Misplacement of stress by Sophomore and Junior Jordanian Students Case Study: The University of Jordan/ Aqaba

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Abstracts: Stress is considered one of the most essential speech tools used by English speakers to communicate meaning. Some English speakers, especially non-native speakers of English encounter difficulties in assigning stress accurately. Therefore, this study purports to explore the effect of native language (L1) stress properties on the second language, i.e., EFL, which is the study of English by persons who reside in regions where it is not the primary language of communication. To gather the data of the study a descriptive qualitative method is used. The study’s population is the second and third-year English department students for the academic year 2022_2023. The sample of the study included 30 male and female students. The researchers designed an oral test to collect the data of the study through asking the student to pronounce words to observe where the students place stress on the words. The findings showed that there were statistically significant disparities among the students in placing stress on words, due to their gender, and their level of university study experience. One of the most important findings that the students transfer the stress rules from their mother tongue language. This study also showed that it is possible to predict Arabic word stress placement from the word's syllabic structure. Additionally, the findings showed Jordanian students have difficulty placing word stress on the right syllable. The misplacement in assigning stress to the correct place in words is attributed to the influence of the mother tongue and students' lack of awareness of the importance of stress in the English language. This study is distinguished study because it developed a model in the importance of assigning stress in English words. The findings of this study suggest that further studies in the reasons of misplacement of stress could be conducted to clarify the main reasons for misplacement of stress among non-native speakers of English.

Keywords: Stress, Misplacement, Mother Tongue, Syllabic Structure.

1. INTRODUCTION

Students in Jordanian universities whose primary area of study is not English typically need access to fluent English speakers on or off campus. Because English is not the medium of instruction for most specializations, except for some scientific fields like medicine, engineering, and mathematics, these students need to practice speaking the language in lecture rooms. English language learners (EFLs) have a 24/7 arena for real-world conversation and genuine contact with native English speakers thanks to instant messaging (I.M.) and video chat (V.C.). Many studies have been carried out to investigate the principles and rules that govern stress placement rules in English and Arabic. Betti and Ulaiw (2018) state that there is no difference between English and Arabic in terms of degrees, types and functions of stress. Also they reassure the stress as a phenomenon exists in Arabic and English language and it is not phonemic. Additionally, in both languages, it is related with strong syllables, and its main functions of stress are emphasis and contrast.

Stress assignment is essential in phonology, and the word stress is considered the starting point; in some languages like English, the words may exhibit degrees of stress. The study of stress can be taken from two points of view: production and perception. The output of stressed syllables is said to be more muscular energy than the production of stressed syllables, whereas the perception point of view states that stressed syllables are prominent. From a teaching perspective, two ideas need to be marked; incorrect stress placement is the major cause of intelligibility problems for foreign learners, and therefore a subject that needs to be treated seriously.

2. BACKGROUND

In learning English, the learner must master the language skills and its components. Language skills consist of two basic skills, which are the receptive skill and the productive skill. The reception skill consists of listening and reading skills, while the productivity skill includes speaking and writing skills. There are several components of
language that support language skill, namely pronunciation, vocabulary and grammar. Speaking skills are considered one of the important productive skills in communicating with others in order to exchange opinions or in order to express their needs in life.

Therefore, speakers must master speaking skills to reach others clearly and understandably. Hence the importance of pronouncing words correctly so that others can understand them. Some may have difficulty mastering the skill of speaking in a second language other than their native language due to the difference in the phonemic system between languages.

Children have a greater ability to acquire a second language with a sound system different from their mother tongue. As for older people, they face several problems in acquiring a new language with different vocabulary and sound system. It has been able to identify some attempts addressing the question of how second language learners can acquire the stress system of a new language by following the attempts of (Anani, 1989; El-Hassan, 1994; Aziz, 1980; Ghaith, 1993; Mobaidin, 2003). In discussing the word stress system, it is vital to remember the distinction between fixed and free stress systems. The fixed stress system is determined by morphological principles in which the phonological rules can be stated for the stress placement. The system is determined by a purely lexical fashion in which the stress is a specific part and is not determined by the rules (i.e., the free stress system). In this case, the learners do not need to memorize the stress rules of any given word; the language where the stress falls on a particular word syllable is called non phonemic stress language. For example, in Hungarian, the stress is assigned on the first syllable; in Turkish, the stress is assigned on the last syllable, and it falls on the penultimate syllable in Polish. In Russian, the stress falls on different syllables (for example, first, last) syllable of the word.

3. RESEARCH OBJECTIVES AND QUESTIONS

3.1. Research Objectives

The current study is devoted to achieving the following research objectives:

i. To explore the main difficulties facing Jordanian students in assigning stress correctly.

ii. To provide the main reasons for misplacement of stress in pronouncing words by Jordanian students.

iii. To investigate how the students can avoid misplacement in stress.

3.3. Research Questions

1. What are the main difficulties facing Jordanian students in assigning stress correctly?

2. What are the main reasons for misplacement of stress in pronouncing words by Jordanian students?

3. How do the Jordanian students avoid misplacement in assigning stress in words?

4. Literature Review

Word stress is different from one language to another. Each language has a different sound system. For instance, English language has different sound system from Arabic. The Sound Pattern of English (SPE) model (Chomsky & Halle, 1968) is relatively successful in accounting for English stress patterns. Moreover, in assigning the place of stress in English, several issues have to be considered: syntactic information; which depends on the part of speech (nouns, verbs, adjectives), morphological information; which depends on the suffixes (mono- or polyphonic syllables) and phonological information which depends on the part of the nature of the last two syllables (light vs. heavy syllable) (Kreidler, 1989). According to Cruttenden (1986) the stress assignment rules for English verbs, nouns and adjectives are under one category.
1. Compounds combining two nouns have stress on the first element. e.g. ‘TYPEˌwriterˌ, ‘SUNˌriseˌ, ‘TEAˌcupˌ, ‘SUITˌcase.

2. Compounds with an adjectival first element and –Ed at the end have stress on the second word. e.g., bad-ˈTEMperˌ, ‘heavyˌHANDeed.

3. Compounds in which the first element is a number tend to have final stress. e.g., three-ˈWHEELerˌ, ‘second-ˈCLASSˌ, ‘five-ˈFINGerˌ.

4. Compounds functioning as adverbs are usually final stressed. e.g., ‘head-ˈFIRSTˌ, ‘north-ˈEASTˌ, downstream.

5. Compounds that function as verbs and have an adverbial first element takes final stress. e.g., down ‘GRADEˌ, ‘backˌPEDALˌ, ‘illˌTREAT.

In Arabic, the SPE model is the segment–based approach adopted by Abod (1969), Brame (1971,1974), Broselow (1976), Johnson (1979), and Weldon (1980) in which the stress is encoded as a distinctive phonological feature [+ stress] is assigned to [+syllabic] segment in particular segment context.

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<thead>
<tr>
<th>Light target in bold</th>
<th>Penultimate stress</th>
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The rule should be read as the following:

i. Assigning antepenultimate stress to long words whose final syllable is not super heavy and whose penult is light.

ii. Assigning penultimate stress to disyllabic words whose last syllable is light.

iii. Assigning stress to monosyllabic words.

When applied, the most significant expansion of rule (a) takes precedence over the next most significant expansion (b), which in turn, takes precedence over (c). In other words, (a) applies before (b), which, in turn, applies before (c).

The internal structure of the syllable and its placement among the other syllables in the same word must be considered when using Arabic principles for stress. Arabic allows for extended strings of unstressed syllables known as the "unbounded system," and the location of the stress depends entirely on the word’s structure. Three different syllable lengths are allowed in Arabic: long, short, and medium (Roach, 2009).
English and Arabic are accentual systems characterized as being stress-timed languages, so it is expected that the speakers of Jordanian Arabic find some aspects of the target language's accentual system easy to learn. In English, many vowels are not found in Arabic, and the vowel quality is one of the factors that make a syllable prominent. For these reasons Arabic learners misplace stress in pronouncing English words. For example, the word "specific" will be pronounced by Arabs as 'spasifik'. As it is shown, the stress placement is on the wrong syllable, and also, the use of vowel quality in the first syllable is rendered by the Arabic speaker; instead of using schwa (ə), which is not an Arabic vowel, the open, front, short vowel \( a \) is used. (cf. El-Hassan, 1994).

The research on the acquisition of an accentual system of English by Arab speakers, which has been carried out by (El-Halees, 1986; Al-Jarah, 2002), and Mobaidin; 2003 indicates that Arab speakers face problems in acquiring the correct stress patterns of English. Many students tend to transfer their first language stress rules into a second language, and the issue of stress transfer has been carried out by many researchers. Anani (1989) confirms that Jordanian Arabs produce English verbs, nouns, adjectives, adverbs, and compounds in accordance of Arabic stress patterns.

Insofar as the syllable is considered, the syllabic structure in English must be described in terms of consonant (C) and vowel (V), in which the vowel is obligatory, and consonants are not. Moreover, pure English vowels are considered as high (h), mid (m), or low (l), and also the prosodies of 24 Rounding (+R, -R), vowel length (+L, -L), and vowel Height (h, m, l). The generalized phonemic units of English syllable structure are:

\[(c)(c)(c)V(c)(c)(c).\]

This structure will account for the following types of syllables, among others (cf. Al-Rashdan; 2008: 27):

- \(v[-R,+L,+l]\) --- e.g. ah
- \(cv[+R,+L,+h]\) --- e.g. coup
- \(cvc[-R,-L,+l]\) --- e.g. fat
- \(CVC[+R,+L,+h]\) --- e.g. food
- \(CVC[-R,+L,+h]\) --- e.g. feed
- \(cvc[-R,-L,+m]\) --- e.g. head
- \(cvcc[-R,-L,+m]\) --- e.g. help
- \(cvcc[-R,+L,+m]\) --- e.g. field
- \(cvcccc[-R,-L,+h]\) --- e.g. sixths
- \(VC[-R,+L,+h]\) --- e.g. eat
- \(vc[+R,+L,+h]\) --- e.g. ooze
- \(ccvvccc[-R,-L,+h]\) --- e.g. splints

The main stress rules for English verbs, as Chomsky and Halle (1968) explain them, can be captured by the following rules:

1. A "Tense" Suffix Rule
2. Prefinal Stress Rule

\[-C_0(W) \quad \left[ + \quad \text{long} \right] C_0 \] N, A, V

America Arizona’s original material

3. Stress Syllable Rule

\[-C_0(W) (VC_0) \quad \left[ + \quad \text{stress} \right] C_0 (+y) \] N, A, V

Assimilatory compensatory inhibitory compulsory heterodyne.

4.1. Vowel Reduction In Arabic

The major problem that faces many non-native speakers (Arab learners) is vowel reduction; according to El-Hassan (1994), the process of vowel reduction is alien in Arabic. Arab learners tend to give the accented and unaccented vowels the same weight," full articulation." They produce vowels accented or not by raising or lowering the tongue and jaw by rounding or spreading the lips. Most of these learners consider the schwa (\(\partial\)) the most challenging vowel because it is not Arabic. "In addition to this, accentuation and vowel quality in English are connected in such a way that a vowel in accented syllables is always strong (not weak) and must receive its full weight. In contrast, a vowel in unaccented syllables is typically reduced to the indeterminate quality of 28 schwas" (El-Hassan; 1994:213). Also, El-Hassan adds that Arab learners have to do intensive classes, and they also try to hear the stress in individual words and listen to radio or films to recognize stress and vowel reduction in English words.

The difficulty that Arab learners may encounter in placing English lexical stress correctly may be related to the level of the learner and the language transfer. El-Halees (1986) says "negative transfer from Arabic sound system into English system is considered to be very frequent and persistent... " and he also adds that Jordanian speakers learning English transfer their mother tongue stress assignment system, in which they tend to assign stress of disyllabic word with CVCC in the penult position, and since the super heavy syllable in disyllabic words in Arabic always has primary stress, Arabic speakers reflect this to English words whose final syllable is super heavy.

A study has been carried out by Anani (1989) investigating the pronunciation errors that Arab learners of English produce. This study consisted of six Jordanian undergraduate students majoring in English at the university level and six American students studying Arabic. The result showed that the two groups differ considerably in stress placement in disyllabic words. This result provided evidence of negative transfer from their mother language. Also, it showed that six Jordanian students are taught by Jordanian teachers who committed pronunciation mistakes themselves at school and college. Another critical case on the issue of stress was also made by Anani (1989) for Jordanians learning English. He found that the learners produce English words (verbs, nouns, adjectives, and adverbs) by applying Arabic stress rules, which differ from English patterns. Moreover, according to El-Hassan (1994), Arab learners of English face problems in acquiring an accent in English compound, and the stress pattern of English compound is alien to Arabic, "This pattern of accentuation is alien to Arabic, and well-established habits of Arabic pronunciation interfere in the Arab’s rendering of such compounds. Arabs tend to give equal prominence (and equal rhythmic weight) to both words in the compound viz:
(a) * ‘green’ house  
(b) * ‘black’ currant. (El-Hassan; 1994:212).

According to Peperkamp and Dupoux (2002), the ability to perceive different stress assignment decreases if the stress assignment in their native language is regular. On the other hand, Archibald (1993) argues that when the learners want to apply stress rules, they apply either stress strategy of the second language or they may apply stress rules that are neither in their native language nor in the second language. Peperkamp and Dupoux (2002) also find that the prosodic system properties of the learner’s first language (L1) may play a role in determining how the speakers can deal with the stress patterns and the information in the second language.

5. MATERIAL AND METHODOLOGY

This study includes 30 students that selected randomly. This study is a random sample of male and female students at the university of Jordan, Aqaba branch, in the English Language Department, for students of the second- and third-year level of the academic year 2022/2023. The selection of the sample aims to help answering the questions of the study.

5.1. Data Collection And Analysis

This study aims at investigating the issue of the incorrect stress placement in EFL of Jordanian native speakers of Arabic. All the participants in this research were at the same university and took a test in English stress assignment rules. It was decided to choose the sophomore and junior students because they were supposed to have good experience with stress assignment rules and also to check their English pronunciation. None of the participants have acquired English as their first language and need to be bilingual.

The subjects are asked to indicate whether they heard or know how the words are pronounced. The data is collected from the students by recording their pronunciation and giving them time to read the test items for themselves. Each subject is asked to record the test individually. It is shown that there is a significant difficulty facing these students in terms of primary stress assignment of the English word. The subjects have a chance to monitor their production, and each time, the second pronunciation for each word is analyzed. In order to conduct the research qualitatively, it is essential to develop the participants to meet the needs of the research questions.

The researcher receives categories of responses from the typical questions used in this method that was relatively simple to understand. In addition, the survey questionnaire provided a suitable method for quickly acquiring data from many respondents. The questionnaire does, however, have certain drawbacks, including:

(a) The impossibility of probing;  
(b) The lengthy drafting process;  
(c) The lengthy development process for the pilot questionnaire; and  
(d) The fact that it gives descriptive data rather than explanations. (Black, 1999)

6. RESULTS AND DISCUSSION

It is known that languages differ not only in the segmental elements like consonants and vowels, but they also differ in the use of suprasegmental features. That is why mastering L2 phonology includes not only acquisition of L2 segments, but also acquisition of L2 prosody and learning how to integrate phonetic and prosodic information in a native-like manner (c.f. Anna Lukyanchenko, William J. Idsardi and Nanjiang:2011). The result of this study indicates that the learners face hard times in assigning the correct stress placement in which the problem is caused
by the mother tongue interference and sometimes is caused by the deficient and impoverished input produced by teachers of English whose first language is JA.

As it appears, stress placement is considered as pronunciation problem faced by Arab learners of English which is related to the fact that Arab learners tend to interfere their mother tongue pronunciation to produce English words. "...Arab learner is predisposed to impose this own vowel qualities and patterns of accentuation of English word, thereby distorting its pronunciation and running the risk of being misunderstood" (El-Hassan; 1994:215). Zonnevereld.2004; Dupoux et.al. 1997;2001; 2008 claim that L2 stress location may impose certain learning and processing difficulties when L1 stress location is different and may result in incorrect stress placement in L2.

In this study the students are given many words in order to assign the stress in the correct syllable; the results show how the students transfer the stress rules from their mother tongue language for example; if the syllabic structure of this word is (CV CVCC), the students tend to put stress on the second syllable \k o 'ment \, where it must be in the first syllable \'k o ment \ as in English assignment rules . In this case students transfer one of their first language stress rules, which says that the long-word final (i.e. ultimate) syllable (structurally CVVC.CVCC) carries the main stress. As in the Arabic word "Mahall " (place\shop) structurally CV. CVCC). So the stress is on the second syllable " Ma'hall", and since this word has the same syllabic structure of the word \comment \. The placement of stress on the words that have a negative contracted form is also another problem. According to English stress rules if a short vowel followed by two consonants it is stressed, and also in English the negative contracted is a weak form which means it does not receive the stress like the word "haven't\ " \hæv∂nt\. If we look at the syllabic structure of the word

havent" is (CV. CVCC), the syllable (CVCC) is a heavy syllable in Arabic, thereby it is stressed. And when the students were asked to assign stress in these negative contracted forms, they tend to transfer wrongly their pattern of accentuation to the English word and misplace the stress on the incorrect syllable as in \hæv∂nt. It is also shown that the words that have dual pattern of accentuation (i.e., verb and noun) which also cause an additional problem for the students. By following English stress rules in order to assign stress in English many phonological descriptions require information like; (1) morphological boundaries and (2) class categories such as nouns and verbs. A good example of the latter occurs in English, (c.f. Hyman 1975:76).

Some words in English depend on their classification as verbs or nouns on the position of stress. for example.

<table>
<thead>
<tr>
<th>Noun</th>
<th>Verb</th>
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<tbody>
<tr>
<td>'permit'</td>
<td>per'mit '</td>
</tr>
<tr>
<td>object</td>
<td>ob'ject</td>
</tr>
<tr>
<td>'present'</td>
<td>pre'sent</td>
</tr>
<tr>
<td>'record'</td>
<td>re'cord</td>
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</table>

The stress falls on the first syllable in nouns and on the second syllable in verbs. Unfortunately, most of the students majoring in English know this rule but they misuse it and they do not apply it carefully when they produce words like these although they can distinguish between verbs and nouns.

Words containing reduced vowels; also pose a problem for the students. This type of the words causes a problem to the students because of the influence of their native language, and the Arab students tend to retain the full value of the vowel irrespective of its stress status.
English words | Learners' pronunciation
---|---
'several' | se'veral
'pre'paratory | prepa'ratory
'legendary' | le'gendary
'basically' | ba'sically

CONCLUSIONS

Speakers of Jordanian Arabic find aspects of the accentual system of the target language is easy to learn. However, stress assignment is a serious problem that faces many Arabs learning English. Jordanians produce English verbs, nouns, adjectives, adverbs, and compounds by Arabic stress patterns. Middle Eastern speakers usually put stress on the wrong syllable, and the reason is related to the differences in vowel quality. It is observed that teaching word stress techniques needs to be addressed by most teachers.

In English, the position of stress does not depend only on the phonological properties, but it depends on the morphological structure of words, and syntactic classes determine the stress placement. In Arabic, the stress assignment is simple and straightforward because the stress is predictable from syllabic structure of words. English syllables can be described as a consonant (C) and vowels (V), in which the vowel is obligatory, and consonants are not. Pure English vowels are considered as high (h), mid (m), or low (l), and the prosodies of 24 Rounding (+R, -R), vowel length (+L, -L), and vowel Height (h, m, l). In English, there is a tendency to reduce vowels (along with changing their quality) in monosyllabic and polysyllabic words. Arabs resist this reduction and tend to give the vowels their total weight. The main reason is that no stress patterns and drills are introduced for them in their curriculum.

Arab learners of English produce English words (verbs, nouns, adjectives, and adverbs) by applying Arabic stress rules, which are not the same as English patterns. Arab learners have to do intensive classes and try to hear the stress in individual words. A vowel in accented syllables is always strong (not weak) and must receive its total weight. In unaccented syllables, it is typically reduced to the indeterminate quality of 28 schwas. Arabs tend to give equal prominence (and equal rhythmic weight) to both words in the compound viz: (a) ’green ’house’ and ‘black ’currant’ (El-Hassan; 1994:212). According to the findings, students' perspectives regarding using online chat with English-speaking native speakers are more optimistic about developing their speaking and listening abilities. According to data analysis, male students have more positive attitudes toward improving speaking and listening skills than female students, who have stronger attitudes toward increasing their writing abilities. The results of the study reveal that students in scientific faculties have a more assertive attitude toward speaking skill improvement than their counterparts in social science faculties. In contrast, students in social science faculties were more interested in writing skill improvement than students in scientific faculties. The findings show that students had more robust and more favorable views toward utilizing texting to improve their writing abilities when they commonly opted to utilize instant messaging over audio or video chat.

REFERENCES


