

“/j/” or “/dʒ/”: A Comparative Study of Hadhrami – Southern Saudi Arabian dialectal variations of “/dʒ/” and its Implications on the Phonological Structure of the Verb Form

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Abstract

This study investigates the dialect variation of verb forms in Hadhrami and Southern Saudi Arabian. The study indicates that Hadhrami /dʒ/ productions showed many dialect-specific features comparable to those in southern Saudi speakers; both in terms of phonological and morphological features. This work helps in better understanding and interpretation of the dialectal variations of “/dʒ/” and its implications on the phonological structure of the verb form. The study reveals that the inner phonological structure of the verb form changes in two respects in Hadhrami dialect. However, in the Saudi dialect, there is no substitution for the sound /dʒ/. Furthermore, the Saudi dialect keeps the same phonological structure of standard Arabic imperative verb form. /dʒ/ in the southern Saudi dialect does not undergo any phonological or morphological changes when compared to standard Arabic verb forms (i.e. past, imperative, and present).

Keywords: Dialectal variations, /dʒ/, verb forms, Hadhrami dialect, southern Saudi dialect

Introduction

No human language is stable. Language variation is an observed phenomenon found in every language in this world. The change in one segment over another is rule governed. Many attempts have been made to explain why one segment replaces another segment. However, no one, till now, has discovered the real cause. The tendency to replace one sound in the place of another sound seems to be a natural phenomenon in the languages of the world. This phenomenon is a well-known phenomenon in Arabic language too. [j] Replaces [dʒ] in many contexts and the reason to do so is more than ease of articulation.

In most dialects from classical times, [dʒ] is identified as a voiced palate-alveolar affricate. There is variation in Modern Arabic varieties, where /dʒ/ is pronounced as [g] in Egyptian Arabic, and in a number of Yemeni and Omani dialects. It is not well known when this change occurred or if it is connected to the pronunciation of Qāf (ق) as a [g].

Several questions have been raised attempting to force an adequate account of the nature and the status of [dʒ]. Bishr (2000: 320-321) points that /dʒ/ is pronounced by most Arab speakers as /dʒ/. It is pronounced as /z/ by Damascus. Egyptian speakers of Cairo and some speakers of southern Yemen pronounces it as /g/ (Bishr, 2000:334). Moreover, /j/ is a characteristic especially in some other southern Yemeni dialects as in Hadhramout, and some Saudi dialects, the dialects in question.

In Arabic, /j/ and /dʒ/ are two distinctive phonemes. ‘Jamal’, “camel” and ‘yamal’ (i.e. to be borne of something) are two different words. However, /j/ replaces /dʒ/ in many contexts and this is known as linguistic replacement (Abdel-Tawaab, 2000). In spoken Arabic, /dʒ/ as in shjarah /ʃadʒara/ (i.e. tree), for instance, is in free variation with /j/ in /ʃijara/.

Some earlier Arab linguists recognized this as a dialectal change. Ibn Jinni justifies this by saying that the replacement occurs due to /i/ substituting /a/ to cope with the genitival form of the first syllable of the second word, /ʃijara/. This becomes true when minimizing; but the change, to him, must occur in consonants and not in vowels. Such

a change of the consonant is reliable to take place by a sudden leap or substitution rather than a gradual change as it does in vowels (Brook, 1975: 81).

This study investigates the implications of /j/ substituting /dʒ/ in many contexts in Hadhrami and Saudi dialects. /dʒ/ has been rarely used recently in Hadhrami and Saudi dialects. The excessive use of /j/ instead of /dʒ/ in most, if not all contexts, is the main reason of the widespread existence of this phenomenon. This dialectal change has its effect on the phonological structure of the words.

/dʒ/ as a distinctive phoneme in Arabic language has a remarkable number of variants:

1. [dʒ], the classical Arabic variant identified as a voiced palate-alveolar affricate. It has also been found in most natively spoken varieties.
2. [j] A variant popular in Eastern Arabian dialects identified as a voiced palatal glide.
3. [g] A variant of colloquial Egyptian Arabic and some Eastern Arabian dialects identified as a voiced velar stop.
4. [ʒ] A variant used in urban dialects of the Levant identified as voiced palate-alveolar fricative.
5. [gj] A voiced velar stop followed by voiced palatal glide. Kuwaiti Arabic has the following variants of the variable (dʒ): [dʒ] voiced palate-alveolar affricate [j] voiced palatal glide (Dashti et al, 2015).

Reasons of /j/ substituting /dʒ/:

1. /j/ and /dʒ/ have the same place of articulation. Sibawaiyh points out that “between the blade of the tongue and the mid of the hard palate the point of the articulation of the jīm/dʒ/, tshə /t□ / and yaa /j/.
1. In addition to the similarity in their place of articulation, /j/ and /dʒ/ are voiced sounds.
2. /j/ differs from /dʒ/ in their manner of articulation. To this Ibn Yaeish refers; “except for the intensity /dʒ/ has, otherwise it will be /j/”. In Arabic studies, /dʒ/ is considered a stop sound while /j/ is an approximant (Steietiya, 2003).

With /j/ substituting /dʒ/, this study attempts to investigate the process of alternation from a phonological point of view. Further, it is intended to study the phonological change and the phonotactic constraints that condition the syllable structure of Arabic comparing with the Hadhrami and Saudi ones and the morphological change the verb forms undergo in the two dialects due to the phonological change.

Research Questions

The study explores the dialectal variations of “/dʒ/” in Hadhrami and southern Saudi Arabian verb forms, and attempts to find answers to the following questions:

1. Does /j/ substitute /dʒ/ in the verb form? if yes,
2. In what environments does this substitution take place?
3. Does it affect the phonological and morphological structure of the verb form?

Review of Literature

The Palatalization of /dʒ/ into /j/ is a well-known natural phenomenon in Arabic dialects. The Modern Standard Arabic sound /dʒ/ is realized as [j] in Modern Kawaiti Arabic but as [dʒ] in Bedouin Arabic (Dashti et al 2015, P. 67). In addition, /dʒ/ is realized as [j] in both dialects, e.g. [ja] (came) and [jild] (leather). Johnstone (1965) notes that the realization of /dʒ/ as [j] is not subject to phonetic conditioning. He, also, found that some words are always realized with [dʒ], whereas others can be realized with both [dʒ] and [j]; yet this interchangeable feature does not occur in the ‘commonest’ words (P. 241). Al Obaidi (2010) points that /dʒ/ alternates into /j/ in Tamim Arabic. He attributes this change to the fact that /j/ is a continuant sound, which makes it louder and clearer than the non-continuant /dʒ/. Furthermore, both sounds are in the same articulatory area. Hassan (2017) investigates a phonological phenomenon that occurs in Emirati Arabic (EA), whereby the voiced palato-alveolar affricate /dʒ/ changes into the voiced palatal approximate (glide) /j/. In particular, this study attempts to determine whether this phonological alternation is triggered by a certain phonological environment, or whether it occurs randomly without any rule. It also endeavors to examine the hypothesis that this phonological phenomenon was borrowed from other Arabic dialects spoken in the Gulf through language contact. Al Salman (2016) investigates the peculiarity of the Bedouin dialect regardless of the place where it is used.

Al-Darsooni (2013) reports that in some parts of southwest of Saudi Arabia some tribes articulate /dʒ/ as /j/. Dashti et al. (2015) point out that the [j] sound in the speech of Kuwaitis is used by both the indigenous and nonindigenous groups, and [dʒ] is a characteristic feature of the Bedouins who are also a part of the indigenous population. To them, [dʒ] which is the classical variant, is regarded by Kuwaitis as the stigmatized form and the [j] as the one that spoken by

prestigious high class. Their study investigates the change of status of [j] and [dʒ] in the speech of Kuwaitis. This indicates that the [j] variant is undergoing change of status and that the social parameters and the significant political and social changes, that Kuwait has undergone recently, have triggered this linguistic shift. Arabic has processed the same phenomenon with sound change, and the morphological correspondent changes, too. These changes may not be documented in written form and so it will be difficult for scholars to study (McMahon, 1994, p.14).

Methodology

In this study, a qualitative approach is used for data analysis to provide insights into how verb forms in the two dialects have undertaken the change, and being affected phonologically and morphologically. To perform this work, the researchers have studied the present, the past, and the imperative forms of the verb.

The preceding forms are the basic corpus of this study with /j/ substitution in different positions: initial, middle and final. These are analyzed to identify environments where the changes do occur. Milroy and Milroy's study (1978) was used as a method of analysis. Phonologically, the researchers investigate the alternation between the two sounds. For morphological change, they examine the form of verbs where the replacement of /j/ may affect the word formation.

Data Analysis

Phonologically, it appears that any change in the phonological system of languages may affect defined subsets of phonological classes in a regular way. Due to nonlinguistic factors, such as geographical location of the speaker, the change can spread through the community. In the case of Hadhrami and Saudi Sothern dialects, some instances of verb forms with /dʒ/ changing into /j/ are found. It seems that the alternation takes place in different positions in the word. This can be summed up as follows:

1. There are no constraints restricting the replacement of /dʒ/ by /j/. Whatsoever the consonant sound is, it does not affect the choice of /j/ over /dʒ/. However, in Saudi dialects, the replacement is obvious, too.
2. The phonological structure of the verb forms that undergoes a change results in a morphological change in the case of Hadhrami dialect rather than in Saudi's.

3.1 The past tense form

There are three morphological forms of the past forms in Arabic Hadhrami and Saudi dialects with [dʒ] occurring in initial, middle and final positions. These are as follows:

- a. /faʔal/
- b. /faʔul/
- c. /faʔil/

As shown above, the difference between the three forms is in the second syllable of the verb form. It is /ʔal/ as in (a), /ʔul/ as in (b) or /ʔil/ as in (c), respectively. However, the most common past form used in Arabic Hadhrami dialect is /faʔal/. Consider:

- a.1. /ħa.radʒ/ → /ħray/ “went out (ms 3rd per sing)” (i.e. He has gone). (Hadhrami)

This word /ħa.radʒ/ has no change in Saudi dialect. It is not used in the same way the Hadhrami use it. It is the same as in standard Arabic. (i.e. ħa.radʒ).

- /dʒa.las/ → /Ylas/ “sat down (ms 3rd per sin)”
(i.e. He sat down). (Hadhrami)

Similarly, there is no change of the sound. /dʒ/ is not alternated to /j/. It is the same as in standard Arabic (i.e. /dʒa.las/). What the above examples show is that:

1. [j] substitutes [dʒ]; in Hadhrami dialect only.
2. Consequently, the inner phonological structure of the word changes in three respects:
 - a. Because of the omission of the case ending “i.e., /a/ at the end of the word”, this results into a verb form consisting of two syllables. Therefore, the verb form [dʒa.las] has been reduced into one syllable in Hadhrami dialect (i.e.ylas). Similarly, [ħa.radʒ] has been reduced into one syllable [ħray].
 - b. The reduction of the word into one syllable leads to a succession of two consonants: /yl/ and /ħr/, respectively.
 - c. The stress has been moved from the first sound of the first syllable to the second sound of the word.

There is another instance of the same verb form /faʔal/, in addition to the above examples listed in (a.1),

- a.2. /dʒa.raħ/ → /yi.riħ/ (i.e. has been injured) (masculine 3rd person singular). (Hadhrami)
The difference between (a.1) and (a.2) is in the structure they take in Hadhrami dialect.

The above example shows the following:

- Vowels have been changed from /a/ to /i/ with the loss of the case ending.
- There are two syllables instead of one syllable as in the examples above; the first is [ji], the second is [riḤ]. However, in the Saudi dialect, the verb form /faʔal/ maintains the same pronunciation and phonological structure of standard Arabic.

/dʒa.raḤ/ → dʒa.raḤ/ (i.e. has been injured) (masculine 3rd person singular) (Saudi)

3.2. The imperative form

- /Idʒlis/ → /ji.lis/ “sit down” (Hadhrami).
 (add a short vowel) /dʒlis/ → /Idʒ.lis/ (Saudi)

/Ḥ.rɔdʒ/ → /ḥi.rij/ “get out” (Hadhrami).
 /Ḥ.rɔdʒ/ → /Ḥ.rɔdʒ/ (Saudi)

- /IdʒraḤ/ → /jraḤ/ (Hadhrami).
 /IdʒraḤ/ → /Idʒ.raḤ/ (Saudi).

What the above examples show is that in Hadhrami dialect, the imperative forms have had a considerable change in the structure of the verb form.

- There are two syllables in the first examples while one syllable in the second example.
- The two forms of the imperative verb forms show how simultaneously they are used in relation to the past form. It seems, as shown in the examples above that, the imperative form in (a) takes the structure of the past form (b), while the imperative form in (b) tends to take the structure in (a). This can be illustrated in figure (1) below:

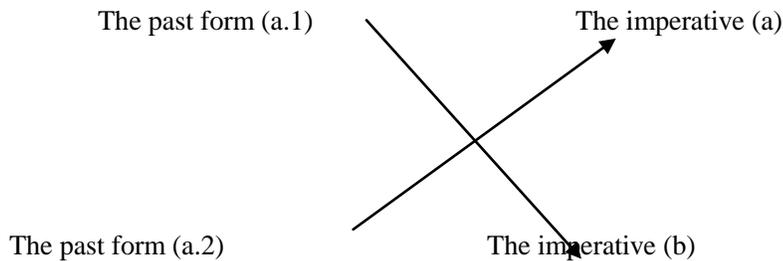


Figure (1) the Imperative forms of the verb in Hadhrami variations

The examples in (a) have the syllable patterns [ji] as in /yi.lis/ and [ij] as in [hi.rij]. These two syllable patterns are considered as unacceptable syllable patterns in standard Arabic due to the existence of the glide /j/ preceded or followed by the vowel /i/ which results into difficulty in the articulation of the syllable.

On the other hand, in the Saudi dialect, there is no substitution for the sound /dʒ/ as shown in the examples above. Besides, the Saudi dialect keeps the same phonological structure of standard Arabic imperative verb form. (to add to the abstract)

3.3. The Present form

In Hadhrami dialect, to derive the present form from the triconsonantal past tense form, the morpheme [ja] is added. With the attachment of [ja] as a prefix added to the triconsonantal word, vowels which are added as infixes through a process of affixation are inflected to cope with the change in the aspect and the structure of the word. Consider:

- /jadʒ.lis/ → /ji.j.lis/ (Hadhrami)
 /jah.rɔdʒ/ → /jih.rɔdʒ/ (Hadhrami)
- /jadʒ.raḤ/ → /ji.j.riḤ/ (Hadhrami)
 /jah.dʒal/ → /jih.jil/ (Hadhrami)
- /jah.yur/ → /jih.yir/ (Hadhrami)

However, in the Saudi dialect, the standard Arabic present verb form keeps its structure. Consider:

- a. /jadʒ.lis/ → /jadʒ.lis/ (Saudi)
 /jaħ.ridʒ/ → /jaħ.ridʒ/ (Saudi)
- b. /jadʒ.raħ/ → /jadʒ.raħ/ (Saudi)
 /jaħ.dʒal/ → /jaħ.dʒal/ (Saudi)
- c. /jah.yur/ → /jah.yur/ (Saudi)

The above Hadhrami examples show that there is a change in the morphological and phonological structure of the verb form. In Standard Arabic, [ja] is attached to the word to indicate the aspect of the verb form: the present. However, this [ja] has been changed to [ji] in Hadhrami dialect. The change of [ja] to [ji] has led to another change: the three types of the vowels, /a, u, i/ “i.e., the infixes that indicate the morphological structure of the verb forms have been replaced by [i]. This can be illustrated by the following rule:

{a, u, i}(i.e.; the ifixes) → {i}/ji# [where (ji) is the morpheme of present aspect]

Discussion

The aim of any phonological or phonetic variability (assimilation, epenthesis, replacement etc...) in any language moves towards facilitating ease of articulation and perception. When [j] replaces [dʒ] in many contexts in Hadhrami verb forms, the reason to do this is to facilitate ease of articulation. [dʒ] needs a great effort in its production than [j]. /dʒ/ is produced when the middle of the tongue contacts the middle of the hard palate (Anis, 1975: 77). However, with /dʒ/ articulation, the air is obstructed at a certain point in the oral cavity resulting into an explosion. In contrast, /j/ needs less effort in articulation since air moves out of the mouth with no obstruction. This is the main reason distinguishing /dʒ/ from /j/.

/j/ replacing /dʒ/ results into:

1. Morphological change

The implication of [j] substitution on the morphological structure of the verb form is obvious. Arabic tends to construct its words through a process of infixation. The basic elements in the construction of word structure are vowels. The triconsonantal word is constructed by the addition of vowels within the root of the word. To derive the past tense form of the triconsonantal root (dʒ.l.s), vowels are infixed. Consider:

Root	past (SA)	past (SA)	past (H.D)
dʒ.l.s.	dʒa.la.sa	dʒa.las	jas

As shown above, with [dʒ] altering to [j], the word structure has been completely changed. There is no longer that structure of the verb form of standard Arabic. This morphological change goes side by side with the phonological change.

2. Phonological Change

The phonological change that can be seen in the structure of /jas/ is as follows:

- Two consonants are in succession. This is known as consonant cluster. The onset position of the verb form has been filled with two consonants, which is not allowed in Standard Arabic. Catford (1988: 208) confirms this by saying "Arabic admits no consonant cluster."
- A case of re-syllabification can be observed here. The word, which once consists of two syllables, has been reduced to constitute one syllable with the stress placed on the second sound of the onset rather than the first one.
- "hi.rj" the imperative form in Hadhrami dialect consists of an unacceptable syllable type in Arabic. "-ij" is rather an acceptable syllable in Arabic. When such a syllable does occur in a word, Arabic tries to overcome this unacceptability by omission then compensation by lengthening. (Safaa, 2005: 50- 51). This then will be considered as follows:

hi.rj → hi.rii

Similarly, to overcome the unacceptability of iy syllable in the present form yiylis and jii.riħ, the second /j/ has been dropped and was compensated by lengthening the vowel /i/, consider:

jjj.lis → jii.lis
 jjj riħ → jii.riħ

On the contrary, /dʒ/ in the southern Saudi dialect does not undergo any phonological or morphological changes when compared to standard Arabic verb forms (i.e. past, imperative, and present).

Limitations of the Study

The study is concerned with verb forms in Hadhrami and some Saudi southern dialects. South Saudi dialect is a variety of Arabic spoken in the Asir, Jizan regions in the south of Saudi Arabia. Generally speaking, there are two main groups of dialects spoken in these two regions, one by the urban population, originally spoken mainly in the cities of Abha, Khamis Mushait and partially in Jizan and another dialect by the rural populations. Some rural tribes in the southern area of Saudi Arabia (i.e. Alnemas tribes) have the same pronunciation of Hadhrami dialect /dʒ/. Other dialects of some southern Saudi tribes (i.e. Alfiifi) substitute /dʒ/ with /z/ (i.e. jazlis/). Some Jazani tribes use the same phonological structures of the Hadhrami dialect, while keeping the same pronunciation of /dʒ/. However, all these rural dialects are an exception of the commonly used dialect in the southern area of Saudi Arabia. The present study applies only to the urban variety which is discussed in this article.

Conclusion

In this study, the researchers deal with the alternation of /dʒ/ to /j/. This alternation results in a change in the phonological and morphological structure of the verb form as well: the past, the imperative and the present in Hadhrami dialect. However, in Saudi dialect, no phonological or morphological changes have been detected in the verb forms (i.e. past, imperative, and present).

The main reason for such phonological variability in Hadhrami dialect is to facilitate the production of the verb forms. However, the change that a verb form undergoes in Hadhrami dialect leads to a sort of difficulty. The genitival case in Hadhrami dialect is unmarked in contrast to standard Arabic; /i/ replaces /a/ in most if not all positions of the verb form. /a/ in standard Arabic is the unmarked vowel used because of its ease of articulation while /i/ is considered as the most difficult vowel to articulate. Moreover, the alternation of /dʒ/ to /j/ results into establishing a syllable type unacceptable in standard Arabic. [-ij] in standard Arabic is the most difficult syllable type. The transition period to move from /i/ to the articulation /j/ needs a great effort of articulation that is supposed to be difficult.

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