phonetic, lexical, grammatical, and pragmatic levels. The aim is to identify the forms, causes, and mechanisms of interference in bilingual speech and assess their impact on language competence and linguistic norms. The study integrates psycholinguistic, linguistic, and sociolinguistic approaches.

Keywords

bilingualism, interference, phonetic interference, lexical interference, grammatical interference, pragmatic interference, code-switching, language mixing.

Introduction

In today's global and multilingual societies, bilingualism is increasingly widespread. However, alongside knowledge and use of two languages, bilingual speech often exhibits cross-linguistic interaction—known as interference. Interference occurs due to interactions between language systems and can manifest at various levels: phonetic (pronunciation, stress, intonation), lexical (word choice, translation errors), grammatical (syntax, morphology, rule violations), and pragmatic (appropriateness in context, language choice). These phenomena affect not only speech fluency and linguistic correctness but also broader language norms and stability. Therefore, a systematic and multi-level study of interference in bilingual speech is essential.

Interference takes several forms: phonetic (pronunciation, stress, sounds), lexical (word choice, translations, loanwords), grammatical (syntactic structures, morphological rules, code-switching errors), and pragmatic (contextual appropriateness, language choice, communicative norms). Such changes can influence the internal structure of language, speech fluency, and linguistic norms. Studying interference in bilingual speech thus represents a complex process encompassing psycholinguistic, linguistic, and sociocultural dimensions.

The aim of this study is to identify the forms, frequency, causes, and mechanisms of interference in bilingual speech and evaluate their impact on language competence, norms, and communicative effectiveness. The relevance of this research lies in the widespread use of multiple languages and language mixing in modern multicultural societies, which poses challenges for language standards, linguistic identity, speech culture, and language policy. Understanding interference is also essential for language integration, cultural stability, and communicative balance.

Methods

ISSN: 2692-515-x, Impact Factor: 9.23
American Academic publishers, volume 6, issue 01,2026
Journal: https://www.academicpublishers.org/journals/index.php/ijai

A mixed-methods approach was employed, combining linguistic-psycholinguistic analysis, empirical speech analysis, and sociolinguistic context examination. Linguistic-psycholinguistic analysis involved collecting oral and written speech samples from bilingual individuals to examine phonetic (pronunciation, stress, intonation), lexical (word choice, translation errors, loanwords), grammatical (syntactic and morphological rules), and pragmatic (contextual appropriateness, language choice) aspects. Empirical analysis included speech production or code-switching tasks to identify phonetic, lexical, and grammatical errors. Sociolinguistic context analysis examined speech situations, language use environments, language policy, linguistic identity, and social factors such as education, language dominance, and language pairs.

The mixed-method approach allowed a comprehensive analysis of interference forms, frequency, causes, and contextual factors. Oral conversations, written texts, and code-switching instances were analyzed for phonetic, lexical, grammatical, and pragmatic features. Additionally, interviews and questionnaires investigated bilingual individuals' language choice habits, language control, linguistic identity, and attitudes toward code-switching. Statistical comparisons across different groups (age, language pair, environment) enabled precise identification of interference patterns and frequencies.

Results

The analysis revealed that phonetic interference is widespread, often manifesting as pronunciation, stress, or intonation influenced by the speaker's dominant language. Lexical interference was observed through translation errors, loanwords, and cross-linguistic word mixing. Grammatical interference appeared in syntactic structures, morphological rules, and during code-switching, leading to errors. Pragmatic interference manifested as inappropriate language choice relative to context, impacting linguistic identity and social language status.

The degree of interference depends on language exposure, frequency of use, bilinguals' language control ability, and the stability of the language environment. Code-switching and language contact often result in grammatical transfer and interference, potentially affecting linguistic norms. Psycholinguistically, bilinguals continuously monitor language choice and control during speech, with language activation and selection mechanisms influencing the occurrence of phonetic, lexical, and grammatical errors.

Thus, interference occurs at phonetic, lexical, grammatical, and pragmatic levels in bilingual speech, affecting speech norms, linguistic correctness, and language stability. However, its form and degree vary depending on the language environment, contact frequency, bilingual language control, and code-switching experience. The analysis revealed that interference in bilingual speech manifests at multiple levels with varying frequency and intensity depending on the individual's language experience, environment, and control mechanisms. Phonetic interference was frequently observed, including substitution of sounds from the dominant language into the non-dominant language, stress and intonation patterns influenced by the first language, and prosodic deviations such as altered rhythm and pitch contours, especially in spontaneous speech. Pronunciation errors were more common among younger bilinguals and in environments with limited exposure to the second language. Lexical interference appeared through borrowing and loanwords, direct translation errors, word omissions, or substitutions when the correct lexical item was not readily accessible. Lexical interference was particularly prevalent during code-switching and in bilinguals with uneven proficiency across their languages.

Grammatical interference manifested in syntactic structure deviations, morphological errors such as tense, aspect, number, and gender misalignment, and mixing of grammatical

ISSN: 2692-515-x, Impact Factor: 9.23
American Academic publishers, volume 6, issue 01,2026
Journal: https://www.academicpublishers.org/journals/index.php/ijai

rules from both languages during code-switching, resulting in hybrid constructions. Errors were correlated with language dominance and frequency of language switching. Pragmatic interference was observed in contextually inappropriate language choice, misinterpretation of sociocultural norms, and reduced ability to adjust speech style according to interlocutor or setting, particularly in rapid conversation. The frequency of interference correlated strongly with the language environment. Bilinguals in mixed-language households or communities exhibited higher rates of phonetic and lexical interference but developed adaptive strategies to maintain pragmatic appropriateness.

Discussion

Interference is a natural, multidimensional phenomenon in bilingual speech. If managed properly, it can enhance communicative competence, while uncontrolled interference may lead to errors and inconsistency. The presence of phonetic, lexical, grammatical, and pragmatic interference highlights the need for language control, metalinguistic sensitivity, and maintenance of linguistic identity. Interference should not be viewed as a "mistake" but as a natural feature of bilingual language processing. Effective language environments, norm reinforcement, and linguistic awareness can minimize the visibility of interference, strengthening bilingual speech potential.

Interference demonstrates that language mixing and code-switching are not negative but part of the complex, manageable process of bilingualism. Strong language control, active use of both languages, and adaptive language selection reduce negative effects, and in some cases, interference contributes to language diversification. Evaluating interference in bilingual speech requires considering not only error counts but also communicative competence, language environment, individual attitudes, language control, and code-switching strategies. The value of speech is determined by adaptability, communicative effectiveness, and contextual appropriateness, rather than strict "purity." Bilingual interference is a complex and dynamic phenomenon that reflects the interaction of cognitive, linguistic, and sociocultural mechanisms. The results indicate that interference is not merely a series of errors, but a natural byproduct of managing two active language systems. Phonetic, lexical, grammatical, and pragmatic deviations demonstrate the cognitive load involved in language selection, monitoring, and control. The presence of interference highlights the bilingual speaker's constant engagement in metalinguistic evaluation and adaptive strategies, such as code-switching, to maintain communicative efficiency.

Phonetic interference, while sometimes affecting speech clarity, can also reflect the integration of multiple phonological systems, contributing to a flexible speech repertoire. Lexical and grammatical interference, particularly during code-switching, reveals both the challenges of cross-linguistic transfer and the bilingual's ability to creatively navigate linguistic gaps. Pragmatic interference underscores the role of social context and language norms in shaping speech behavior, showing that bilingual competence extends beyond structural knowledge to sociolinguistic awareness. Environmental and experiential factors, such as language exposure, age of acquisition, and social context, strongly mediate interference patterns. Bilinguals with consistent language practice, strong metalinguistic awareness, and supportive language environments exhibit more controlled interference, demonstrating that cognitive regulation can mitigate potential negative effects. Importantly, interference should not be viewed purely as a deficit; it can signal cognitive flexibility, enhanced problem-solving, and the ability to integrate diverse linguistic resources. From a pedagogical and policy perspective, recognizing interference as an inherent feature of bilingualism emphasizes the need for

ISSN: 2692-515-x, Impact Factor: 9.23
American Academic publishers, volume 6, issue 01,2026
Journal: https://www.academicpublishers.org/journals/index.php/ijai

supportive language instruction, balanced language exposure, and strategies that enhance linguistic monitoring and control.

Conclusion and recommendations

Interference in bilingual speech occurs at phonetic, lexical, grammatical, and pragmatic levels, arising from language contact, code-switching, uneven language environments, and insufficient language control. Interference affects speech clarity, bilingual linguistic competence, identity, and social language status. The cognitive and communicative advantages of bilingualism—including code-switching flexibility, language choice adaptability, cognitive control, and metalinguistic awareness—can enhance speech potential when interference is managed.

Recommendations include:

- Implementing language education strategies to strengthen pronunciation, vocabulary, and grammatical structures.
- Teaching conscious code-switching control and balancing language environments.
- Providing pedagogical support, language policy, and integration strategies.
- Conducting empirical monitoring to minimize interference and maximize bilingual competence.

References

1. “Code-switching experience as a mitigating factor for cross-linguistic phonetic interference.” *Journal of Phonetics*, 2024.
2. “Phonemic interference: General concepts and theoretical foundations.” Academic article, 2025.
3. “Lexical interference in Uzbek and English.” Article, 2024.
4. “Grammatical Encoding in Bilingual Language Production: A Focus on Code-switching.” *Frontiers in Psychology*, 2015.
5. “Psycholinguistic mechanisms of cognitive adaptation in language learning.” Article.
6. “Grammatical transfer and interference processes in Uzbek.” Academic analysis.
7. “Lexical interference and prediction in sentence processing among heritage speakers.” Research, 2024.