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Phonetic resilience and linguistic transfer: An acoustic analysis of Jibbali (Shehri) influence on English vowel production

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Abstract

This study explores the influence of Jibbali (Shehri) as a mother tongue on English vowel production, focusing on phonetic resilience and linguistic transfer. Mainly, the study aims to analyze how differences in the vowel systems of Jibbali and English affect articulation patterns among bilingual speakers in Oman, with implications for language education under Oman's Vision 2040. The study involves 20 participants: 10 native Jibbali speakers from Dhofar who have learned English as a foreign language, and 10 native English speakers serving as a control group. Participants' pronunciations of selected English vowels were recorded and analyzed using PRAAT, a recognized acoustic phonetics software. The focus was on formant frequencies (F1 and F2) to assess vowel quality and detect patterns of interference. Results reveal significant phonological transfer from Jibbali to English. Jibbali speakers showed consistent vowel centralization, with /iː/, /oʊ/, and /uː/ produced with F2 values closer to the central range. Furthermore, contrasts between short and long vowels (e.g., /ɪ/ vs. /iː/) were less distinct, indicating influence from Jibbali's phonological system, which lacks equivalent vowel length distinctions. These findings highlight the challenges Jibbali-speaking learners face in mastering English vowel quality. The study offers valuable insights for educators and policymakers in Oman, emphasizing the need for targeted pronunciation instruction and culturally informed teaching approaches. Such efforts align with national goals to enhance English proficiency and educational quality as part of Oman's Vision 2040.

Keywords: Acoustic analysis, English vowel production, Jibbali (Shehri), linguistic transfer, second language acquisition (SLA).

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1. Introduction

Presently, in a globalized job market, English proficiency has emerged as a vital skill, functioning as a foundational requirement for a broad spectrum of professional opportunities across the world. The knowledge of the English language becomes not only indispensable for individual achievement but also for the economic development of countries [1]. In an increasingly globalized world, English serves as a key medium for international communication, trade, and collaboration [2]. For Omanis, as outlined in the Oman 2040 Vision (2020), enhancing English proficiency is crucial for fostering economic diversification, attracting foreign investment, and integrating into the global economy. The vision portrays the English language as a tool for improving the employability of Omanis and their ability to work anywhere across the globe, which will aid in the growth of Oman's economy. On the other hand, for Jibbali speakers, the acquisition of English as a Foreign Language (EFL) is challenging due to the significant phonological distance between English and their native language. The most problematic area is phonetics because vowel quality and vowel length are interfered with in terms of their native-language polarity. The differences in vowel systems and prosody between Jibbali and English often influence how a Jibbali speaker produces and perceives English vowels; this results in incorrect vowel quality, problems with vowel length, and difficulties in achieving native-like fluency [3, 4]. Despite a growing interest within the linguistic community in studying the intricacies of Modern South Arabian languages, systematic studies focusing specifically on Jibbali interference in English at the phonetic level are long overdue. It is this lacuna that the study attempts to fill by conducting an acoustic-phonetic analysis of Jibbali interference so that serious insights reflecting its impact on English vowel quality and length can be made available.

1.1. Research Questions

This paper aims to analyze the Jibbali phonetic interference on the pronunciation of English vowels, specifically vowel quality. The study attempts to show how the phonological features of Jibbali influence the pronunciation of English vowels and cause deviations in vowel quality and compromised distinctions in vowel contrasts. The research questions of the study are as follows:

1. How does the Jibbali vowel system influence the quality of English vowels produced by Jibbali speakers, as measured by formant frequencies (F1 and F2)?
2. What specific patterns of interference (e.g., centralization, exaggerated openness) are observed in the production of English vowels by Jibbali speakers?
3. How do the phonological features of Jibbali contribute to the challenges faced by its speakers in achieving native-like English vowel quality?
4. What pedagogical strategies can be developed to address the phonetic challenges identified in this study and improve English vowel production among Jibbali speakers?

The objectives of the study are as follows:

1. To analyze the acoustic properties of English vowels produced by Jibbali speakers, particularly focusing on formant frequencies (F1 and F2) to determine how Jibbali's vowel system influences the quality of English vowels.
2. To identify patterns of interference in English vowel production by Jibbali speakers, such as centralization, exaggerated openness, and reduced front-back distinctions, and to compare these patterns with native English vowel norms.
3. To explore the role of Jibbali's phonological system in shaping the challenges faced by Jibbali speakers in achieving accurate English vowel production, including the influence of Jibbali's prosodic features on English vowel articulation.
4. To provide pedagogical recommendations for English language teaching tailored to Jibbali speakers, focusing on improving vowel quality and reducing phonetic interference to enhance intelligibility and fluency in English.

1.2. Significance and Scope

The significance of this paper lies in its worth in revealing the phonetic challenges in Jibbali learners' second language acquisition of English. By adopting a perspective on vowel quality, this study addresses a key aspect of pronunciation with specific relevance to English intelligibility and communication. Exploring how Jibbali's unique phonological system influences English vowels will provide deeper insights into the patterns and mechanisms of language interference, enriching the broader field of second language acquisition and phonetics.

The research also has pedagogical implications for instructors and language learners. By pointing out the specific areas of difficulty that Jibbali speakers experience, this research can inform the creation of targeted pedagogical interventions and pronunciation materials. These interventions can help Jibbali-speaking learners overcome phonetic interference, improve their English language abilities, and develop their academic, workplace, and social communication skills. In addition, the findings can guide curriculum developers and policymakers in crafting language learning programs tailored to the requirements of Jibbali-speaking communities.

This study focuses specifically on Jibbali speakers from the Dhofar region of Oman and examines the extent of phonetic interference in their production of English vowels. The analysis is limited to vowel quality, using acoustic phonetic analysis (formant frequencies F1 and F2) to compare the vowel productions of Jibbali speakers with those of native English speakers. The study aims to provide a detailed analysis of how the phonological system of Jibbali influences English vowel quality, with a particular focus on patterns such as centralization, over-openness, and reduction of vowel contrast. The other aspects of phonetic interference, such as vowel length, consonantal pronunciation, and suprasegmental features (e.g., stress and intonation), are beyond the focus of this study but could potentially offer further insight. Additionally, since the data were

collected through the use of a controlled reading task, the findings may not fully reflect spontaneous speech patterns, insofar as spontaneous speech can exhibit even more interference patterns.

2. Literature Review

The acquisition of a second language or foreign language (L2) is a complex process influenced by various linguistic, cognitive, and social factors. Among these, the role of the learner's first language (L1), often referred to as mother tongue interference, has been widely recognized as a significant factor in shaping L2 learning outcomes [5, 6]. Mother tongue interference occurs when the phonological, syntactic, and lexical features of the L1 influence the production and perception of the L2, leading to deviations from native-like proficiency [7]. This phenomenon is particularly evident at the phonetic level, where the sound systems of the L1 and L2 may differ substantially, resulting in pronunciation challenges for L2 learners [8]. Over the past few decades, extensive research has been conducted to understand the mechanisms of phonetic interference, with studies highlighting how differences in vowel and consonant systems, as well as prosodic features such as stress and intonation, can impact L2 pronunciation [9, 10]. However, much of this research has focused on widely spoken languages, leaving a gap in our understanding of how less-studied languages, such as Jibbali, influence L2 acquisition.

2.1. Mother Tongue Interference

Oman's path to attaining this vision will be fulfilled by effectively acknowledging and overcoming issues along the route to English language proficiency, such as mother tongue interference, also known as L1 influence. It is the influence of the native language of a speaker in acquiring and using a second language and is manifested in every level of linguistic systems and thereby proves to be a problem in many ways and opportunities for learning the second language [11, 12]. Errors may occur when the learner unknowingly applies the phonological and grammatical rules of their first language used in pronunciation, structure, and usage of the target language [13, 14]. For workplaces, the most important thing in communication is the right English pronunciation, clarity, and fluency, and therefore these are the areas that need to be emphasized in educational and skills development programs [15]. At the phonetic level itself, the mother tongue shows its interaction with such aspects as vowel quality, consonant articulation, and prosodic patterns in the production and perception of speech sounds by second language learners [15]. The present paper endeavours to probe how Jibbali's interference with English makes itself evident at the phonetic level. The ultimate goal is to gain an insight into what problems this reveals for the individual attempting to make their way between two diverse linguistic systems.

2.2. Jibbali Interference on English

Jibbali is spoken in Oman's Dhofar region by a population who regard it as an important linguistic and cultural marker. The language area is located in what is traditionally considered to be a zone of historic trade movement and ethnic diversity [16]. Yet, the linguistic situation of Jibbali draws on a different lineage, unrelated to the dominant Arabic languages of the region [3, 17]. Globalization and the dominance of English as a lingua franca worldwide frequently impose English on Jibbali speakers in academic, professional, and social contexts. However, the structural and phonological differences between Jibbali and English introduce a labyrinth of challenges for learners, especially when features of their native language continue to interfere with their English acquisition. These challenges are reflected in different linguistic domains, ranging from pronunciation to grammar and vocabulary, manifested by Jibbali speakers as they grapple with the intricacies of language transfer.

Phonological interference proves to be a salient issue for Jibbali English learners. In fact, research confirms that the phonetic system of Jibbali, which is highly divergent from English, offers scope for producing English words incorrectly, particularly with regard to vowel quality and consonant clusters. An example is the absence of some English phonemes from the Jibbali phonological inventory, which sometimes leads to substitution errors or mispronunciation. Other features, such as vowel length and intonation patterns in Jibbali, affect the speech rhythm and stress patterns of Jibbali speakers in English, further complicating their acquisition of native-like fluency [18]. The knowledge of these interference patterns not only reveals the linguistic intricacy of Jibbali but also informs the necessary pedagogical attention required to help Jibbali speakers surmount such difficulties in their quest for L2 English acquisition.

2.3. Mother Tongue Interference at the Phonetic Level

Mother tongue interference at the phonetic level is a well-documented phenomenon in second language acquisition. Research has consistently shown that the phonological features of a speaker's first language (L1) can influence their production and perception of sounds in a second language (L2) [19]. These influences manifest in segmental aspects such as vowel quality and consonant articulation, as well as suprasegmental features like stress and intonation [20]. Studies on vowel quality indicate that differences in the vowel inventories of L1 and L2 often lead to substitution errors, while variations in vowel length can cause non-native-like timing patterns [21, 22]. Despite extensive research on general phonetic interference, there remains a lack of comprehensive studies focusing on acoustic analysis to quantify the exact nature and extent of these influences.

2.4. Mother Tongue Interference in the Phonetic Level in the Gulf Context

In the Gulf region, the influence of Arabic as the dominant mother tongue on English pronunciation has been widely studied. Research highlights significant challenges faced by Arabic speakers due to the phonetic and phonological disparities between Arabic and English, such as difficulties with vowel distinctions and consonant clusters [23]. However, studies on interference from minority languages like Jibbali, a modern South Arabian language spoken in Oman, remain scarce [3, 24].

While the Dhofar region's linguistic diversity is well recognized, there is limited empirical evidence on how Jibbali-specific phonological features, such as its vowel system, affect English pronunciation. Most existing studies either generalize findings across Gulf Arabic speakers or focus on broader linguistic influences without isolating the phonetic characteristics of Jibbali. This lack of targeted research highlights a significant gap in understanding how Jibbali speakers navigate the challenges of English phonetics, particularly in terms of vowel quality and length.

3. Research Methodology

A robust research methodology is vital to ensuring the reliability and validity of findings in phonetic studies, especially those analyzing language interference. The methodology for this paper is designed to capture precise acoustic data on Jibbali interference in English, focusing on vowel quality. To achieve this, PRAAT software, a widely recognized tool for acoustic phonetic analysis, is employed. PRAAT allows for the precise measurement of vowel formant frequencies (F1 and F2) to assess vowel quality [25]. Its versatility and accuracy make it ideal for studying intricate phonetic phenomena such as the influence of Jibbali phonological features on English vowels.

3.1. Participants

The study involves 20 participants, consisting of 10 native speakers of Jibbali from the Dhofar region of Oman who have acquired English as a foreign language and 10 native English speakers. Participants will be selected based on the following criteria:

1. Jibbali Speakers
- Native speakers of Jibbali, with proficiency in English as a second language.
- Reside in or originate from the Dhofar region of Oman.
- Have a minimum of five years of exposure to English through formal education or daily communication.
2. Native English Speakers
- Monolingual or predominantly English-speaking individuals.
- No significant exposure to Jibbali or other Semitic languages.
- Represent standard English pronunciation norms, particularly for vowels under study.

This selection ensures a balanced comparison between Jibbali-influenced English pronunciation and native English norms.

3.2. Task Design

The study employs a controlled reading task to elicit data on vowel quality. Participants will be asked to read a series of carefully selected words. This approach ensures uniformity in speech contexts and minimizes variability due to intonation or sentence-level prosody. The controlled reading task also allows for precise comparison of vowel quality across different participants, providing reliable data for analyzing systematic pronunciation patterns.

3.3. Design of Controlled Words

The controlled word set is carefully designed to include English vowels that are likely to be influenced by Jibbali phonological features. The selection encompasses key vowel contrasts, including:

1. Short vs. Long Vowels: ship (/ɪ/) vs. sheep (/iː/).
2. Front and Back Vowels: cot (/ɒ/) vs. coat (/oʊ/).
3. Central Vowels: cup (/ʌ/) vs. cap (/æ/).
4. Rounded vs. Unrounded Vowels: soon (/uː/) vs. sun (/ʌ/).

This word set is designed to capture potential vowel quality and length variations influenced by Jibbali phonological patterns, enabling a systematic analysis of interference.

3.4. Implementation of the Reading Task

Participants will perform the reading task in a quiet room to minimize background noise and distractions. They will first familiarize themselves with the word list to ensure accurate pronunciation and reduce hesitations during recording. Multiple trials will be conducted to capture consistent data, with breaks provided to prevent fatigue.

3.5. Recording Process

The recording process will use high-quality audio equipment, including:

- Microphone: A unidirectional microphone to capture clear speech sounds.
- Recording Device: A digital audio recorder with a sampling rate of 44.1 kHz to ensure high-fidelity recordings.
- Environment: A soundproof or acoustically treated room to eliminate background noise.

Recordings will be saved in WAV format to ensure compatibility with PRAAT software for acoustic analysis.

3.6. Acoustic Measurements

- Vowel Quality
- Formant Analysis: Formant frequencies (F1 and F2) will be measured using PRAAT to determine the tongue height and position, which define vowel quality.
- Comparison: The formant values of Jibbali speakers' English vowels will be compared to standard English vowel formants.

This methodology provides a systematic approach to uncovering the phonetic-level interference of Jibbali in English. The use of PRAAT ensures precise acoustic measurements, and the controlled task design minimizes variability, allowing for a detailed analysis of how Jibbali speakers produce English vowels.

3.7. Analysis of Vowel Quality

The acoustic measurements for the Jibbali speakers and native English speakers reveal significant differences in the production of English vowels, specifically in terms of F1 (tongue height) and F2 (tongue advancement). The following patterns were observed:

3.8. Short vs. Long Vowels: Ship (/ɪ/) vs. Sheep (/iː/)

Jibbali speakers produced /ɪ/ (ship) with an average F1 of 343 Hz and F2 of 2066 Hz, whereas native English speakers produced it with an average F1 of 466 Hz and F2 of 2008 Hz. This indicates that Jibbali speakers' /ɪ/ was pronounced with a lower tongue position, suggesting exaggerated openness.

For /iː/ (sheep), Jibbali speakers had an average F1 of 325 Hz and F2 of 2038 Hz, while native English speakers produced an average F1 of 395 Hz and F2 of 2380 Hz. This shows that Jibbali speakers centralized /iː/, reducing the front-back distinction. The following images show the segmentation of the words ship and sheep in PRAAT for one Jibbali speaker and one native English speaker.

3.9. Native English Language Speaker

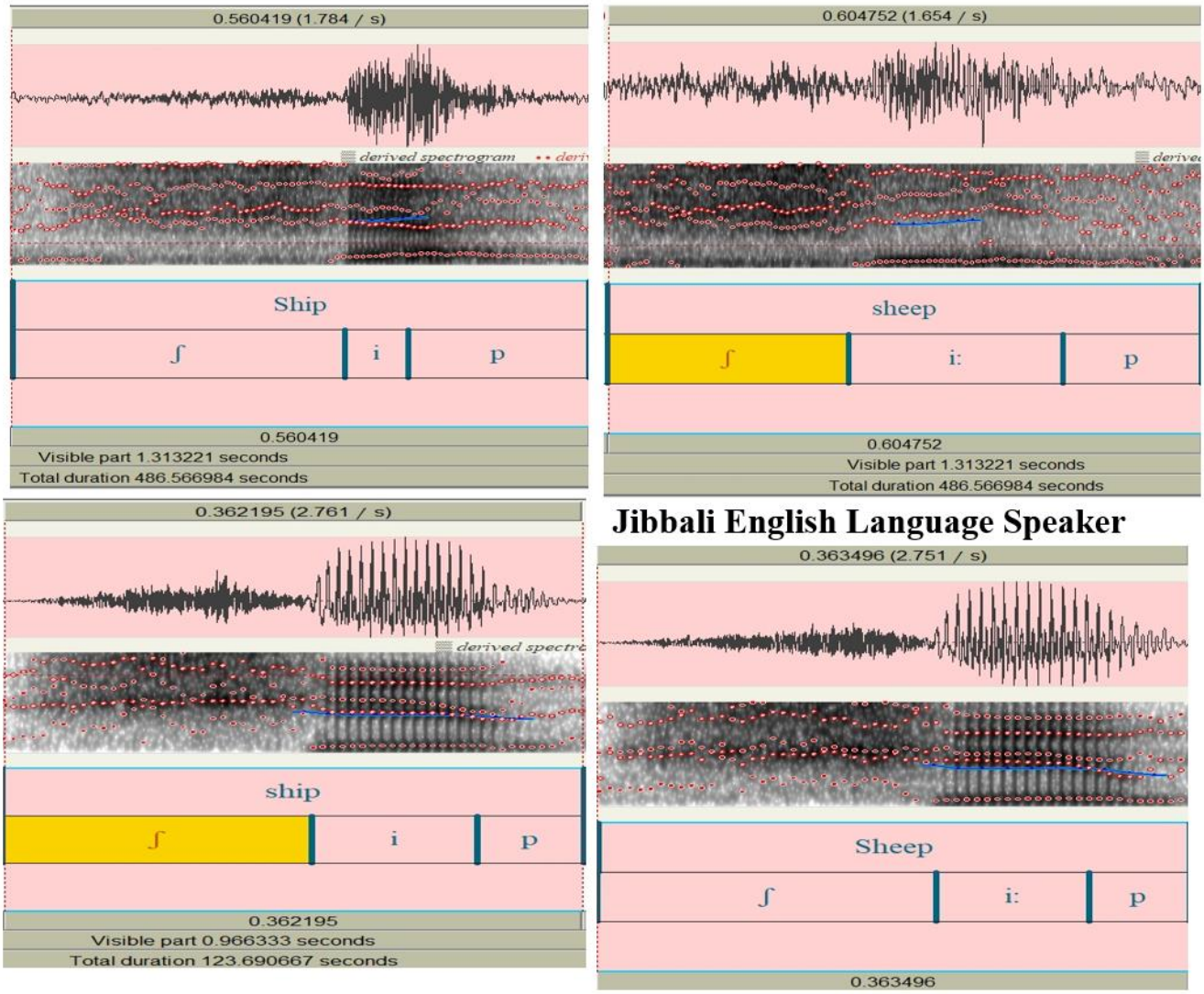

Figure 1.
Vowel Quality in Ship vs Sheep (/i/ vs /ii/- Short and Long Vowels) Among Native English and Jibbali Speakers.

3.10. Front and Back Vowels: Cot (/ɒ/) vs. Coat (/oʊ/)

For /ɒ/ (cot), Jibbali speakers produced an average F1 of 692 Hz and F2 of 1146 Hz, while native English speakers produced an average F1 of 782 Hz and F2 of 1136 Hz. Jibbali speakers' production of /ɒ/ was closer to native norms, but with a narrower range of F1 values, indicating reduced variability.

For /oʊ/ (coat), Jibbali speakers had an average F1 of 571 Hz and F2 of 1255 Hz, compared to native English speakers with F1 of 457 Hz and F2 of 1198 Hz. This suggests centralization of /oʊ/ by Jibbali speakers. The following images show the segmentation of the words cot and coat in PRAAT for one Jibbali speaker and one native English speaker.

3.11. Native English Language Speaker

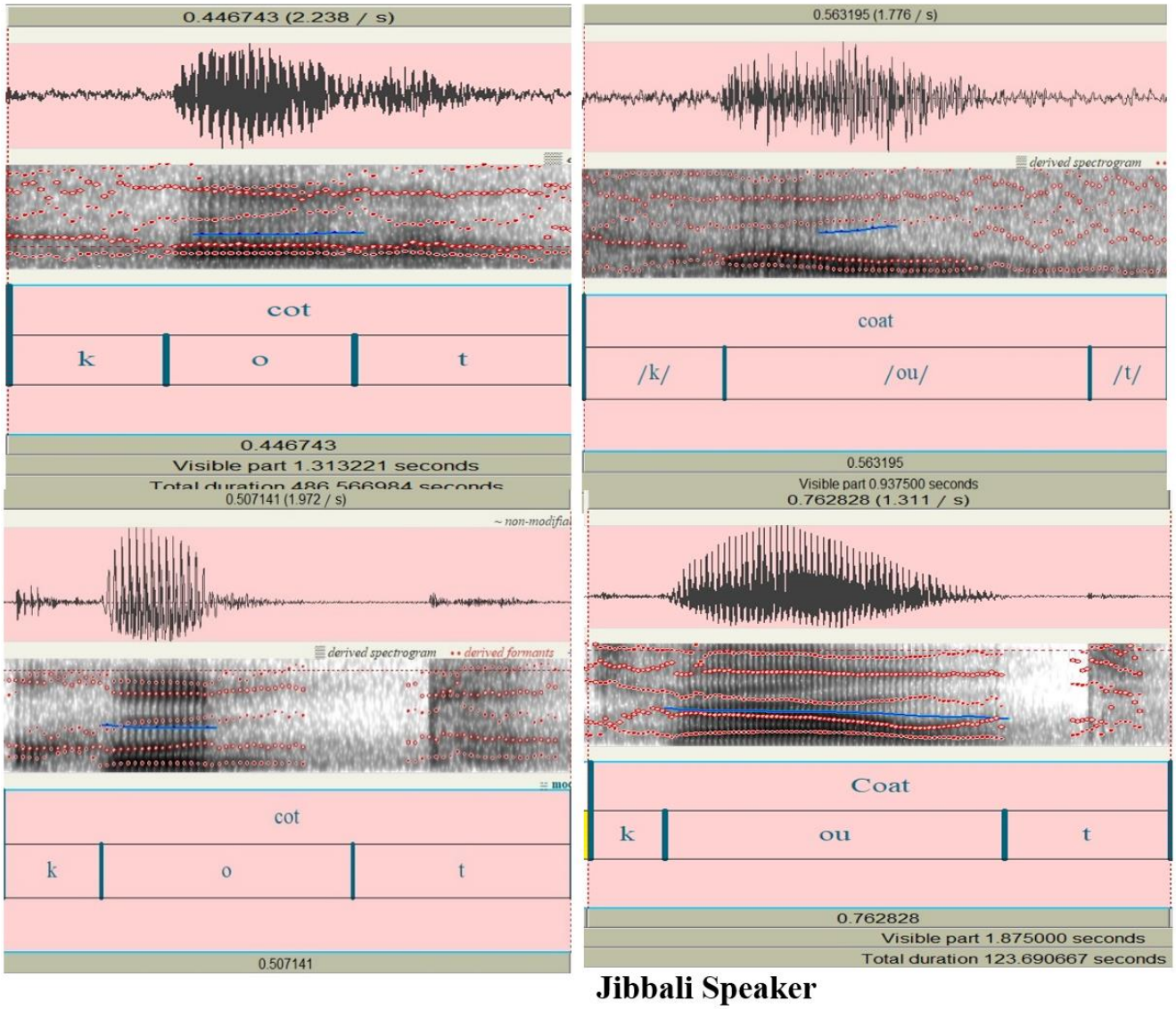

Figure 2.
Vowel Quality in Coat vs Cot (/ɒ/ vs /oʊ/- Front and Back Vowels) Among Native English and Jibbali Speakers.

3.12. Central Vowels: Cup (/ʌ/) vs. Cap (/æ/)

Jibbali speakers produced /ʌ/ (cup) with an average F1 of 655 Hz and F2 of 1167 Hz, while native English speakers produced it with F1 of 792 Hz and F2 of 1296 Hz. This indicates that Jibbali speakers' /ʌ/ was less open and less fronted than native norms.

For /æ/ (cap), Jibbali speakers produced it with an average F1 of 738 Hz and F2 of 1505 Hz, compared to native English speakers with F1 of 804 Hz and F2 of 1789 Hz. This shows that Jibbali speakers' /æ/ was centralized and less fronted. The following images show the segmentation of the words cup and cap in PRAAT for one Jibbali speaker and one native English speaker.

3.13. Native English Language Speaker

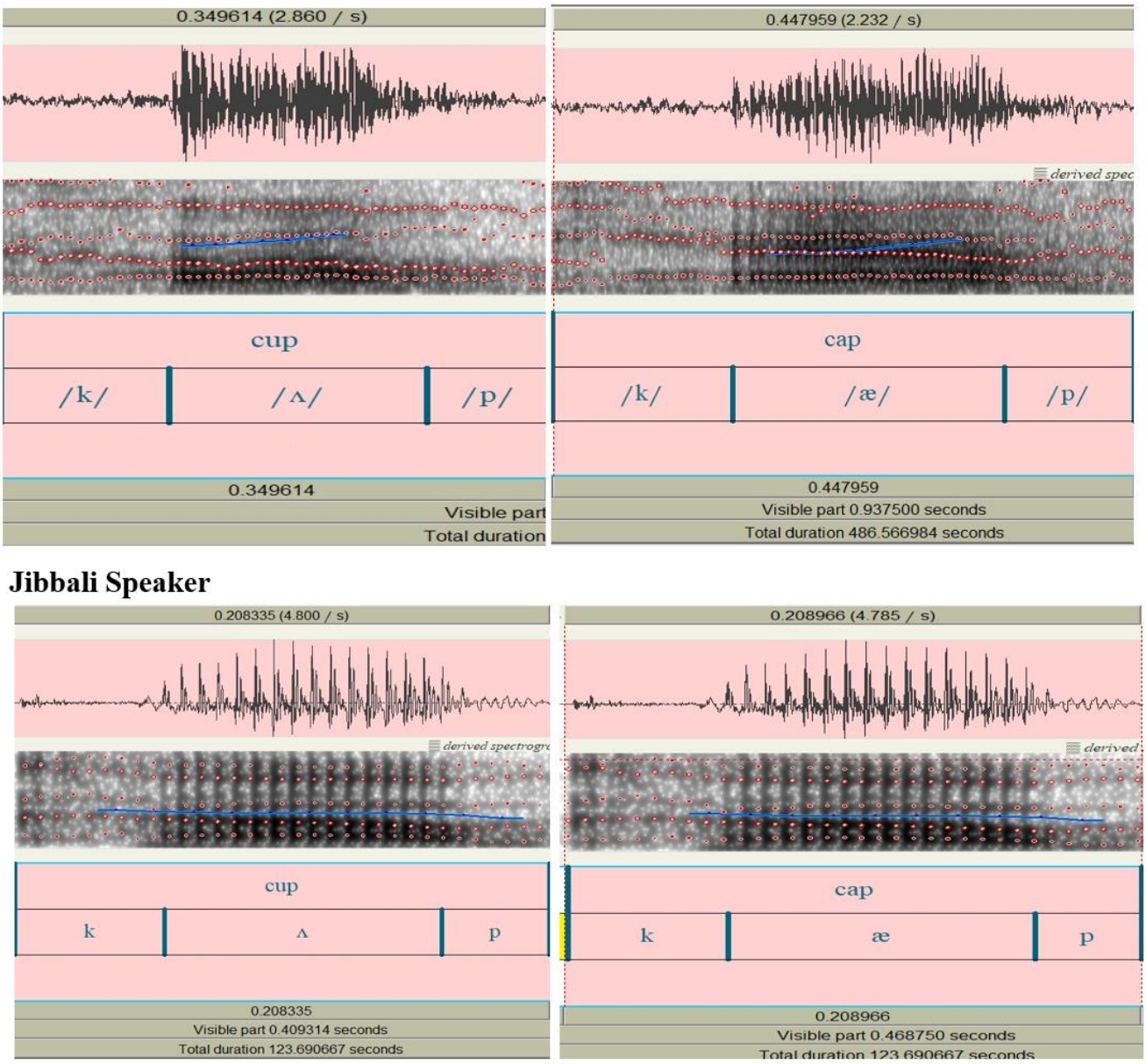

Figure 3.
Vowel Quality in Cup vs Cap (/ʌ/ vs. /æ/- Central Vowels) Among Native English and Jibbali Speakers.

3.14. Rounded vs. Unrounded Vowels: Soon (/u:/) vs. Sun (/ʌ/)

For /u:/ (soon), Jibbali speakers had an average F1 of 536 Hz and F2 of 1144 Hz, while native English speakers produced it with F1 of 376 Hz and F2 of 1426 Hz. This indicates reduced backness and closeness in Jibbali speakers' /u:/.

For /ʌ/ (sun), Jibbali speakers produced it with an average F1 of 839 Hz and F2 of 1254 Hz, compared to native English speakers with F1 of 676 Hz and F2 of 1418 Hz. This suggests exaggerated openness and centralization of /ʌ/ by Jibbali speakers. The following images show the segmentation of the words "soon" and "sun" in PRAAT for one Jibbali speaker and one native English speaker.

3.15. Native English Language Speaker

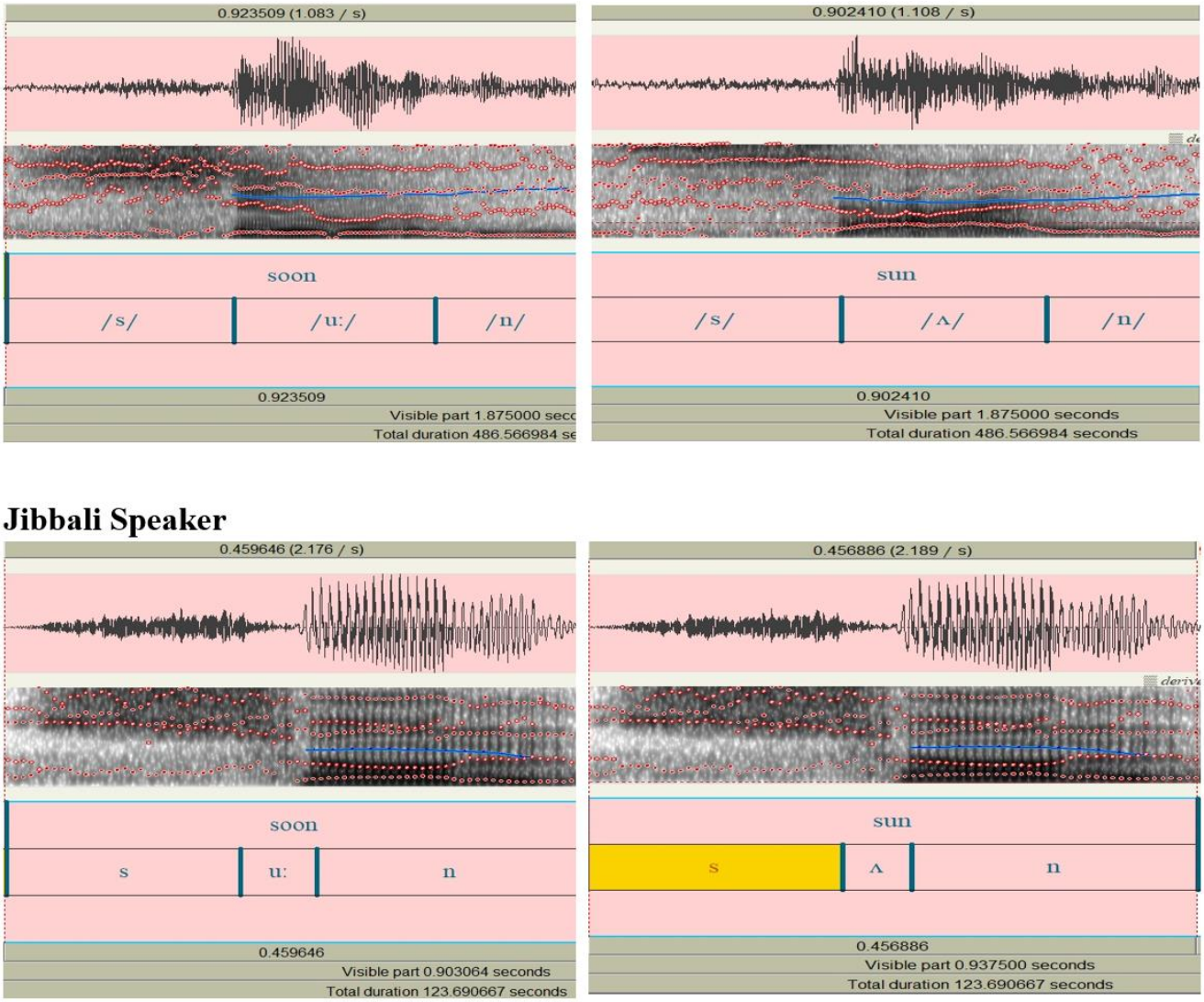

Figure 4.
Vowel Quality in Soon vs Sun (/uː/ vs. /ʌ/- Unrounded and Rounded Vowels) Among Native English and Jibbali Speakers.

4. Discussion

The data highlight significant interference from Jibbali phonology in the production of English vowels. This interference stems from structural differences in the vowel systems of Jibbali and English, leading to deviations in articulation. These patterns are particularly evident in the centralization of vowels and the reduced distinctions in vowel length and quality.

4.1. Centralization of Vowels

Jibbali speakers consistently centralized vowels, reducing the distinctions between front and back vowels. This was evident in /iː/, /oʊ/, and /uː/, which were produced with F2 values closer to the central range.

4.2. Exaggerated Openness

Vowels like /ʌ/ (sun) and /ɒ/ (cot) were produced with higher F1 values, indicating a lower tongue position compared to native English norms. This reflects the influence of Jibbali's vowel system, which lacks a clear distinction between mid and low vowels.

4.3. Reduced Vowel Length Contrast

The distinction between short and long vowels (e.g., /ɪ/ vs. /iː/) was less pronounced in Jibbali speakers' productions. This suggests interference from Jibbali's phonological system, where vowel length distinctions may not align with English norms.

4.4. Influence of Jibbali Prosody

The reduced variability in formant values across participants suggests a possible prosodic influence, where Jibbali's stress and rhythm patterns affect the articulation of English vowels.

4.5. Targeted Pronunciation Training

Educators working with Jibbali speakers should place a strong emphasis on teaching vowel contrasts, particularly focusing on the distinctions between front-back and short-long vowels. These vowel contrasts are crucial for achieving more native-like pronunciation in English, as they are often areas where Jibbali speakers encounter difficulty. For instance, Jibbali speakers may struggle with producing the subtle differences between short vowels like /ɪ/ (as in *bit*) and long vowels like /iː/ (as in *beat*), or front vowels like /æ/ (as in *cat*) and back vowels like /ɑː/ (as in *father*). By systematically practising these contrasts, learners can improve their overall intelligibility and reduce accent interference.

4.6. Development of Phonetic Tools

Integrating advanced phonetic tools such as PRAAT into language training programs can be highly beneficial for learners. PRAAT, a software for the analysis of speech, allows educators and students to visualize the acoustic properties of vowels, such as formant frequencies, duration, and pitch. By using PRAAT, learners can receive immediate visual feedback on their vowel production, which helps them better understand how their speech differs from native English speakers. This visual feedback can be used to guide learners in adjusting their articulation, leading to improved pronunciation. Additionally, acoustic analysis can be a valuable tool for both teachers and students to track progress over time and identify areas needing further attention.

4.9. Curriculum Design

Language education programs for Jibbali speakers should be designed to address the phonological differences between Jibbali and English. This includes incorporating specific modules that highlight the key differences in vowel and consonant systems, as well as stress and intonation patterns. For example, Jibbali has a different set of vowel sounds and a simpler system of consonant clusters compared to English, which can result in interference patterns. By making learners aware of these differences, educators can help them better understand the challenges they face and develop strategies to overcome them. A curriculum that includes focused practice in these areas will help learners build a solid foundation in English phonology and reduce errors caused by cross-linguistic interference. Moreover, it is essential to incorporate listening and production exercises that target these phonological contrasts, ensuring that learners have ample opportunity to practice and refine their pronunciation skills.

By focusing on these areas, educators can provide Jibbali speakers with the tools and knowledge they need to achieve more accurate and native-like pronunciation in English. Finally, the study also offers valuable insights for educators and language learners. By identifying the particular challenges faced by Jibbali speakers, it provides a foundation for designing focused teaching strategies and pronunciation resources. Such targeted interventions can support Jibbali-speaking students in overcoming phonetic interference, enhancing their English proficiency, and strengthening their communication skills across academic, professional, and social contexts. Moreover, the results can assist curriculum designers and policymakers in developing language programs that specifically address the needs of Jibbali-speaking populations.

5. Conclusion

This study provides clear evidence of Jibbali interference in the production of English vowels, particularly in terms of vowel quality and length. Jibbali speakers exhibit patterns of centralization, exaggerated openness, and reduced contrast between short and long vowels, reflecting the influence of their native phonological system. These findings underscore the need for targeted pedagogical strategies to address these challenges, contributing to the broader goals of Oman's 2040 Vision in enhancing English proficiency. By addressing the specific phonetic challenges faced by Jibbali speakers, educators and policymakers can create more effective language education programs, ultimately improving the employability and global communication skills of Omani citizens.

6. Implications for Language Education

These findings have significant implications for language education in Oman, particularly in the context of Oman's 2040 Vision. They suggest a need for a more integrated approach to language teaching that aligns with the nation's goals of enhancing human capital and fostering innovation. Additionally, these insights can inform curriculum development and teacher training programs, ensuring that language education supports the broader objectives of economic diversification and global competitiveness.

References

[1] H. Ku and A. Zussman, "Lingua franca: The role of English in international trade," *Journal of Economic Behavior & Organization*, vol. 75, no. 2, pp. 250-260, 2010. https://doi.org/10.1016/j.jebo.2010.03.013

[2] K. Srinivasan and R. Collard, "Nature without conservation," *Current History*, vol. 122, no. 847, pp. 289-294, 2023. https://doi.org/10.1525/curh.2023.122.847.289

[3] A. A. Adli Alkathiri and B. A. Mudhsh, "Analysis of tense system in Jibbali (Shehri) Language," *Pakistan Journal of Life & Social Sciences*, vol. 22, no. 2, pp. 1219-1230, 2024.

[4] C. E. Watson, *Modern South Arabian languages. In The Semitic Languages: An International Handbook*. Berlin, Germany: De Gruyter Mouton, 2012.

[5] B. A. D. Mudhsh, "A comparative study of tense and aspect categories in Arabic and English," *Cogent Arts & Humanities*, vol. 8, no. 1, p. 1899568, 2021. https://doi.org/10.1080/23311983.2021.1899568

[6] A. Sinha, N. Banerjee, A. Sinha, and R. K. Shastri, "Interference of first language in the acquisition of second language," *Journal of Psychology and counseling*, vol. 1, no. 7, pp. 117-122, 2009.

[7] B. A. D. Mudhsh and N. B. Laskar, "Examining the learning and comprehension of English aspect categories by Yemeni EFL students," *Journal of Language and Linguistic Studies*, vol. 17, no. S1, pp. 222-235, 2021.
[8] D. Dimitrova, *Decoding L1 influence: Navigating phonotactic barriers in L2 German pronunciation by Bulgarian speakers*. Belgium: ISCA Archive, 2024.
[9] M. Antoniou, C. T. Best, M. D. Tyler, and C. Kroos, "Inter-language interference in VOT production by L2-dominant bilinguals: Asymmetries in phonetic code-switching," *Journal of Phonetics*, vol. 39, no. 4, pp. 558-570, 2011. https://doi.org/10.1016/j.wocn.2011.03.001
[10] N. Kartushina and U. H. Frauenfelder, "On the effects of L2 perception and of individual differences in L1 production on L2 pronunciation," *Frontiers in Psychology*, vol. 5, p. 1246, 2014. https://doi.org/10.3389/fpsyg.2014.01246
[11] E. N. Denizer, "Does mother tongue interfere in second language learning?," *Journal of Foreign Language Education and Technology*, vol. 2, no. 1, pp. 39-54, 2017.
[12] R. A. Thyab, "Mother-tongue interference in the acquisition of English articles by L1 Arabic students," *Journal of Education and Practice*, vol. 7, no. 3, pp. 1-4, 2016.
[13] Z. A. Aziz, B. Daud, and S. Yunidar, "Second language interference towards first language use of Japanese learners," *Indonesian Journal of English Language Teaching and Applied Linguistics*, vol. 4, no. 1, pp. 159-176, 2019.
[14] B. Bhela, "Native language interference in learning a second language: Exploratory case studies of native language interference with target language usage," *International Education Journal*, vol. 1, no. 1, pp. 22–31, 1999.
[15] T. M. Derwing and M. J. Munro, "Putting accent in its place: Rethinking obstacles to communication," *Language Teaching*, vol. 42, no. 4, pp. 476-490, 2009. https://doi.org/10.1017/s026144480800551x
[16] A. D. Rubin, *The Jibbali (Shaḥri) language of Oman: Grammar and texts* Leiden: Brill, 2014.
[17] G. Castagna, *An annotated corpus of three hundred proverbs, sayings, and Idioms in Eastern Jibbali/Śḥərɛ̄́t*. Cambridge, UK: Open Book Publishers, 2024.
[18] J. Brewster, "Language contact and covert prominence in the Šerēt-Jibbālī language of Oman," Master's Thesis, University of Kentucky, Lexington, KY, USA, 2021.
[19] J. K. Hartshorne, J. B. Tenenbaum, and S. Pinker, "A critical period for second language acquisition: Evidence from 2/3 million English speakers," *Cognition*, vol. 177, pp. 263-277, 2018.
[20] R. T. Kan and K. Ito, "Phonological transfer and speech accommodation in the production of English lexical stress by Cantonese speakers," *Second Language Research*, vol. 36, no. 4, pp. 541-569, 2020.
[21] J. E. Flege, "The production of "new" and "similar" phones in a foreign language: Evidence for the effect of equivalence classification," *Journal of Phonetics*, vol. 15, no. 1, pp. 47-65, 1987.
[22] K. Saito, H. Sun, and A. Tierney, "Successful second language pronunciation learning is linked to domain-general auditory processing rather than music aptitude," *Second Language Research*, vol. 36, no. 4, pp. 535-560, 2020.
[23] W. Alshangiti and B. G. Evans, "Investigating the domain-specificity of phonetic training for second language learning: comparing the effects of production and perception training on the acquisition of English vowels by Arabic learners of English," in *The Proceedings of the International Seminar for Speech Production*, 2014.
[24] A. F. M. Balhaf, B. A. Mudhsh, and A. A. A. Alkathiri, "Analyzing the tense system in Mehri language: Unveiling temporal structures," *Evolutionary Studies in Imaginative Culture*, vol. 8, no. 1, pp. 2292–2311, 2024.
[25] P. Boersma and D. Weenink, *Praat: Doing phonetics by computer (Version 6.1.38) [Computer software]*. Netherlands: University of Amsterdam, 2021.