

The Difficulties Of Managing Stress Assignment In The Pronunciation Of English By Iraqi Arabic Learners

Ahmed Ali Hussein AlMuselhy

Ministry of Education, Iraq

ahmed80ali2018@gmail.com

Abstract

Few studies have focused on how Arabic-speaking students' L1 interference affects the stress they assign to English. This study investigates whether Arab learners' incorrect stress attribution is random or systematic. The research also intends to determine whether there is a connection between the phonotactic rules of stress placement in Arabic and the stress misplacement that Iraqi learners of English experience. At random, sixty students from three different English proficiency levels at Al Anbar University: lower-intermediate, upper-intermediate, and advanced. All of the morpho-syllabic word structures the students often mispronounced were included in the 50 stimulus words the teachers had them say. The recordings were analyzed by two independent raters and Praat spectrogram software. Research indicates that learners may have been influenced by other languages to do the following: a) consistently stress one syllable even though the word has different meanings depending on the other stress assignments; b) Misplace stress regardless of their level of English competence; c) Stress the penultimate syllable in the majority of polysyllabic words; d) Stress the second syllable in contracted negative auxiliary verbs; and e) Stress the second item in a compound noun rather than the first item in the composite noun.

Keywords: Iraqi; Arabic learners; Stress Assignment; Syllable Structure; Cluster Rules; Cross-Linguistic Effect

INTRODUCTION

Linguistics, applied linguistics, and the study of foreign language acquisition have all been involved in a significant amount of debate on the impact that a person's first language (L1) has on the process of learning a second or foreign language. This field of inquiry continues to grow because to scholars like Ringbom (1992), Robinson (2008), and Han (2004). According to much of the literature, a person's first language (L1) influences their foreign language learning more as they get older. Mashaqba et al. (2021). Children's speech acoustics differ from adults' from age four, according to research. Within a year, these representations resemble grownups. This suggests that as soon as five years old, one's first language (L1) may influence language learning.

Ringbom (1992) states that a person's first language (L1) might affect their second language learning in two ways. Positive linguistic structure has identical or similar patterns in both languages. This arrangement improves learning. In contrast, negative language transfer occurs when unrelated languages are learnt, hindering language acquisition. L1 does not necessarily affect L2 acquisition, say Lightbown and Spada (2000). The authors say second language acquisition research has revealed that learners' knowledge and use of the second language are similar regardless of their first language. Page 198 contains this information. These hypotheses will explain the current study's

attempt to evaluate if Arab learners' inaccurate stress placements in English are influenced by their first language (L1). The crosslinguistic effect of pronunciation has received much investigation. Proper pronunciation separates native speakers from non-natives. Second-language (L2) learners' pronunciation has been studied extensively. These include L2 learners' pronunciation difficulties, as examined by Farrah and Halahlah (2020), and Thomson and Derwing (2015). Shabani and Alipoor (2017) examined cultural identification and EFL learners' pronunciation. Lasagabaster and Sierra (2002) explored native and non-native English speakers' pronunciation preferences, whereas Bouselmi et al. (2012) developed models for non-native speakers. Since pronunciation is so crucial, the ongoing and diversified study on first language (L1) influence on pronunciation has been vital for decades.

Stress is important in English and other languages. Studying how the learner's native language (L1) affects stress placement in a second language (L2) is important in crosslinguistic effect. According to Karjo (2016), learners may mistakenly place stress in their second language (L2) in a way that is comparable to how sounds can be blended in L1. This study investigates why Iraqi EFL learners place emphasis incorrectly in English. The goal is to discover the implications for learners, educators, and English Language Teaching (ELT) professionals interested in how native language affects English word pronunciation. This study focusses on Iraqi English learners. However, this study may equally apply to Arabic-first language learners from other Middle Eastern countries. Stress assignment is a difficult component of English learning for many EFL learners, so this study may be relevant to other EFL learners.

The stressed syllable is often heard louder than the unstressed syllables; sometimes, it also lasts longer and has a different pitch than the rest of the word. A word's stressed syllable could also sound significantly different from the rest of the word's syllables (Roach, 2009). "A stressed syllable is usually produced by pushing more air out of the lungs in one syllable relative to others..." (Ladefoged and Johnson 2014). Respiratory energy is consequently higher for stressed syllables compared to unstressed ones in the surrounding area" (p. 119). Note that it is oversimplifying things to classify syllables as stressed or unstressed. This is due to the fact that stress in English can exist on several levels; for example, in words with multiple syllables, there can be both main and secondary emphasis on different syllables, as well as unstressed syllables (Mattys, 2000).

The researchers will focus on the stressed/unstressed binary distinction for this study because, first, many words have only one stress and, second, the secondary stress is difficult to identify in polysyllabic words and therefore outside the scope of this investigation. Phonemic stress is the basis for English stress (Giegerich, 1992). Shifting emphasis from one syllable to another within a word can distort the pronunciation or change the meaning of that word; as a result, there are well-defined rules that determine where stress should go and how it should effect a word's meaning. O'Connor (1998) argues that this is why it is so important to know how to pronounce a word correctly, including how to place stress within it. Take the word "import" as an example. It can be pronounced as a noun if the stress is on the first syllable /**Imp**O:t/, or as a verb if it's on the second syllable /Imp**O:t**/.

Arabic accent is not phonemic, unlike English. Stress does not affect a word's grammatical category—noun, adjective, adverb, etc. Moving stress from one syllable to another does not change the meaning of a word. In Arabic, "thahab" can imply gold as a

noun or someone went as a sentence. Making something disappear is called 'athabah'. The first syllable (athhabah) is usually emphasised. However, shifting the stress to the second syllable (athhabah) preserves the word's meaning.

Anani (1989) examined how L1 phonology affects stress misplacement in Arab-spoken English. Six native American English speakers and six EFL learners from Jordan were compared for word stress placement. He found a high possibility that Iraqi EFL learners mispronounced English word stress when the syllable pattern matched Arabic.

In recent years, Arabic stress patterns have garnered attention. Notably, Ryding (2005) studied this. Watson (2011) and Halpern (2009) provide the most in-depth explanation of stress in Modern Standard Arabic (MSA). The current study examines whether Watson and Halpern's Arabic syllable types and stress assignment criteria affect Arabic-speaking EFL learners' erroneous stress creation in English. This study uses phoneticians' literature-based acronyms and symbols.

Watson (2011) and Halpern (2009) classify MSA syllables as light, heavy, and superheavy.

1. Light syllables are generated by a consonant and a short vowel (CV), such "for" (/li/) and "and" (/wə/).
2. heavy syllables have a consonant, long vowel, diphthong, or short vowel and another consonant. In the phrase *كَيْ* (meaning "in order to"), the syllable /kaɪ/ is a heavy syllable due to its CVd structure. In the word "thankful" (*شَاكِرٌ* /ʃaker/), the first and second syllables are heavy (CVL and CVC).
3. superheavy syllables have a consonant, long vowel, diphthong, one consonant, or a cluster of consonants followed by a short vowel. Words like "صيد" (pronounced /s'i:d/) have a consonant-vowel-long consonant pattern (CVLC). The word "جوز" ("nut"), pronounced /ʒuz/, follows a CVdC pattern. The word "كسب" (pronounced /kasb/) has a consonant-vowel-consonant-consonant pattern.

Watson and Halpern's Modern Standard Arabic (MSA) stress norms will be used throughout the talk: 1) The last superheavy syllable of a word is stressed heavily, regardless of its length. 2) A stressed monosyllabic word emphasises its single syllable. 3) Disyllabic terms emphasise the first syllable unless the second is superheavy. 4) In words with three or more syllables, heavy or superheavy second-to-last syllables are stressed. Light words emphasise the antepenultimate syllable.

The purpose of this research is to find out if the incorrect stress assignment in English pronunciation by Iraqi Arabic-speaking EFL learners is random or systematic. This study also aims to find out if there are stress misplacement patterns by employing spectrograms and other objective technical methods. An important goal of this research is to try to figure out how Iraqi English as a foreign language (EFL) students deal with stress misplacement and how it relates to the phonotactic laws of stress placement in MSA. These are some of the questions that this research will try to answer does stress misplacement in English words tend to be more consistent or uniform when spoken by Iraqi Arabic speakers learning English, or is it more of a chaotic phenomenon? What factors in the first language (L1) could be driving Iraqi English learners whose native language is Arabic to continuously and systematically misplace stress when speaking English? Is there a correlation between the level of English competence and the possibility that Iraqi EFL learners may misplace their stress?

While this research sheds light on vowel change in misspelt words, it doesn't say if stress shift is the source or the effect of this phenomenon. In order to better

understand how EFL speakers vary the stress on a vowel sound, researchers could look into this correlation. Auxiliary verbs and prepositions are also disregarded in the paper.

METHOD

According to the findings of the current investigation, the researchers have collected data on pronunciation from a total of sixty individuals. At Al Anbar University in Iraq, each and every student is registered for the Bachelor of Arts program that is offered in the English department. It was throughout the course of the academic year 2023-2024 that the data was collected. Each and every one of the participants was a native spoken Arabic speaker. Random selection was used to choose them from among people with varying levels of English proficiency. At AlAnbar University, there were a total of twenty students who had successfully completed one or two semesters as English majors. These students were beginning the first stage of their academic careers. From CEFR A2 to CEFR B1, their level of English proficiency ranged from A2 to B1. Within the group of twenty students who had successfully completed two years of English majoring at Al Anbar University, they had reached the level of the CEFR B2 standard. Twenty students were in the last semester of their four-year program and had achieved the CEFR C1 level. They were all on the same level, these kids. In order to determine if Iraqi EFL learners only experience misplaced stress at certain competence levels or if it is a phenomenon that happens to both advanced and fluent learners, participants were chosen from a range of English proficiency levels.

To support their claims about stress assignment, the researchers compiled a list of 50 carefully selected English words. Complete sentences including the stimulus words were produced. The inclusion of whole sentences containing the stimulus words was crucial in ensuring that the participants' pronunciation remained authentic to their typical style. In order to keep the participants in the dark about which specific lexical phrase within the utterance was of interest to the researchers, the stimulus words were placed inside larger utterances. The participants were instructed to repeat each sentence at a similar pace with a brief interval of one or two seconds in between to guarantee that the data obtained was accurate and that the stimulus words were pronounced clearly. In a controlled setting, the participants supplied the data. In order to ensure that no participant is affected by the pronunciation of others, the researchers visited with each participant individually in a computer lab. They were provided with a computer and a headset, and asked to read the stimulus sentences aloud so that they could record their readings into a computer using the Praat software version 6.2.23, "it is a cost-free desktop program dedicated to those studying linguistics. In particular, it is an audio package that is capable to analyze, synthesize, and manipulate speech. Simply through your computer, you have all the power to do phonetics. It provides a wide range of standard and non-standard procedures, including spectrographic analysis, articulatory synthesis, and neural networks". The Praat software was utilized to precisely ascertain where the participants' stress was supposed to go in their pronunciation. Following the transcription of each participant's pronunciation into Praat, the software produced a spectrographic depiction of the pronunciation. This enabled researchers to readily determine the most salient syllable in a word by analysing variations in loudness, duration, or quality throughout the data. The researchers employed the Praat methodology to ensure the dependability and impartiality of their study. The software's graphical depictions of the elicited pronunciations enabled the researchers to circumvent observational bias, therefore

preventing them from merely relying on auditory perception to determine the pronunciation and location of stress in each word.

To accommodate the 60 participants, the researchers created 60 folders. Each of the 50 phrases concluded with 50 stimulus words. After finishing the recording of each participant, the researchers stored the audio recording as a WAV file and the spectrograph for the respective sentence as a jpeg file in the folder designated for the person. The operation concluded with the inclusion of 50 spectrographs and 50 WAV audio files in each of the 60 folders, each representing the 50 sentences.

As can be seen in Table (1) below, the fifty stimulus words were chosen with great care in order to effectively cover a broad spectrum of syllable patterns and stress assignment difficulties, both of which are areas in which students frequently make errors.

Table 1. The Fifty Stimulus Words Cover A Broad Spectrum Of Syllable Patterns And Stress Assignment Difficulties

Category No.	Stimulus words	Reason for their use / specific function they accomplish
1.	baseball; bedroom; keynote; mailbox; eyelid; football; handcuffs; drugstore	If a stress placement pattern was discovered in these compound nouns, which were formed of a noun plus another noun, it would be logical to predict that it would be kept for words with a similar morpho-syllabic structure. This would be the case if the majority of the participants' pronunciations were taken into consideration.
2.	eyebrow; earache; mid-night; firearm; bluebird ; cowboy	Due to the fact that many students have a tendency to stress both syllables equally in certain formulations, the compound nouns that are provided here offer a problem with emphasis placement.
3.	Also; compute; result; Happy; kingdom; fortune; Candle; syntax, nation	The purpose of utilising these disyllabic words was to investigate the manner in which the participants' speech revealed patterns of stress assignment in English words that are difficult to pronounce.
4.	Aren't; isn't; wasn't; shouldn't; haven't; couldn't; hasn't; mustn't	These are disyllabic. Why Iraqi learners emphasis these negative auxiliaries on the second syllable rather than the first can be determined from their pronunciation.
5.	teacher; instructor; suddenly; cleverness; presented; creative; creatively; positive; positively; distinctive; distinctively; wonderful; cowardly; efficiency	They are polysyllabic too. They were also used to analyse polysyllabic word stress patterns and determine how suffixes like -er, -or, -ly, -ness, -ive, -ed, -cy, and -ful affected stress assignment.
6.	permission; attention; mission; realization; position; transition; organic; pacific; academic.	The English suffixes -tion, -sion, and -ic affect word stress. Therefore, it is of interest to evaluate whether Iraqi learners accurately put stress in suffixed words following English phonotactic principles or wrongly but systematically due to their first language.
7	No monosyllabic words were put to use.	Second language learners frequently find monosyllable stress placement easy. English words with one syllable are either unstressed or stressed on that syllable (see section 1.2).

The main objective of this investigation was to determine whether the phonology of the learner's L1 had any bearing on the pronunciations and mispronunciations that were produced by comparing them to the rules of stress placement in MSA.

After collecting data from 60 participants, the researcher attentively listened to each tape and transcribed each participant's pronunciation of each of the 50 stimulus words using International Phonetic Alphabet (IPA) symbols. This study focusses on stress assignment, but we transcribed each stimulus word in IPA. Because the talk will also include vowel alteration and other mispronunciation factors. The transcription accurately recorded each word's stress as pronounced.

The researcher used Praat spectrographs to locate stress. Figure 1 shows how praat accurately depicted the wave length and amplitude of each sound in every spoken syllable. This clearly identified the stressed syllable. After listening to the recordings, two phonetics and phonology experts independently analysed them to ensure inter-rater reliability. Disagreements were settled and a stress placement was determined after researchers and raters met.

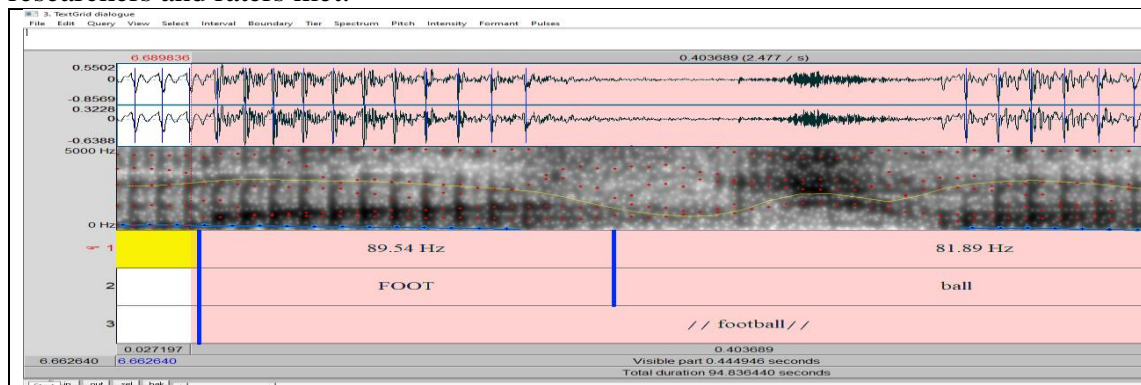


Figure 1. Tonic Syllable

An analysis of Praat spectrographic representations of correct pronunciation of the word 'Football' by participants and its deviation from IPA transcription.

The researcher then created a table that contained the fifty stimulus words, their correct IPA transcriptions (which were copied from the Cambridge English Pronouncing Dictionary-17), their incorrect IPA transcriptions (which were generated using Praat analysis), as well as the count (n) and percentage (100n/120) of participants who caused stress misplacement for each stimulus word.

RESULTS AND DISCUSSION

All participants accurately pronounced fourteen stimulus words. Furthermore, the aforementioned terms were "football, also, compute, teacher, instructor, happy, suddenly, cleverness, kingdom, tiger, creative, caution, distinctive and positive." All respondents incorrectly placed stress in 16 words. All respondents, save four, misplaced stress in 11 given words. Over 100 participants, or more than 83% of the participants, produced incorrect pronunciations for each of the remaining words.

Table 2. Stimulus Words And Incorrect Pronunciations

Category	Phonological stimulus and their accurate pronunciations (A stressed syllable is preceded by the stress mark ')	Mispronunciations		
		Identification of IPA transcriptions for incorrect pronunciations.	Count of Participants exhibiting inaccurate	Pronunciation error percentage (out of 60 samples)

			pronunciations (out of 60)	
1.	Baseball / 'beɪs.bɔ:l/ Bedroom / 'bed.rʊm/ keynot / 'ki:.nəʊt/ mailbox / 'meɪl.bɒks/ eyelid / 'aɪ.lɪd / football / 'fʊt.bɔ:l/ handcuffs / 'hænd.kʌf/ drugstore / 'drʌg.stɔ:/	/ beɪs.'bɔ:l/ / bed.'rʊm/ / ki:.'nəʊt/ / meɪl.'bɒks/ / aɪ.'lɪd / / hænd.'kʌf/ / drʌg.'stɔ:/	20 3 5 23 11 0 35 9	33% 5% 8.33% 38% 18.33% 0% 58.33% 15%
2.	eyebrow / 'aɪ.brəʊ / earache / 'iə.reɪk/ mid-night / 'mɪd.naɪt / firearm / 'faɪər.ɑ:m/ bluebird / 'blu:.bɜ:d / cowboy / 'kaʊ.bɔɪ /	/aɪ.'brəʊ/ /iə.'reɪk/ /mɪd.'naɪt / /faɪər.'ɑ:m/ /blu:.'bɜ:d / /kaʊ.'bɔɪ /	24 7 13 42 29 35	60% 11.66% 21% 70% 48% 58
3.	Also / 'ɔ:l.səʊ/ Compute / kəm 'pjʊ:t / Result / rɪ 'zʌlt/ Happy/'hæp i/ Kingdom / 'kɪŋ.dəm/ Syntax / 'sɪn.tæks/ Nation/ 'neɪ.ʃn/	/ɔ:l.'səʊ/ / 'kəm pjʊ:t / / 'rɪ.zʌlt/. / kɪŋ.'dəm/ / sɪn.'tæks/ / neɪ.'ʃn/	35 40 0 5 10 0	58% 80% 0% 8.33% 20% 0%
4.	Aren't / 'ɑ:nt/ Isn't / 'ɪz.ənt/ wasn't / 'wɔ:.znt/ shouldn't / 'ʃʊd.nt/ haven't / 'hə.vnt/, couldn't / 'kʊ.dnt/. hasn't / 'hæ.znt/, mustn't / 'mʌs.ənt/	/ɑ:r.'ɪnt/ / ɪz.'ɪnt/ /wɔ:.'zɪnt /ʃʊd.'ɪnt/ /hə.'vɪnt/, /kʊ.'dɪnt/. /hæ.'zɪnt/, / mʌs.'ɪnt/	58 46 56 47 49 53 53 54	96% 76% 93% 78% 81% 88% 88% 90%
5.	Teacher / 'ti:.tʃə/ Instructor / ɪn'strʌk.tə/ Suddenly / 'sʌd.ənli/ Cleverness presented / prɪ'zentɪd/ creative / kri'eɪ.tɪv/ creatively/ kri'eɪ.tɪv.li/ positive / 'pɒz.ə.tɪv/ positively / 'pɒz.ə.tɪv.li/ distinctive / drɪ'stɪŋk.tɪv/ distinctively / drɪ'stɪŋk.tɪv.li/ wonderful / 'wʌn.də fʊl/ cowardly / 'kaʊəd.li/ efficiency/ ɪ'fɪʃ.ənt.si/	/ ti:.'tʃə/ / 'ɪn.strʌk.tə/ / sʌ.'dɪn.li/ / pr.ɪzen.'tɪd/ / prɪ.zen.'tɪd/ / kri.eɪ.'tɪv/ / kri.eɪ.'tɪv.li/ / pɒz.ə.'tɪv/ / pɒz.ə.'tɪv.li/ / pɒz.ə.'tɪv.li/ / drɪ.'stɪŋk.tɪv/ / drɪ.'stɪŋk.tɪv.li/ / wʌn.də fʊl/ / dɪs.'tɪŋk.tɪv.li/ / wʌn.'də fʊl/ / kaʊəd.'li/ / ɪfɪ.'ʃ.ənt.si/	33 14 24 15 30 16 33 14 16 20 22 32 19 41	55% 33% 40% 25% 50% 26.66% 55% 23% 26% 33% 36% 53% 31% 68%

6.	Permission / ə'mɪf.ənpə'mɪʃn/	/	30	50%
	Attention / ə'ten.tʃn/	pə'mɪf.ənpə'mɪʃn/	23	38%
	Mission/ 'mɪf.ən/	/ əten.'tʃn/	27	45%
	Realization / ,rɪə.laɪ'zeɪ.ʃn/	/ mɪ.'ʃi.ən/	54	90%
	Position / pə'zɪf.ən/	/ ,rɪə.laɪ.zeɪ.'ʃn/	41	68%
	Transition / træn'zɪf.ən/	/ 'pə.zɪf.ən/		
	Organic / ɔ:'gæ.n.ɪk/		36	60%
	Academic / ,æk.ə'dem.ɪk/	/ træn.zɪ.'ʃn/	27	45%
		/ ɔ:gæ.'nɪk/	33	55%
		/ ,ækə.de.'mɪk/		

Table 2 shows that most responders who misplaced stress made the same mistake. The stress error will be analysed using MSA phonology concepts from section 1.2 because their native language phonology is likely to be the cause. In reference to "light," "heavy," and "superheavy" refer to Arabic syllable structures, not English ones. This study will employ these classifications to relate to English syllables from the Arabic-speaking learner's perspective. The study seeks to investigate if Iraqi EFL learners unwittingly use their native language's phonotactic norms when speaking English.

Compound Nouns (Categories 1 and 2)

"Bedroom" and "football" have first-syllable emphasis in English (Roach 2009). All 60 survey participants emphasised football's second syllable, while all but three focused on bedroom. Table 2 shows the same pattern for category 1 chemicals except "eyelid". Whatever their English level, most speakers mispronounce this stress. Cross-linguistic influence may explain this error. Bedroom and football have superheavy and CVLC second syllables, according to MSA-speaking learners and their first language phonology. Second-syllable CCV.CC is superheavy. MSA phonology emphasises superheavy final syllables (Rule 1 in section 1.2). Arabic learners of English rarely assign compound noun stress according to English phonology, instead using their L1 phonology. Every student pronounced compound eyelid correctly. The syllable structure of this word is unique in category 1: VCVC. Students may have pronounced this word correctly for two reasons. MSA phonology stresses the first syllable of a disyllabic word if the second is not superheavy, therefore they either recognised the correct pronunciation or were influenced by their L1.

Category 2 compounds were harder to detect due to stress. Except for 8 people, all compounds were mispronounced. 22 people pronounced firearm with the second syllable stressed, whereas 20 did not. A total of 28 students placed equal emphasis on both of the component words. This may not be explained by the MSA stress principles because Arabic does not require numerous main stresses to be present in a single word. The structure of the Arabic second component /ʔɑ:rm / may be in conflict with the classification utilised by English phoneticians: The /ɑ:m/ sound is a long vowel that is followed by a consonant in British English communication. A syllable structure known as VCC is used in rhotic accents spoken in the United States and Canada. Due to the fact that Arabic may contain a glottal stop (/ʔ/) followed by a long vowel and consonant cluster (/r/ and /m/), the transcription that is most suitable is /ʔɑ:rm/ This superheavy syllable, CVCC, is something that people who speak Arabic hear. It is possible that this is the reason why seventy percent of students emphasised the second syllable of the word "firearm." There is a school of thought among phoneticians that asserts all vowel-launching words in English have glottal stops. This explanation—that the word arm above

is superheavy rather than heavy—will only apply to the pronunciation of English as a Foreign Language speakers since syllable weight does not affect stress placement in English in the same way that it does in Arabic. All chemicals that fall within category 2 are subject to the same concerns.

Disyllabic Words (Categories 3 and 4)

"Happy," "Defend," "Computer," "Kingdom," and "Nation" were the stimulus words that were correctly spoken by all of the respondents. Under the assumption that they spoke the words correctly, the participants may have appropriately placed the stress in four terms that aligned with Arabic phonology. This is because Iraqi learners of English sometimes misplace the stress in English words. When seen from the perspective of MSA, the second syllable of Protect is a fantastic CVCC. It is always the final superheavy word that receives the major stress, as stated in Rule 1 of Section 1.2. The word "protect" may have been emphasised appropriately as a result of this. When it comes to calculating, the same argument applies. Both "Happy" and "nation" are examples of disyllabic words, with syllable patterns of CV·CV and CV·CVC, respectively. Because they were aware of how to pronounce things, they were able to do it by themselves. There is a possibility that the pronunciations were impacted by MSA conventions and were, by chance, right. When it comes to disyllabic words, MSA phonology places an emphasis on the first syllable, unless the second syllable is superheavy.

"Happy" and "nation" are two words that have second syllables that are not particularly hefty. It's possible that this is the reason why the participants emphasised the first syllable. The initial vowel in joyous is pronounced shorter by Arab speakers of English as a foreign language than it is by native English speakers, which may cause the emphasis in this context to sound even more intense.

The majority of the participants pronounced the word "also" /ɔ:l'səʊ/ incorrectly as /'ɔ:l.so/, with the emphasis being placed on the first syllable and the diphthong in the second syllable being reduced to a monophthong during the pronunciation process. In the pronunciation of /'ɔ:l.so/, the pronunciation of the second syllable /so/ is light (CV), which shifts the stress to the first syllable. One thing that should be taken into consideration is that the monophthongization of the diphthong /əʊ/ in the second syllable does not have any impact on the assignment of stress. Following monophthongization, a heavy syllable (CV) was transformed into a light syllable. It is recommended by MSA phonology that the first syllable of a disyllabic word be emphasised because the second syllable does not have a superheavy accent. Because the second syllable of a diphthong is heavier than the first syllable of a monophthong, the word is more likely to be stressed on the diphthong than it is on the monophthong. Forty individuals said the word "result" with an incorrect pronunciation of /rɪ'zʌlt/. Only ten of the students were able to correctly pronounce the words. The incorrect pronunciation of the word was /rɪ'zʌlt/, which had a syllable pattern of CV·CVCC. For the forty students, the stress was moved from the second syllable to the first syllable, and the open vowel /ʌ/ was changed to the lax schwa /ə/. In accordance with Rule 3 in section 1, it is probable that the emphasis was not properly assigned to the initial syllable. The first syllable of disyllabic words in MSA is given more weight than the second syllable, unless the second syllable is superheavy. When the word outcome is mispronounced, the second syllable appears to be a superheavy CVCC. However, given that the vowel in question is a schwa, the students most likely realised that it could not be emphasised under any circumstances. In spite of

this, it is not quite obvious whether the students moved the emphasis to the first syllable because the second syllable included a schwa and was not stressed or because they were implementing Rule 3 in MSA phonology.

According to the findings of this study, Arab students frequently misplace the stress in contracted negative auxiliary verbs such as aren't, wasn't, doesn't, hasn't, and couldn't, amongst others. Therefore, the focus should be placed on the first syllable of contracted versions of negative verbs because these forms are disyllabic. According to Roach (2009), the phonology of the English language prevents the use of schwas or syllabic consonants to emphasise syllables. A schwa or a syllabic consonant serves as the nucleus of the second syllable in each and every one of the auxiliaries described above. The pronunciation of the auxiliary verb isn't is typically pronounced as /'ɪzənt/ or /'ɪznt/ by an English speaker. Any way you look at it, the first syllable is emphasised. The majority of individuals who are learning Arabic pronounce the auxiliaries as /ɪ'zɪnt/, /wə'zɪnt/, /dɪ'dɪnt/, /hə'zɪnt/, and /kʊ'dɪnt/. As a result of the absence of syllabic consonants in the Arabic language, a vowel /ɪ/ is epenthesized in the second syllables of auxiliaries, resulting in the syllabic structure of CV·CVCC. The vowel /ɪ/, in contrast to schwas, is capable of being stressed. Furthermore, because the second syllable in MSA is quite heavy, the stress is placed on it.

Polysyllabic Words (Categories 5 and 6)

No matter how many syllables a word has, English phonotactics highlight the penultimate syllable before the suffix (Roach, 2009; O'Connor, 1998). The disyllabic term "nation" was analysed in Section 3.2. A group of thirty-six participants repositioned the stress in the "transition" /træn'zɪʃ.ən/ from the penultimate syllable to the first syllable. Altogether, eight individuals, consisting of 14 proficient English speakers and two speakers with advanced proficiency, accurately articulated the word. Its pronunciation adheres to the CCVCCVCVC structure. As to MSA guidelines, the antepenultimate should be emphasised due to the relatively little weight of the penultimate CV. Approximately 90% of the participants mispronounced the word "realisation". The term has the syllable structure CV·CVC·CV·CVC. Given that the penultimate is light, Rule 4 in section 1.2 implies that the learners may have placed more emphasis on the antepenultimate. Erroneous pronunciation of the word "wonderful" /'wʌn.də.fl/ is identified by the syllable structure CVC·CVC.CVC. It is a polysyllabic word, and the stress misplacement can be explained by MSA phonology. This sentence highlights the substantial penultimate syllable.

An analogous rationale for the term "amazing" can be applied to the stimulus word "faculty" /fæk.lɪ.ti/. Notably, every pupil mispronounced this phrase. The pronunciation of /fæk.lɪ.ti/ varies across individuals, with some using /ʌ/ and others using /ɪ/ in /fæk.lɪ.ti/. As Arabic does not include syllabic consonants, Arabic-speaking English as a Foreign Language (EFL) learners sometimes epenthesize a short vowel into English syllables that have syllabic consonants, therefore converting them into non-syllabic ones. Based on teachers' observations, the majority of pupils (16) positioned the phoneme /ɪ/ in the second syllable. The current syllable structure of the term is CV.CV.CCV. Stress is placed on the penultimate heavy syllable in "wonderful".

Like "wonderful" and "faculty," the final heavy syllable of this polysyllabic word maintains stress, as per MSA phonology. Even at advanced levels of English proficiency,

the phonotactic principles of Modern Standard Arabic (MSA) seem to continue affecting the distribution of stress in English sentences spoken by Iraqi EFL learners.

Words such as "distinctive" / dɪ'stɪŋk.tɪv/ and "distinctively" / dɪ.stɪŋk.'tɪv.lɪ / as well as "positive" / 'pɒz.ə.tɪv/ routinely misplace stress. All subjects accurately articulated the words "distinctive" and "positive," but erroneously pronounced intuition and negativity. Introducing the suffix -ly to a word does not impact the stress in English phonology (Roach, 2009). Iraqi learners accurately highlight the unique and positive features, but they give priority to the penultimate syllable in a distinctive manner / dɪ.stɪŋk.'tɪv.lɪ / and in a positive manner / 'pɒz.ə.tɪv.lɪ /.The application of MSA stress placement principles would eliminate the ambiguity. The word "distinctive" is a polysyllabic expression characterised by a CVC.CVC.CCVC syllable structure. The students emphasised the penultimate syllable in accordance with Arabic phonology. An intuitive syllable structure of CVCCVCCCVCCV is observed. Accentuate the heavy penultimate while employing Arabic phonotactics. An adjective "positive" is a polysyllabic word characterised by a CVCVCVC syllable pattern. Although lightweight, the penultimate is incapable of withstanding stress. This may elucidate the reason why all pupils placed particular focus on the antepenultimate, which was accurately articulated. Positively is a polysyllabic word, so the same principle is applicable as with his instinctiveness. Once again, the participants underscored the penultimate.

CONCLUSION

Studies have shown that the apparently arbitrary allocation of stress in English speech by Iraqi English as a Foreign Language (EFL) learners is, in fact, a systematic process that is mostly shaped by their native language. An important degree of consistency is observed in the emphasis misplacement of English words as spoken by Iraqi learners. The provided scenario illustrates the phenomenon of negative L1 transfer as described in Ringbom's (1992) theoretical framework. However, it was not always easy to conclusively establish whether each occurrence of inaccurate placement of stress was a result of crosslinguistic effect. In some instances, the distribution of stress was ambiguous, as no syllable was assigned any auditory prominence over others, and at other occasions, the error was not uniform among all learners. Therefore, it is clear that not all cases of stress misplacements in English committed by Arabic English as a Foreign Language (EFL) learners can be exclusively attributed to the influence of their native language. Furthermore, empirical data has shown that when the proficiency of learners in the English language improves, there is an increased likelihood of rectifying, to a certain degree, errors in applying stress.

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