Stress Variation in Cairene and Upper Egyptian Arabic: Implications for Communication

DOI: 10.12737/2587-9103-2025-13-1-15-20 Получено: 06 октября 2024 г. / Одобрено: 25 октября 2024 г. / Опубликовано: 26 февраля 2025 г.

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Аннотация

Лингвистическая ситуация в Верхнем Египте характеризуется тремя вариантами арабского языка: стандартный арабский, каирский арабский, верхне-египетский арабский (ВЕА). Стандартный арабский язык используется в формальной коммуникации, как устной, так и письменной. Каирский арабский представляет собой арабский диалект, используемый, главным образом, в Каире и в большинстве радио- и телевизионных программ. ВЕА — диалект, который используется в Верхнем Египте. В данной статье показано, что, хотя эти варианты принадлежат к одному и тому же языку и, следовательно, говорящие на этих вариантах легко понимают друг друга, фонологические, лексические и морфосинтаксические различия этих вариантов значительны и могут вызывать коммуникативные проблемы и создавать трудности в обучении.

Ключевые слова: египетские диалекты, вариации ударения, слоговые изменения, кластеры согласных, фонотактика, коммуникативное воздействие.

Abstract

The linguistic sitting in Upper Egypt comprises three different linguistic varieties: Standard Arabic, Cairene Arabic and Upper Egyptian Arabic (UEA). Standard Arabic is used in formal communication either orally or in writing. Cairene Arabic is the Arabic dialect used mainly in Cairo and most radio and TV programs, while UEA is the dialect used in Upper Egypt. The main objective of this article is to illustrate that although these Arabic varieties belong to the same language and are therefore mutually intelligible (i.e. speakers of any variety understand and can be understood the speakers of the other varieties), the phonological, lexical and morphosyntactic differences exhibited by these varieties are significant enough to cause significant communicative problems as well as learning difficulties.

Keywords: Egyptian dialects, stress variation, syllabic change, consonant clusters, phonotactics, communicative impact.

1. Cairene Arabic and Upper Egyptian Arabic

A careful examination of the linguistic setting in Egypt reveals that it comprises at least three main linguistic varieties: Standard Arabic (SA), Cairene Arabic (CA) and Upper Egyptian Arabic (UEA). By Standard Arabic, I mean Modern Standard Arabic as used in formal communication settings either orally or in writing. By CA I mean the Arabic variety used in Cairo and other surrounding cities, as well as most Radio and T.V. Programs. By UEA I mean the Arabic variety used in Upper Egypt.

However, it should be pointed out that the classification of Arabic into three varieties is highly tentative. The reason for this is that there are significant variations within each variety on the basis of such factors as age, educational level, social class and geographic boundaries. (For more details on these varieties, see Mahmoud, 2004).

This paper is confined to two varieties of Arabic, namely CA and UEA. The distribution and frequency of exposure to the two Arabic varieties are tentatively outlined below.

Cairene Arabic: Most of radio programs, particularly serials and informal interviews and shows; most T.V. programs particularly movies and informal interviews & shows; children's communication with either parent in case he or she is a native speaker of this variety; exposure to some of the cartoon films designed for children in Cairene Arabic; and most importantly, some parents are so keen for the adoption of the Cairene variety by their children due to the assumption that the adoption of this variety is viewed in Upper Egypt as a symbol of prestige and social mobility.

Upper Egyptian Arabic: Most of the daily communication at home, at school, and in the street; some Radio serials and local Radio stations developed for the Upper Egyptian communities; some T.V. movies, informal interviews, and local T. V. channels developed for the Upper Egyptian communities.

2. Stress Variation

As pointed out by Marnie and Levis (2015) "stress is the degree of emphasis given to a sound or syllable in speech, also called lexical stress or word stress. For instance, unlike some other languages, English has variable (or flexible) stress. This means that stress patterns can help distinguish the meanings of two words or phrases that otherwise appear to be the same. In all languages, stress is used to make words more understandable on the word level and is especially apparent in the pronunciation of individual words and their parts".

Thus, as pointed out by Fromkin, Rodman & Nina Hayams (2018), stress variation in English is phonemic, since the change of the position of the stress from one syllable into another leads to a change in meaning. Compare the following pairs:

in-sult (N)	—	in-sult (V)
con-duct (N)	—	con-duct (V)
pre-sent (N)	—	pre-sent (V)
per-fect (N)	—	per-fect (V)
rec-ord (N)	—	re-cord (V)

(Throughout this paper, stressed syllables are the underlined ones)

In a lexical stress language, stress can vary across syllable positions within words, and in principle can vary contrastively as shown in the data presented above. This distinguishes lexical stress languages from fixed-stress languages, where stress is assigned to the same syllable position in any word. (For more details, see Harold 2002 and William et al. 2001).

The Arabic language and its dialects in general belong to the fixed-stress languages. However, stress variation occurs in some Arabic varieties. The main objective of this paper is to investigate the phenomenon of stress variation in CA and UEA.

3. Theoretical Background and Research Questions

Despite major differences between the different Arabic varieties, they basically exhibit the same fundamental phonological features. Relevant to the topic addressed in this paper are two of these features, namely sound/letter correspondence, and phonotactic constrains. The following is a brief discussion of these two features.

3.1. Sound/letter Correspondence

With respect to sound/letter correspondence, Arabic has one-to-one correspondence between sounds and letters. In other words, each sound is associated with a certain letter, and each letter is associated with a certain sound. This makes spelling a straightforward and easy task. Unlike English which completely lacks this correspondence. To illustrate this issue, consider the following examples from English:

A. Different letters in English may represent a single sound (e.g. to, too , two, through, threw, clue, shoe). The sound meant here is the high rounded back vowel /u:/ .

B. A single letter in English may represent different sounds:, (e.g. dame, dad, father, call, village, many). The letter meant here is the letter “a”.

C. A combination of letters may represent a single sound, (e.g. shoot character Thomas physics either)

(For more details, see Fromkin, Rodman & Hayams 2018)

All these discrepancies between spelling and sounds in English do not exist in Arabic. On the contrary, Arabic has one-to-one correspondence between sounds and letter. In other words, each sound is associated with a certain letter, and each letter is associated with a certain sound. This makes spelling a straightforward and easy task in Arabic.

3.2. Phonotactic Constrains

The term phonotactics is used in phonology to mean rules and anguages which allow sound combinations and segment. sequencing to form larger units such as syllables and words. Every language has its own set of rules and constraints which determine the sound combinations that are permissible , and those that are impermissible. (For more details on phonotactics, see Celata & Calderona 2015).

As illustrated later in this article, stress variation results in vowel loss which, in turn, results in syllabic reduction which, in turn, results in consonant clusters consisting of three consonants. Such consonant clusters are phonotactically marked, in the sense that they are unfamiliar to Arabic speakers. The reason for this is that the maximum of consonant clusters permissible in Arabic is two consonants in the middle or the end of a word, but never in the beginning, e.g. yaktub, “to write”, yashrab “to drink”, qalb “hearet”, rasm “drawing”. Normally, Arabic phonotactic constrains do not allow for consonant clusters consisting of three consonants. English, by contrast, allows for consonant clusters consisting of three consonants, even word initially, e.g. strong, struggle, split, scream. (For more details on the relevance of phonotactics to stress variation in UEA, see Section 5 of this paper).

3.3. Research Questions

The research questions addressed in this paper are stated below:

1. What are the lexical items that allow for stress variation?

2. What are the types of constructions that allow for stress variation?

3. What is the impact of the stress variation on the number of syllables and the phonotactics of the forms which exhibit this variation?

4. What are the communicative implications of the stress variation and the resultant syllabic and phonotactic difference between the CA and UEA?

The approach adopted in this paper is a descriptive one, since it analyses stress variation as used by native speakers of the two varieties of Arabic. It is also a phonological study, since it investigates the phenomenon of stress variation and its impact on syllable structure, phonotactics and communication among the users of these varieties.

4. Data Analysis

Forms that exhibit stress variation in the two Arabic varieties are elicited from native speakers of CA and UEA. These forms can be classified into three types: lexical items, sentential constructions and imperative constructions. As pointed out earlier, throughout this paper, underlined syllables are the ones that have the stress. Symbols used to represent the data are given in Appendix 1, while abbreviations used in the paper are given in Appendix 2. Below is the analysis of the forms that exhibit stress variation in CA and UEA.

4.1. Lexical Items:

CA	UEA	
mak-ta-bah	mak-ta-bah	“library/bookstore”
mad-ra-sah	mad-ra-sah	“school”
Say-da-lah	Say-da-lah	“pharmacy”
tar-bi-yah	tar-bi-yah	“education”
man-sha-fah	man-sh-afah	“dryer”
maf-ra-mah	maf-ra-mah	“grinder”
mal-za-mah	mal-za-mah	“notes”
mas-?a-lah	mas-?a-lah	“problem”
mar-ta-bah	mar-ta-bah	“matrix”
magh-sa-lah	magh-sa-lah	“washer”
man-Da-rah	man-Da-rah	“guest hall”
mas-Ta-rah	mas-Ta-rah	“ruler”
mak-na-sah	mak-na-sah	“sweeper”
mar-wa-hah	mar-wa-hah	“fan”
sil-si-lah	sil-slah	“chain”

As shown above, the CA and UEA lexical items are tri-syllabic, in the sense that each form consists of three syllables. As shown in the data above, the CA forms consistently have the stress on the second syllable, while in the UEA forms the stressed syllable is the first. However, this stress variation does not have impact on the number of syllables in both varieties. Furthermore, in both varieties, word class remains the same, despite the stress variation. This means that, unlike English, stress variation in the two Egyptian varieties does not lead to a change of the word class. More specifically, stress variation in the English forms given in Section 2 leads to a change of the word class, while in the CA and UEA forms given above the word class does not change.

Thus, based on the analysis presented above, the forms in both varieties are mutually intelligible. Indeed they exhibit significant pronunciation difference, but this difference does not impede mutual intelligibility or communication among the users of the two varieties. As discussed in Section 5, this difference has communicative implication.

4.2. Sentential Constructions

Sentential constructions that exhibit stress variation are morphological compounds of two types. The first type consists of a verb followed by a subject suffix and an object suffix, while the second consists of a verb followed by a subject suffix and a prepositional phrase suffix. Both types express the meaning of a full sentence. Below is a sample of the first type

Type 1:

CA	UEA	
ka-tab-tu-hum	ka-tabt-hum	“I wrote them”
?a-xad-tu-hum	?a-xadt-hum	“I took them”
ra-ga’-tu-hum	ra-ga’t-hum	“I revised them”
?a-kal-tu-hum	?a-kalt-hum	“I ate them”
Hi-fiTH-tu-hum	Hi-fiTHt-hum	“I memorized them”
si-mi’-tu-hum	si-mi’t-hum	“I heard them”
fi-him-tu-hum	fi-himt-hum	“I understood them”

Type 2:

The following is a sample of the second type of the sentential constructions:

CA	UEA	
fa-taH-ti-lak	fa-taHt-lak	“I opened for you”
ka-tab-ti-lak	ka-tabt-lak	“I wrote to you”
ra-sam-ti-lak	ra-samt-lak	“I drew for you”
ra-ga’-ti-lak	ra-ja’-tlak	“I returned to you”
sa-maH-ti-lak	sa-maH-tlak	“I allowed you”
fi-riH-ti-lak	fi-riH-tlak	“I felt happy for you”

As illustrated by the samples of data given above, both types of sentential constructions exhibit stress variation. Precisely, the CA constructions have the main stress on the third syllable, while in the UEA the main stress is on the second syllable. Furthermore, as a result of this stress variation, the number of syllables in the UEA has become three, while in CA it remains four. This syllable loss in UEA is a direct consequence of a vowel loss, since the number of syllables in a word equals the number of vowels.

Thus, a vowel loss in the UEA forms results in a reduction of one syllable. Moreover, this syllable reduction results in the creation of a consonant cluster consisting of three consonants. For example, the CA form ra-sam-ti-lak “I drew for you”, corresponds to the UEA ra-samt-lak. The former consists of four syllables, while the latter consists of three syllables. The former has the stress on the third syllable ti, while the latter has the stress on the second syllable samt. Vowel loss in the UEA form triggered the syllable reduction, which, in turn, triggered the creation of the consonant cluster consisting of the three consonants “mtl”. As pointed out in Section3, normally a consonant cluster of three consonants is phonotactically impermissible in Arabic. This analysis applies to all the forms in Type 1 and Type 2 above.

However, the constructions in both varieties are mutually intelligible, despite the fact that they exhibit significant pronunciation difference due to the stress variation and the resultant syllabic and phonotactic differ-

ences. Thus, these differences do not affect mutual intelligibility or communication among the users of the two varieties.

4.3. Imperative Constructions

An imperative construction is a morphological compound expressing a command. It consists of a verb followed by a pronominal suffix. Two types of imperative constructions are identified in this paper depending on whether the stress variation results in syllabic reduction or not. In the first type, the CA imperative construction consists of three syllables, while its corresponding UEA counterpart consists of two syllables due to the stress variation and the syllabic reduction. Consider the following examples:

Type 1:

CA	UEA	
?ud-xu-li	?udx-li	“come in”
?ik-ti-bi	ikt-bi	“write”
?ir-si-mi	?irs-mi	“draw”
?ik-zi-bi	?ikz-bi	“lie”
?us-ku-ti	?usk-ti	“keep quiet”
?im-si-ki	?ims-ki	“hold”

As illustrated by the examples above, in the CA imperative constructions, the stress is on the second syllable, whereas in the UEA examples it falls on the first syllable. Moreover, this stress variation has resulted in syllabic reduction in UEA. Thus, a UEA construction consists of two syllables, while its CA counterpart consists of three syllables. This syllabic loss is a direct consequence of a vowel loss. Thus, a vowel loss in the forms above results in a reduction of one syllable. Moreover, syllabic reduction results in the creation of a consonant cluster consisting of three consonants. For example, the form CA ?ud-xu-li “come in” corresponds to the UEA ?udx-li. The former consists of three syllables, while the latter consists of two syllables. The former has the stress on the second syllable xu, while the latter has the stress on the first syllable ?udx. Vowel loss in the UEA form triggered the syllabic reduction, which, in turn, triggered the creation of the consonant cluster consisting of the three consonants “dxl”. And, as pointed out in Section 3, a consonant cluster consisting of three consonants is phonotactically impermissible in Arabic. Hence, such clusters have negative impact on the principle of ease of articulation on the part of the speaker, while they sound odd on the part of the listener This analysis applies to all the forms in Type 1 above.

However, the CA and the UEA constructions are mutually intelligible, despite the fact that they exhibit significant pronunciation difference due to the stress variation and the resultant syllabic and phonotactic differences. Thus, these differences do not affect mutual intelligibility or communication among the users of the two varieties.

Type 2:

CA	UEA	
?if-ta-Hi	if-ta-Hi	open
?ir-ka-bi	?ir-ka-bi	ride
?is-ma-'i	?is-ma-'i	listen
?ish-ra-bi	?ish-ra-bi	drink
?id-fa-’i	?id-fa-’i	“pay”

As illustrated by the examples above, the CA imperative constructions have the stress on the second syllable, whereas in the UEA examples the stress is placed on the first syllable. Unlike the imperative constructions in type 1, stress variation in type 2 does not lead to syllabic reduction or consonant clusters in UEA. Thus, the number of syllables is the same in both the CA and the UEA constructions. Despite the stress variation and the pronunciation difference, the constructions in both varieties are mutually intelligible.

5. Communicative Implications

As explained in this paper, three types of constructions exhibit stress variation in CA and UEA. This stress variation results in syllabic reduction and consonant clusters in UEA. Consequently, the CA and the UE exhibit a very significant pronunciation difference. However, from the linguistic perspectives, the CA and the UEA varieties are mutually intelligible despite the stress variation and the syllabic and phonotactic difference associated with it.

The question which arises has to do with the communicative implications of this phenomenon of stress variation and the resultant features associated with it. Linguistically, as pointed out above, the CA and the UEA are mutually intelligible despite the differences outlined above. However, from the sociolinguistic perspectives, the CA variety is associated with prestige and high social class compared to the other Arabic dialects. Thus, is speech communities where the UEA is used the CA variety is also used by the people who belong to the high social class. In other words, the adoption of this variety is viewed in Upper Egypt as a symbol of prestige and social mobility.

On the other hand, the use of the UEA variety is stigmatized by people who belong to the high social class. Thus, the stress variation, the resultant syllabic reduction and the resultant consonant clusters are viewed by some members of the speech community as markers of a stigmatized variety. Furthermore, some parents in speech communities where the UEA is used instruct their children

to avoid using these markers. (For more details on this issue, see Mahmoud, 2014)

6. Findings and Conclusions

The main findings and conclusions, as well as the answers to the research questions raised in this paper are outlined below.

1. The phenomenon of stress variation in CA and UEA is exhibited by three types of constructions, namely lexical forms, sentential constructions and imperative constructions.

2. From the phonological perspectives, stress variation results in syllabic reduction and consonant clusters consisting of three consonants in UEA.

3. Despite the significant pronunciation difference due to the stress variation and the resultant syllabic and phonotactic differences, the two varieties are mutually intelligible.

4. From the sociolinguistic perspectives, this phenomenon has communicative implications. The stress variation, the resultant syllabic reduction and the resultant consonant clusters that distinguish the UEA variety from the CA variety are viewed by some members of the speech community as markers of a stigmatized variety.

5. The adoption of the CA variety is viewed by some members of the Upper Egypt speech communities as a symbol of prestige and social mobility.

6. Further research to explore the lexical or structural parameters that condition the occurrence of the stress variation is recommended.

7. Appendices

Appendix1

Symbols Used to Represent the Data

The phonetic symbols used to represent the Arabic data are listed below with their corresponding Arabic orthography in parentheses:

[b]	voiced bilabial stop	[ب]
[t]	voiceless alveo dental stop	[ت]
[T]	voiceless alveo dental velarized stop	[ط]
[d]	voiced alveo dental stop	[د]
[D]	voiced alveo velarized stop	[ض]
[k]	voiceless velar stop	[ك]
[?]	voiceless glottal stop	[ء]
[j]	voiced alveo-palatal affricate	[ج]
[H]	voiceless pharyngeal fricative	[ح]
[’]	voiced pharyngeal fricative	[ع]
[f]	voiceless labio-dental fricative	[ف]
[TH]	voiced dental velarized fricative	[ظ]
[s]	voiceless alveolar fricative	[س]
[S]	voiceless alveolar velarized fricative	[ص]
[z]	voiced alveolar fricative	[ز]
[sh]	voiceless alveo palatal fricative	[ش]
[x]	voiceless uvular fricative	[خ]
[gh]	voiced uvular fricative	[غ]
[h]	voiceless glottal fricative	[ه]
[r]	voiced alveolar trill	[ر]
[l]	voiced alveolar lateral	[ل]
[m]	voiced bilabial nasal	[م]
[n]	voiced alveolar nasal	[ن]
[y]	voiced palatal glide	[ى]
[w]	voiced bilabial round glide	[و]
[i]	high front vowel	قرسك
[a]	low back vowel	ةحتف
[u]	high back rounded vowel	قمض

Note: Consonant gemination (doubling of the consonant) and vowel length are represented by doubling the respective consonant or vowel.

Appendix2

Abbreviations Used in the Article

CA	Cairene Arabic
UEA	Upper Egyptian Arabic
N	Noun
V	Verb
Adj	Adjective

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