

	<p style="text-align: center;">Scientific Events Gate Innovations Journal of Humanities and Social Studies مجلة ابتكارات للدراسات الإنسانية والاجتماعية IJHSS https://eventsgate.org/ijhss e-ISSN: 2976-3312</p>	
--	---	---

A Socio-phonetic Investigation of Arab English-Speakers' Accent Reduction and Modification

Asst. Prof. Sadiq Mahdi Al Shamiri, PhD

University of Babylon, College of Education for Human Sciences, Department of English,
51001 Hillah, Babylon, Iraq

hum.sadiq.mahdi@uobabylon.edu.iq

Asst. Lect. Jaafar H. Ejam

Kerbala Technical Institute, Al-Furat Al-Awsat Technical University, 56001, Kerbala, Iraq
jaafar.ejam@atu.edu.iq

Received 19|11|2024 - Accepted 20|12|2024 Available online 15|01|2025

Abstract: The current study investigates the poor English pronunciation of Arabic speakers, focusing on Socio-phonetic aspects, such as speaking style, speaker background, and group membership issues, as well as the phonetic and phonological aspects of language. This study aims at identifying the sources of differences between Arabic and English phonological systems that are closely related to poor foreign accents of English. The study hypothesises that the various colloquial varieties of one language have an impact on the accents of the target language. The study develops a model for the analysis of the selected data to showcase the distinctions between Arabic-accented English pronunciation transcription and that of the received pronunciation. The results show that the accent of Arabic speakers of English is greatly influenced by their mother tongue. Regardless of their high educational level or their prestigious positions representing their countries, the selected ambassadors of this study demonstrate low levels of English pronunciation mastery. This is evident mainly in the phonological aspects of vowels and the lateral consonant allophones. The analysis concludes with a list of recommended practices and strategies for reducing accents, the most important of which are studying the phonetic transcription of English, speech therapy, as well as practice and repetition.

Keywords: Socio-phonetics, Accent Reduction, Foreign Accent, Arab Speakers, Non-Native English

كيفية تقليل وتعديل اللكنة لدى الناطقين باللغة الإنجليزية من العرب (دراسة اجتماعية صوتية)

أ.م.د. صادق مهدي كاظم الشمري

جامعة بابل، كلية التربية للعلوم الإنسانية، قسم اللغة الإنجليزية – العراق

hum.sadiq.mahdi@uobabylon.edu.iq

م.م. جعفر حسن جاسم عجام

جامعة الفرات الأوسط التقنية، المعهد التقني كربلاء – العراق

jaafar.ejam@atu.edu.iq

الملخص: تتناول الدراسة الحالية ضعف نطق اللغة الإنجليزية لدى الناطقين بالعربية، مع التركيز على الجوانب الاجتماعية الصوتية، مثل أسلوب التحدث وخلفية المتحدث وقضايا الانتماء الى مجموعة ما، بالإضافة الى الجوانب الصوتية والأنظمة الصوتية للغة. وتهدف هذه الدراسة إلى تحديد مصادر الاختلافات بين الأنظمة الصوتية العربية والإنجليزية التي ترتبط ارتباطاً وثيقاً باللكنات الأجنبية الضعيفة للغة الإنجليزية. وتفترض الدراسة أن التنوعات العامية المختلفة للغة واحدة لها تأثير على لكنات اللغة المستهدفة. وتعد الدراسة نموذجاً لتحليل البيانات المختارة لإظهار الاختلافات بين النسخ الصوتي للغة الإنجليزية باللكنة العربية والنطق البريطاني. وتظهر النتائج أن لكنة الناطقين بالعربية للغة الإنجليزية تتأثر بشكل كبير بلغتهم الأم. اظهروا السفراء المختارين لهذه الدراسة مستويات منخفضة من اتقان نطق اللغة الإنجليزية على الرغم من مستواهم التعليمي العالي او مناصبهم المرموقة في تمثيل بلدانهم. ويتضح هذا بشكل رئيس في الجوانب الصوتية للصوائت والحروف الساكنة الجانبية. ويختتم التحليل بقائمة من الممارسات والاستراتيجيات الموصى بها لتقليل اللكنات، وأهمها دراسة النسخ الصوتي للغة الإنجليزية، وعلاج النطق، وكذلك الممارسة والتكرار.

الكلمات المفتاحية: علم الصوتيات الاجتماعي، تقليل اللكنة، اللكنة الأجنبية، المتحدثون بالعربية، اللغة الإنجليزية لغير الناطقين بها

1. Introduction

Sociolinguistics is a field of study that examines the relationship between language and society. The three main dimensions of language variation examined in sociolinguistic research are temporal, geographical (pertaining to geography), and social. Thomas Hodson first introduced the term "sociolinguistics" in 1939 (Edwards, 2013). However, the study of sociolinguistics has roots in dialectology, lexicography, and art. In the 1960s, scholars like William Labov employed methodologies and principles from diverse domains, such as historical linguistics and sociology, to create frameworks for examining how linguistic diversity is influenced by the social context in which it occurs. Sociolinguistics is a field of study that focuses on communities of practice and speech, social networks, prestige, place, and personal characteristics like gender and ethnicity. Sociolinguistic research provides valuable insights, including the correlation between the level of formality in a given context and speech production, the frequency of word usage, and the ability to predict the placement of a word within a sentence (Labov, 1972; Jurafsky & Martin, 2008; Drager, 2010).

Speech can index information that is not found in a dictionary. The speech signal also carries data regarding the speaker's social membership and, in certain instances, the speaker's perception of the listener's social membership. Social-indexical variation is employed in the speech signal to transmit this specific type of social membership information. Language structure displays social-indexical variation across various domains. Socio-phonetic variation refers to the social and contextual differences in the way sounds are pronounced, which is a field of study within phonetics, the branch of linguistics that examines the specific sounds of a language.

Arab-speaking countries or regions exhibit variations in the pronunciation of English words. Regarding Arabic, individuals from various Arabic countries possess distinct Arabic colloquial dialects, such as the Iraqi Arabic dialect, the Egyptian dialect, and the Saudi one. This could be manifested in their pronunciation in English or any other non-native language. In other words, the Arabic language represents a typical example of diglossia, as it possesses a high variety (i.e., the standard Arabic) and a number of low varieties, such as the Egyptian Arabic, the Saudi Arabic, and the Iraqi Arabic. As a result, Arabs are likely to commit various mistakes and errors in different aspects of pronunciation.

Accent reduction, also referred to as accent modification or accent neutralisation, is the practice of assisting individuals in modifying their accent to enhance their pronunciation and communication in a second language or dialect. The present study hypothesises that the English accent of Arab speakers is influenced by their respective colloquial Arabic varieties, despite their shared use of Modern Standard Arabic as a second code. This study aims at pinpointing some various methodologies and strategies that can be employed to achieve foreign accent reduction, typically within the framework of learning a new language or enhancing communication skills. Moreover, the examples and data collected for this research paper are limited to some Arab speakers of English, namely, the Egyptian, Saudi, and Iraqi ambassadors to the United Nations. Furthermore, the value of this research lies in the significance of proper English pronunciation in communication, especially in media interviews. In addition, this research attempts to help Arabic and English speakers to understand the differences between the phonological systems of the languages in question.

2. Socio-phonetics

Socio-phonetics is a recently emerged subfield of sociolinguistics. The term "Socio-phonetic" was initially employed by Deshaies-Lafontaine in 1974 in a dissertation on the variability of Canadian French (Deshaies-Lafontaine, 1974; Hardcastle, Laver, & Gribbon, 2010). This research was conducted within the emerging field of Labovian, or variationist, sociolinguistics. However, previous studies have collectively offered valuable knowledge in the fields of phonetics and sociolinguistics. Labov's study in 1966 on stratified New York English, which is widely recognised in the field of sociolinguistics and Socio-phonetics, was preceded by Ladefoged and Broadbent's observation that a speaker's regional origin can accurately predict both their speech production and perception (Ladefoged & Broadbent, 1957; Labov, 1966). Socio-phonetics is the term used to describe research in variationist sociolinguistics that focuses on phonetics. It examines the relationships between social factors such as speaking style, speaker background, and group membership issues, as well as the phonetic and phonological aspects of language.

The study of Socio-phonetics has advanced our knowledge in a variety of fields related to the interface between language and society. For instance, Elizabeth Strand demonstrated how listeners' expectations regarding a speaker's purely social characteristics can affect phonological categorization by using a synthetic /s/ to /ʃ/ continuum paired with both female and male faces (Strand, 1999). The study found that category boundaries varied between male and female speakers, with women's boundaries occurring at higher frequencies and men's at lower frequencies. This could be expected since men typically produce fricatives at lower frequencies than women. Research on how people perceive speech has provided insight into how well listeners can recognise changes in sound as they occur. They claimed to have discovered an apparent—but nonexistent—vowel merger there that Utah English speakers had trouble identifying. Research on speech perception has also provided evidence that the speech signal itself, as well as physical characteristics such as sex and age, may influence listeners' assessments of the speaker's personality (Giles & Powesland, 1975).

In addition to its potential advantages in phonetics and sociolinguistics research, Socio-phonetics can also provide insights into pedagogical concerns such as the utilisation of African American English in educational settings and the capacity of automated speech recognition systems to accommodate natural variation, among other domains. In addition, socio-phonetics research provides valuable insights for making modifications to the phonological framework. Doing Socio-phonetic analysis necessitates knowledge about phonetics, within which knowing how certain sequences of sounds are produced and perceived by individuals (Foulkes, Scobbie, & Watt, 2010).

2.1 Phonetics

Phonetics is a branch of linguistics that primarily focuses on the study of speech sounds. In the case of non-vocal languages, it also examines the essential components of the signs used. Acoustic measurements can be employed to gain a deeper understanding of the levels of perceptual distinctions in commonly spoken languages, making the study of the phonetic level intriguing. The study of Socio-phonetic perception enhances phonetic theory by demonstrating that listeners possess a significant amount of intricate phonetic information during perception (Hay & Drager, 2007).

2.2 Production

In Socio-phonetic production studies, utterances are commonly subjected to phonetic analysis, which involves examining the sounds produced. This analysis is then used to establish correlations between phonetic patterns and speaker characteristics such as age, gender, ethnicity, and regional dialect. The preceding section encompassed a majority of the studies, notably Labov's initial research in 1966, which primarily focused on production. Studies conducted by scholars, such as Walton and Orlikoff in 1994, have failed to show measurable variations in speech output between speakers of regional dialects and speakers of the mainstream dialect when both groups shared common linguistic features specific to the regional dialect. Nevertheless, studies on perception have revealed that when a speaker possesses phonetic characteristics similar to those of speakers from a contrasting dialect, the ability of listeners to accurately evaluate the speaker's characteristics is diminished. Conducting further research on racial variations in spectral noise, voice quality, laryngeal function, and ventilator function for phonation is suggested by Walton and Orlikoff. However, obtaining natural speech samples that closely resemble those obtained in controlled laboratory environments proved to be a challenging task (Walton & Orlikoff, 1994).

2.3 Perception

Throughout the majority of its existence, socio-phonetic research primarily focused on analysing the process of speech production. However, perception has gained recognition as a valuable area of study among sociolinguists. “Although perception has been a neglected stepsister of production in sociolinguistics, it, like Cinderella, may have its day soon” (Thomas, 2002). During the initial phases of the development of Labovian sociolinguistics, the equipment used for recording and analysing speech was large and costly. Linguists utilised their own perceptual faculties to transcribe the spoken language of the communities they examined. This hindered accurate measurement in real-life environments and made transcriptions susceptible to potential human error caused by perception biases induced by their individual linguistic backgrounds. Recent technological advancements have significantly reduced the cost, intrusiveness, and complexity of speech recording and analysis mechanisms.

3. Methodology

The current paper attempts to investigate the relationship between social factors, such as speaking style and speaker background, and the phonetic and phonological aspects of language. Since Socio-phonetics is a variationist sociolinguistics that focuses on phonetics, the collected data is analysed Socio-phonetically. This paper designs an eclectic model to conduct a qualitative method of analysis of poor English pronunciation of non-native speakers. This method of analysis focuses on the descriptive results of the collected data. After understanding the connection between the social factors of non-native speakers of English and their English pronunciation, suggested methods and strategies of accent reduction and modification are presented.

3.1 Data Description

The analysis of this study primarily relies on three instances, extracted from YouTube, featuring Arabic UN ambassadors delivering speeches in English. The Ambassadors are: (1) Mohamed Ibrahim Nasr, Egyptian Ambassador to the United Nations, 2022; (2) Abdallah Y. al-Mouallimi, Saudi Ambassador to the United Nations, 2015; and (3) Mohammed Bahr Aluloom, Iraqi Ambassador to the United Nations, 2020. Furthermore, the examples under investigation are provided through parts of the original speeches (see the Appendix for the links to the full speeches).

3.2 The Model of the Study

The analysis of this research consists of three steps. The first step involves identifying the instances of English with a foreign accent in the selected data. Second, making a comparison between the Arabic-accented English and RP English by writing the transcription of the words that are pronounced in that way as well as the normal RP one. Third, focusing on Arabic and English vowels, as well as on the distinction between clear /l/ and dark /ɫ/, as the majority of differences between Arabic varieties and English are found in these areas. As a result, understanding the source of pronunciation differences aids in the reduction and modification of Arabic speakers' English accent. The figure below outlines the model developed for this study:

4. Text Analysis

Example #1 :

The table below shows the English words that are pronounced with an Arabic accent, taken from

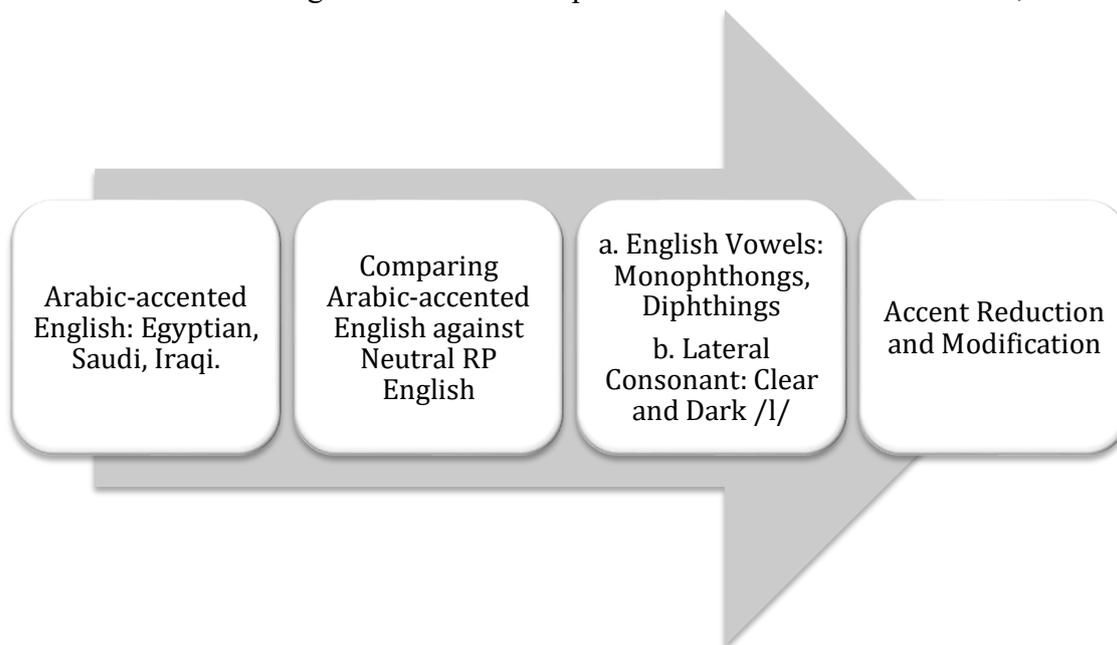


Figure 1. The Model of the Study

the speech of the Egyptian Ambassador.

Table 1. English words with Egyptian Arabic Accent

Word	Arabic Accented	RP Pronunciation
Forward	/fɔwɔrd/	/'fɔ:wəd/

More	/mɔːr/	/mɔː/
Participation	/pɑːtɪsɪpeɪʃən/	/pɑː tɪsɪ' peɪʃən/
Stakeholders	/steɪk'hɔʊldəz/	/'steɪk həʊldəz/
Role	/rɒl/	/rəʊl/
Sector	/sektə/	/'sektə/
Importance-Importantly	/ɪmpɔːtəns/-/ɪmpɔːtəntli/	/ɪm'pɔːtəns/-/ɪm'pɔːtəntli/
Adaptation-Mitigation	/ædæpteɪʃən/-/mɪtɪgeɪʃən/	/,ædæp'teɪʃən/-/,mɪtɪ'geɪʃən/
Will	/wɪl/	/wɪl/
Raising	/reɪzɪŋ/	/'reɪzɪŋ/

Commentary: Regarding the table above, it is clearly evident that there are differences in the way these words are pronounced by the Egyptian individual in line with the RP pronunciation, as a standard English. Most of the differences are attributed to vowels shifts. Changes in vowels occur due to the limited number of vowels found in Arabic (i.e., 3-5 vowels) compared to those found in English (i.e., 14-16 vowels). The precise quantity is not the crucial aspect; rather, it is noteworthy that English possesses three times the number of distinct and separate vowel sounds compared to Arabic, excluding diphthongs (Tharpe, 2014). Other cases are the different pronunciation of /r/ sound. It is not pronounced when occurs in the middle and final position in RP English (Underhill, 1994). Exceptions are found in instances of linking and intrusive /r/ and in American /r/. In the examples above, it is pronounced in every position. Moreover, the pronunciation resembles the the Egyptian dialect of Arabic /r/ rather than the English /r/. The Arabic rolled /r/ is generally known as an apical-alveolar trill (Yavas, 2006), which differs from the one found in RP. Additionally, /ŋ/ does not exist in the Egyptian dialect of Arabic, therefore it is pronounced as /ŋg/. Ultimately, Egyptian people often pronounce /l/ in its light variation rather than its dark one; this is reflected in English words such as “will” → /wɪl/ rather than the English /wɪl./

Example #2:

The table below shows the English words that are pronounced with a Saudi Arabic accent, taken from the speech of the Saudi Ambassador.

Table 2. English words with Saudi Arabic Accent

Word	Arabic Accented	RP Pronunciation
Introduction	/əntɹɔdʌkʃən/	/,ɪntɹə'dʌkʃən/
World	/wɔːrld/	/wɜːld/
Organisation	/ɔːrgənəzeɪʃən/	/,ɔːgənəɪ'zeɪʃən/
Flagrant	/flægrənt/	/'fleɪgrɪnt/
Struggle	/'strʌgəl/	/'strʌgl/
Coalition	/kɔːlɪʃən/	/,kəʊə'lɪʃən/
Conduct	/kɔːndʌkt/	/kən'dʌkt/

Reciprocal	/rɪsɪprəkəl/	/rɪ'sɪprəkəl/
------------	--------------	---------------

Commentary: Concerning Table 2., and like the Egyptian pronunciation, most cases are ascribed to vowel change, especially when /aɪ/ is changed into /ə/, or /ə/ is changed into /ʊ/ as in ‘conduct’. Other instances pertain to the syllabic consonants, namely, /l/ and /ŋ/. Arabic sound system prohibits consonant clusters and it does not include syllabic consonants as well. This can be seen in the pronunciation of words such as ‘struggle’ where /l/ should be pronounced as a syllabic. Dark /ɫ/ occurs after vowels, before consonants, and as syllabic (Underhill, 1994). However, the Saudi ambassador inserts a schwa before /l/, the same is found with syllabic /n/. Regarding the pronunciation of “conduct”, “flagrant”, “reciprocal”, and “world”, the Saudi ambassador pronounces the words as they are written, i.e., the pronunciation resembles the orthography of the words.

Example #3:

The following table displays how the Iraqi ambassador pronounces some English words with a foreign accent.

Table 3. English words with Iraqi Arabic Accent

Word	Arabic Accented	RP Pronunciation
Important	/ɪmpɔrtənt/	/ɪm'pɔ:tnt/
Close (n.)	/kləʊz/	/kləʊs/
Here	/hi:r/	/hɪə/

Commentary: Table 3 highlights three instances, with the first one pertaining to the absence of the syllabic /n/ sound in the pronunciation of the Iraqi individual. The second is regarded as a mispronunciation rather than a correct one with an Arabic accent. The Iraqi ambassador articulates "close," which is a noun according to the context of his speech, as /kləʊz/, which is a verb. The third instance is related to the pronunciation of Arabic rolled /r/, which is neither RP nor American Standard English.

4. Results and Discussion

The Socio-phonetic analysis is conducted qualitatively based on the three steps of the developed model of the study. The selected data includes speeches of three Arab ambassadors, namely, Egyptian, Saudi, and Iraqi ones. They are all males. They all represent a highly esteemed position in their countries. They live abroad; however, the impact of their mother tongue (the regional dialect of Arabic) is evident in their English pronunciation. Phonologically, differences in pronunciation and accent are ascribed to changes in vowels. Arabic and English vowels do not show correspondence. Therefore, Arabic vowels are often substituted for English ones that are similar, but not identical, in articulation area. Moreover, the lack of knowledge about the variants of the lateral consonant /l/ paves the way for foreign accent. The ambassadors pronounce /l/ only in its clear allophone, never in its dark one. Finally, some English words are written identically but do not share the same meaning and pronunciation, such as ‘close’ as noun, and ‘close’ as a verb. This is an example of homographs. In light of these findings, the study presents some suggested

methods and strategies to overcome such deficits in pronunciation, as detailed in the following section.

5. Suggested Methods and Strategies

All the examples presented in the aforementioned tables are categorised as segment-level occurrences. It is evident that the speech of the ambassadors in question exhibits unnatural or non-native-like patterns, despite their qualifications, high level of education, and the esteemed positions they represent.

It is normal for non-native speakers of English to have a foreign accent; however, for those who are interested, there are some common methods and strategies that help minimising the accent to sound more like the native individuals. The selection of one particular method or a combination of methods is contingent upon the unique preferences towards learning, objectives, and the specific obstacles presented by the learner's mother tongue and the desired language or dialect. Accent reduction is a gradual endeavour, requiring consistent practice and feedback to attain success; these include:

1. **Speech Therapy:** Though it is rare to find in Arab countries, consulting a speech therapist is one of the best strategies that helps reduce the foreign accent. Such coaches focus on the points of weakness of the speakers' pronunciation.
2. **Phonetic Transcription:** Phonetic and phonological education and awareness aid speakers in knowing the correct pronunciation of words by studying their IPA transcription.
3. **Audio Recordings and Self-evaluation:** It is useful to record your own's speech and listen to it, as well as compare it to the native pronunciation. It can be helpful to hear your own speech in order to pinpoint any areas that require improvement.
4. **Practice and Repetition:** Practice makes perfect. Reducing accents requires practice. This is achieved by repeatedly pronouncing words correctly.
5. **Stress and Intonation Patterns:** Arabic speakers of English ought to use the English intonation patterns rather than those of Arabic. The same is true concerning the correct placement of stress.
6. **Listening and Imitation:** In order to speak fluently and in a correct manner, a speaker should also perceive and listen to native speakers and tries to imitate them. Imitating the native speakers definitely helps in accent reduction and modification.
7. **Technology-Based Tools:** There are a number of online resources, smartphone apps, and software programmes available for accent reduction. Such resources come with speech recognition features, audio samples of native speakers, and interactive exercises and drills of word pronunciation.
8. **Language Immersion:** Accent reduction can be accelerated by fully integrating oneself with the target language's culture and language. This is achieved by watching English films and listening to English songs. Furthermore, it can be very beneficial to live in an area where English is spoken and have regular conversations with native speakers.
9. **Group Classes and Workshops:** A lot of English learning centres provide group sessions and workshops with a focus on accent reduction. The same method is conducted in most Arabic schools.

10. Comments from Native Speakers: It is very helpful to get comments from native speakers who can identify particular areas that need work. One useful tactic is to converse with fluent speakers and ask for their feedback.

6. Conclusion

This study clarifies the complex connection between social factors and Arab speakers' pronunciation of English. The research highlights the differences in pronunciation and foreign accent of English that the ambassadors from Egypt, Saudi Arabia, and Iraq have displayed. These foreign accents are attributed to the negative transference of linguistic habits from the speakers' local Arabic dialects; in other words, a psycholinguistic aspect has been activated and triggered by underlying sociolinguistic factors. The research adds to a better understanding of sociolinguistic influences on foreign language pronunciation by pinpointing particular phonetic deviations from RP.

Common accent patterns are demonstrated through a practical analysis that highlights consonant pronunciations, vowel shifts, and /l/ allophones. Arabic and English systems of vowels do not show total correspondence. Consequently, Arabic vowels are often substituted for English ones that are similar in articulation area. Moreover, the Arabic sound system prohibits consonant clusters; that is, it does not include syllabic consonants, such as /l/. That is why Arabs tend to pronounce it as clear /l/. The recommended techniques and approaches offer a thorough guide for Arab English speakers who want to lessen the noticeable foreign accent. These suggestions, which recognise the value of constant practice, constructive criticism, and cultural immersion, are meant to assist people in improving their communication abilities and sounding more like native English speakers.

References

- Deshaies-Lafontaine, D. (1974). *A socio-phonetic study of a Québec French community: Trois-Rivières (doctoral dissertation)*. University College London.
- Drager, K. (2010). Sociophonetic variation in speech perception. *Language and Linguistics Compass*, 4(1), 473-480. doi:10.1111/j.1749-818X.2010.00210.x
- Edwards, J. (2013). *Sociolinguistics: A very short introduction*. Oxford University Press. doi:10.1093/actrade/9780199858613.001.0001
- Foulkes, P., Scobbie, J. M., & Watt, D. (2010). Sociophonetics. In W. J. Hardcastle, J. Laver, & F. E. Gibbon (Eds.), *The handbook of Phonetic sciences* (2nd ed., pp. 703-754). Blackwell. doi:10.1002/9781444317251
- Giles, H., & Powesland, P. (1975). *Speech style and social evaluation*. Academic press. doi:10.1002/ejsp.2420100113
- Hardcastle, W. J., Laver, J., & Gribbon, F. E. (2010). *The handbook of phonetic sciences*. Blackwell. doi:10.1002/9781444317251
- Hay, J., & Drager, K. (2007). Sociophonetics. *Annual Review of Anthropology*, 36(1), 89–103. doi:https://doi.org/10.1146/annurev.anthro.34.081804.120633
- Jurafsky, D., & Martin, J. H. (2008). *Speech and language processing: An introduction to natural language processing, computational linguistics, and speech recognition*. Prentice Hall.
- Labov, W. (1966). *The social stratification of English in New York city*. Center for Applied Linguistics. doi:10.1017/CBO9780511618208

- Labov, W. (1972). *Sociolinguistic Patterns*. Blackwell.
- Ladefoged, P., & Broadbent, D. E. (1957). Information conveyed by vowels. *Journal of the Acoustical Society of America*, 29(1), 98-104. doi:10.1121/1.1908694
- Strand, E. (1999). Uncovering the role of gender stereotypes in speech perception. *Journal of Language and Social Psychology*, 18(1), 86-99. doi:10.1177/0261927X99018001006
- Tharpe, P. (2014). *English pronunciation, intonation and accent reduction for Arabic speakers: Teacher's guide*. APC.
- Thomas, E. R. (2002). Sociophonetic applications of speech perception experiment. *American Speech*, 77(1), 115-147. doi:10.1215/00031283-77-2-115
- Underhill, A. (1994). *Sound foundations: Learning and teaching pronunciation*. Macmillan.
- Walton, J. H., & Orlikoff, R. F. (1994). Speaker race identification from acoustic cues in the vocal signal. *Journal of Speech and Hearing Research*, 37(1), 738-745. doi:10.1044/jshr.3704.738
- Yavas, M. S. (2006). *Applied English Phonology*. Wiley. doi:10.1002/9781444392623

Appendix

The Egyptian Ambassador Interview: <https://www.youtube.com/watch?v=xFlesIHrOMw>

The Saudi Ambassador Interview: <https://www.youtube.com/watch?v=hlt2EptjS9U&t=172s>

The Iraqi Ambassador Interview: <https://www.youtube.com/watch?v=GpsRngPxCAA>