

Comparative Prosody between English And Arabic

Inst. ALAA MJREN OLEIWI

University of Kirkuk – College of Education for Human Sciences

dr.alaa4565@gmail.com

”العروض المقارنة بين اللغتين الإنكليزية والعربية”

مدرس مساعد / علاء مجرن عليوي

جامعة كركوك كلية التربية للعلوم الإنسانية

Abstract

The recent paper sheds light on the term prosody and studies in very short term the comparative between English and Arabic as a different language ,and who prosodic features are represented in both of them , in Arabic we make examples taken from holy Quran to show how prosodic features in Arabic play a central role in tajweed Al – Quran and how they are represented in printed text and we have mentioned the features of the two languages in respect to comparative prosody. Keywords ; prosody , stress, intonation ,and color coded

ملخص

تسلط الورقة البحثية الضوء على مصطلح علم العروض المقارن بين الإنكليزية والعربية كلغة مختلفة، وماهي الخصائص العروضية التي تمثلها كل منهما، وفي اللغة العربية نأخذ أمثلة مأخوذة من القرآن الكريم لنبين كيف تلعب السمات العروضية في اللغة العربية دورًا مركزيًا في تجويد القرآن وكيف يتم تمثيلها في النص المطبوع بينما ذكرنا السمات فوق القطعية للغتين الدور المركزي في تجويد القرآن الكريم وكيفية تمثيلها في النص المطبوع وقد ذكرنا مميزات وخصائص اللغتين فيما يتعلق بالعروض المقارنة. الكلمات المفتاحية؛ علم العروض، النبر، التجويد، والترميز اللوني

Introduction

This paper titled as comparative and contrastive description of segmental features between the Arabic and English languages. In this assignment, differently, the light will be shed on comparative and contrastive description of suprasegmental features between the above-mentioned languages. Ellery, et al. (1995) indicated that ”features of spoken languages which are not identified as discrete segments are variously referred as prosodic features, non- segmental features or suprasegmental features” (p.327). Ellery, et al. (1995) also stated that prosody refers to prosodic features of speech, namely, tone, stress, intonation and others. Thus, three prosodic features will be discussed to show the similarities and differences between English and Arabic. Besides, the focus will be shifted to identifying the problems the Arab learners often face in learning English in terms of prosody.

Definition

Definition of Prosody The term “prosody” is used in different ways by different authors in different contexts. Prosody is defined here as phonetic and/or phonetic phenomena observed in domains larger than a single speech syllable: syllables, feet, phrases, and combinations thereof. This definition equates prosody with suprasegmental phenomena, rather than segmental phenomena, but excludes action on poetry or musical meter. This chapter examines three interrelated aspects of prosodic variation: stress, rhythm, and intonation

١. **Syllable Structure in English** According to Deterding & poedjosoedarmo (1998) the distinction between light and heavy syllables can be helpful in predicting stress in English. The former contains a diphthong and/or several consonants in the coda while the latter contains a single short vowel. Heavy syllables tend to be stressed and light ones tend not to be stressed. The relationship between syllables and stress is extremely related. Deterding & poedjosoedarmo (1998) argued there are not pure rules that help learners accurately predict stress placement in multisyllabic words; however, knowing the syllable structures- heavy and light syllables may solve

the problem and prove useful. All in all, understanding stress rules in English entails understanding syllable structures first. English words are different in terms of the number of syllables. Some contain one, or two. Some may contain three or four. Some examples are provided below:

2. StressChomsky and Halle (1968) suggested that stress, like the Arabic language within English words is predictable, and several sets of complex rules have been proposed for predicting stress. Stress is very important in English as it is a major feature that distinguishes certain pairs of words. According to Christophersen (1996), English has the following stress rules: The great majority of two-syllable words are stressed on the first syllable, e.g. A number of words have two different stress patterns according to whether they are verbs or nouns, adjectives or verbs e.g. Noticeably, nouns and adjectives are stressed on the first syllable while verbs are given stress on the second syllable. According to Deterding & poedjosoedarmo (1998) derivational suffixes can be classified into three types: stress-preserving, stress-attracting and stress-shifting. The first type does not change stress placement in words such as -ful, as in 'wonder/ 'wonderful. The second type receives primary stress such as -ee, as in em'ploy/ empty'ee. The last type make the stress shift such as -ive, as in 'reflex/ re'flexive. The analysis of suffixation on stress placement is outlined below: When a suffix is added to a word, the new form is stressed on the syllable as was the basic word, e.g. words ending in -tion, -sion, -ic, -ical, -ity, almost always have primary stress on the syllable preceding the ending, e.g. If a word ending in -ate or -ment has only two syllables, the stress falls on the last syllable if the word is a verb, but on the first syllable if the word is a noun or an adjective. When stressed, the ending is pronounced [eɪˈt], [mɛˈtmnt]; when unstressed, it is pronounced [t], [mɛˈtmnt], e.g. If a word ending in -ate, -ment has more than two syllables, the main stress will fall on the third syllable from the end. In verbs, the final syllable is pronounced [eɪˈt], [mɛˈtmnt]; in nouns it is pronounced [t], [mɛˈtmnt], e.g. Stress placement is also affected by compounding. "When two roots are combined to produce new words, the resulting word is called a compound" (Deterding & poedjosoedarmo 1998 (p. 100). The rules are summarized below:

Compound nouns have a primary stress on the first component, e.g.:

In compound verbs, the primary stress falls on the second component, e.g. In the intensive reflexive pronouns, the stronger accent falls on the last syllable, e.g. Numbers ending in -teen may receive primary stress on either syllable, e.g. In words ending in -ion, -sive, the stress falls on the last vowel before the ending, e.g.:

The majority of English compounds have single stress, e.g.:

All compounds with a present participle, as the first element, have a single stress, e.g. A double stress is used in compounds of two nouns, if the first noun indicates the material of which or with which the second is made, e.g. A double stress is used in compounds that have two nouns, each noun indicates a distinct characteristic of the same person or thing, e.g. In most sentences, some words are more important than others and we indicate this by the way we stress or unstress them. The following words are usually unstressed: articles: a, an, the, prepositions such as at etc. personal pronouns such as I etc. possessive adjectives such as my etc. relative pronouns such as who etc. conjunctions such as and etc. The following words are usually stressed: nouns, verbs, adjectives, adverbs, demonstrative interrogatives, e.g.: He shall send it to you. She cooks three meals each day. In an hour, he will be ready to send it. This new car is to be barked here.

4. IntonationRoach (2001) pointed out that intonation is difficult to define. Generally, intonation is the 'melody of speech' and is to be analyzed in terms of variations of pitch. It is known that intonation can indicate different types of utterances, such as statements, questions, commands, attitudes and emotions of the speaker. Reima (2007) summarized the intonation rules as follows: A) In English, rising & falling intonation is normally used at the end of: Simple statements of facts (declarative statements), e.g. Commands: Questions which begin with an interrogative word B) In English, rising intonation is normally used in the following cases: At the end of yes & no questions: In requests: C) In utterances containing an element of protest or surprise:

3. RhythmEnglish, with an alternation of stressed and unstressed syllables, is obviously stress-timed. Deterding & poedjosoedarmo (1998) stated that rhythm is important in English because many cases of miscommunication can be attributed to failure to interpret familiar words as they are uttered with an unfamiliar rhythm pattern. For example, the speaker may say "talking to themselves" stressing on talk and them. If a native speaker hears these words, he will misunderstand the words and interpret them as 'taking to damsels'. So, the unexpected rhythm pattern contributed to misunderstanding. As stated above, English words may contain one or more syllables. These words contain syllables (stressed) that are louder, clearer than others (unstressed). Gilbert (1984) believed that the combination of these stressed and unstressed syllables results in the rhythm found in English words. This combination also shows the strength, length and pitch of syllables. Moreover, sentences in English, like words,

have rhythm. Dauer, (1993) argued that if one wants to have good sentence rhythm, she/he needs to know how to join syllables together into larger unites besides the clear difference between stressed and unstressed syllables.

6. Problems in learning English in terms of prosody Arab learners find it easy to grasp the predictable word stress in their language; however, they face problems in grasping the unpredictable nature of English word stress. Sentence rhythm is alike in both languages so that Arab learners avoid contracted forms and elision when they read loudly. As a result, heavy staccato rhythm can be found in their reading. Regarding intonation, Swan & Smith (2001) found out that Arab learners tend to intone, reducing intonation to a low fall at the ends of phrases and sentences. According to Rababah, (2002) Arab learners face problems that are related to stress, intonation and other features of prosody due to some difference in pronunciation between the two languages. English word pattern with (-ism) suffix receive their stress on the antepenultimate or pre- antepenultimate syllable, but they never receive it on the penultimate or final syllable. Quite contrary to this, in the pronunciation of the Arab learners of English, it is often noticed that stress in such word patterns tend to be consistently shifted to the penultimate (before the final) syllable. According to Ryan & Meara (1999) Arab learners confuse English words due to the number of syllables and the shift of stress syllables as in the following example:

5. Prosodic Boundary Mark-up for English

Prosodic-syntactic chunking is a language universal [1]: we process linguistic content by splitting it up into meaningful stand-alone units, where each chunk includes at least one accented word with pitch variation on the stressed syllable(s). In English, punctuation in text plus pauses and inflections in speech signify phrase breaks or boundaries between successive chunks. Furthermore, boundary annotation schemes for British and American English, as in the Spoken English Corpus [2] and the Boston University Radio News Corpus [3], are an attempt to visualize perceived boundaries, and distinguish relative boundary strengths. The scheme for British English describes three levels of juncture between words: none; minor break (1); major break (11), while that for American English describes five: (0, 1, 2, 3, 4), with break indices (3) and (4) mapped to tone unit boundaries (1) and pauses (11) in the previous scheme.

7. Prosodic Boundary Mark-up for Arabic We report on automated phrase break prediction for Arabic [4], [5]. Most editions of the Qur'an', intended to help both native and non-native Arabic speakers parse the text during oral recitation, carry fine-grained boundary annotations (Table 1) which we have adapted (cf. Fig. 1) in our machine-readable Boundary-Annotated Qur'an Corpus [6].

﴿ ٦٥ ﴾	End of verse is a compulsory major break.
⸮	Major and compulsory verse-medial break which completes the meaning of a phrase.
⸮	Minor break: a break is allowed and preferable.
⸮	Minor break (continuation mark): the reader can continue without pausing, but a pause is preferable.
⸮	Minor break permitted: readers can pause if they wish, but it is better not to.
⸮	Minor break for a shorter time without breathing, where last pronounced letter before break is pronounced without its short vowel.
⸮	Alternative boundaries in the same phrase: if the reader breaks in one position, they must not break in the other, and vice versa.
⸮	Non-break: pausing is not permitted as it would change the meaning of the verse.

Table 1: Symbols are used to visualise fine-grained levels of juncture between words in Qur'anic verses

This prescriptive scheme of stops and starts is one component of the art of TAJWID or recitation where boundary annotation as it shown in fig. 1 project implicit prosody onto the text (fodor, 2002) to guide reading (whether silent or vocal) and comprehension.

Alternative phrasing given by Tajwid mark-up in verse 29.45 economically subsumes two phrasing variants for the following extract, as translated into English, and utilizing our adapted minor/major boundary divide [6], (Fig. 2: (

(١) Recite [O Muhammad] what has been revealed to you of the Book and establish prayer indeed prayer prohibits immorality and wrongdoing and the remembrance of Allah is greater

| And Allah knows that which you do (٢) || Recite [O Muhammad] what has been revealed to you of the Book and establish prayer | indeed prayer prohibits immorality and wrongdoing and the remembrance of Allah is greater And Allah knows that which you do ||

Figure 2: Two phrasing variants enabled by exploiting optional Tajwid boundary mark-up In variant (1), there is an option to stop after the first occurrence of pra

yer: the speaker/turn- taker emphasises how the beneficial effects of regular prayer are immediately felt on its establishment. In variant (2), the speaker/tum-taker uses the optional stop to differentiate these two events.

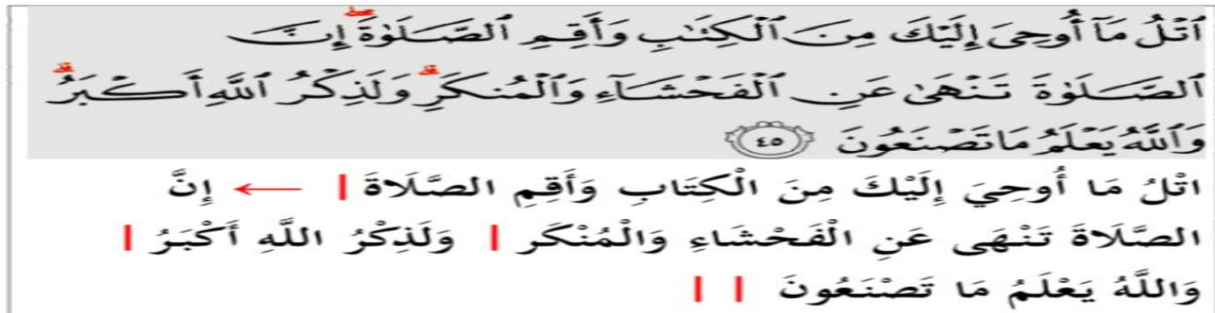


Figure 1: We have mapped our boundary annotation scheme in the *Boundary Annotated Qur'an Corpus* to *Tajwid* mark-up, as in this example from *The Holy Qur'an*: 29.45

8. Color coded Arabic Phonetics and Phonology

Tajwid editions of the Qur'an also use colour coding for guidance on how to intone the verse, and especially on accenting. Our corpus adopts the same widely-used recitation style (hafs bin 'āṣim) as this e-book (Fig. 3) published by the Islamic Bulletin. Here, the use of orange and red fonts in the opening chapter of the Qur'an denotes permissible and necessary prolongation respectively on prominent syllables. For example, in verse 1.3, orange mark-up in the invocation to Allah as Master of the Day of Judgment highlights the syllable nucleus in the penultimate syllable: maliki yawmi al-dini (verse transliteration). Similarly, red and orange mark-up on the last word within the final phrase in verse 1.7 ...wala al-dālīna (...and not of those who go astray) reinforces the (already considerable) sonority of the open vowel in l-dālīna and its immediate successor: the high vowel al-dālīna. We plan to extract this wealth of linguistic knowledge (ie. morphology, syntax, phonetics, and phonology) in Qur'anic orthography, and to model it in chunking algorithms for Arabic, for example to supplement sparse punctuation in Modern Standard Arabic



Figure 3 : Holy Quran

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