A STUDY ON VOWEL HARMONY IN THE DIALECTS OF AZERBAIJAN TURKISH IN IRAN

Amir KHALILZADEH [1]

ABSTRACT

Vowel harmony (VH) is a phonological rule which is mainly related with the vowels, though some degrees of harmony exist between vowels and consonants and also between some consonants in the dialects of Azerbaijan Turkish in Iran. The purpose of this paper is to study the treatment of vowel harmony in the dialects of Azerbaijan Turkish in Iran. In fact, the researcher has made an attempt to find a reliable answer to the question "Is vowel harmony realized in the speech of the Azerbaijan Turks in Iran?" Using the necessary linguistic data collected from the inforants of the dialects and within the framework of generative phonology, the author of the paper has attempted to evaluate the present-day situation of vowel harmony in the above-mentioned dialects of Azerbaijan Turkish (a synchronic study). The results of the study showed that, except some violations mostly observed in the loanwords, there is an innate harmony in the roots of the words and a stronger and more stable harmony between the roots and the suffixes of these dialects, so vowel harmony is realized in these dialects to a relatively high degree. The study demonstrates that vowel harmony is a major and distinctive phonological rule in these dialects.

Key Words: vowel harmony, dialects of Azerbaijan Turkish, phonological rule, generative phonology.

1. Introduction

This article deals with the dialects of Azerbaijan Turkish in Iran to show the present situation of vowel harmony in these dialects. Vowel Harmony (VH) is one of the distinctive characteristics of Azerbaijan Turkish, a member of Turkic languages. It plays a very important role in the speech of the dialects under discussion. VH is a phonological rule which is mainly related with the vowels, though some degrees of harmony exist between vowels and consonants and also between some consonants in these dialects. VH is categorized into two types:

   a. The harmony between vowels
   b. The harmony between vowels and consonants. (Axundov, 1984, p.210)

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[1] Assit. Prof. Dr., Islamic Azad University, Department of English Teaching, e-mail: amirkhl42@gmail.com

According to Zehtabi (2002, pp. 37-38) VH is devided into three types:
  a. The harmony between vowels
  b. The harmony between vowels and consonants
  c. The harmony between consonants

Dəmirçizadə (2007, pp.104-5) suggests that in agglutinating languages, specifically in Turkish languages such as Azerbaijan Turkish, there is a law named vowel harmony according to which the phonemes of a word, especially the vowels, assimilate with each other. He adds that VH is a kind of progressive assimiation.

Lass (1984) believes that it is the last vowel of the root in Azerbaijan Turkish which determines the kind of the vowel of the suffix added to it. In other words, it is the vowel of the suffix which assimilates with that of the root. For example:

əl (hand) + -Im (posessive suffix) → [əli̲m] (my hand),   qulax (ear) + -lAr (plural suffix) →[qulaxla̲r] (ears) Carr (1993, p.248) quotes some of the characteristics of VH as follows:
  a. VH may occur in the roots.
  b. VH may affect the suffixes.

According to Falk (1978) when the vowel of the suffix assimilates with that of the root, whatever occurs is called vowel harmony, but when the vowel of the root assimilates with that of the suffix, the process is called umlaut. Falk names Hungarian and Turkish languages as examples of vowel harmony.

The subject is going to be studied both in the roots and between the roots and the suffixes. Goldsmith (1990) asserts that according to vowel harmony, the vowels of a word should be of the same kind. Lyons(1981) believes that vowel harmony, in Turkish languages, is realized on the basis of [back] and [round] features.

Gökdağ (2006, p.79) has done a study on the dialects of Azerbaijan Turkish in Iran. He asserts that in Salmas dialect VH is highly realized on the basis of [back] feature in the roots of the words, though some degree of violation occurs in different forms of the verbs.

Yorgancı (2000, p.131) suggests that VH in Turkic languages is based on both [back] and [round] features. The same is true in Azerbaijan Turkish. It should be mentioned, however, that in Turkey Turkish and Azerbaijan Turkish the realization of the harmony on the basis of [round] feature is rather limited. In other words, this kind of harmony is realized in these languages only when the vowels of the word belong to [back] vowels. Zehtabi (2002, p.43) asserts that in Azerbaijan Turkish, if the vowel of the first syllable is an unround vowel (/e/- /i/- /ı/- /a/- /ə/)(back and front), no round vowel will be observed in the next syllable(s).

For example:
a-na-mı-zın (our mother's), sa-tı-cı (seller), ev-lər-im-iz (our houses), əl-lər-im (my hands)

As mentioned before, vowel harmony in Azerbaijan Turkish is based on both [back] and [round] features. Regarding [back] feature, all the vowels should belong to either back or front vowels (This is the main rule of vowel harmony in Azerbaijan Turkish.), e.g. arvat (woman) and kişi (man). The second form of vowel harmony is realized on the basis of [round] feature (This is not as strong and widespread as the previous rule.), i.e. the vowels of a word should be either round or unround, e.g. qolum (my arm), ölüm (death), though this does not always happen, e.g. qollarım (my arms), ölsəm (If I die.). It means that it is possible to add a suffix containing an unround vowel to a root whose vowel is round but not vice versa. It seems necessary to mention that if the round vowel of the root belongs to the back vowels, the unround vowel of the suffix should be back, too (qollar) and if the round vowel of the root belongs to the front vowels, the unround vowel of the suffix should be front, too (ölsəm). This demonstrates that the harmony on the basis of [back] feature is the main or mother rule of vowel harmony in this language. Vowel harmony plays a very important role in the speech of the speakers of the dialects under discussion and it seems that if it weakens, the whole language is going to deform and consequently lose its beauty. These matters motivated the author to do a synchronic study on the dialects. It should be mentioned that this is the first study dedicated to VH in these dialects.

The main question of the study is " Is vowel harmony realised in the speech of the dialects of Azerbaijan Turkish in Iran?" Clearly, we are going to know, using the collected data from the informants, if the speakers of these dialects use, unconsciously, the rules of vowel harmony in their speech. We have limited the study to three Azerbaijani-inhabited states of Iran, i.e. West Azerbaijan, East Azerbaijan and Ardabil. The linguistic data have been collected from different cities and towns of these states through free conversation method and the informants have been selected from among the old, male, illitrate and possibly those who live in the village or have spent most of their lives in the village. The study is based on the spoken form of language.

2. Vowel harmony in the roots

As mentioned before, in Azerbaijan Turkish, vowel harmony is realized on the basis of [back] and [round] features. The harmony observed in the roots is a morphological matter. In other words, the vowels of a word should be either back or front in this language. Similarly, they should be either round or unround. We show this through the following rule:

$$V \longrightarrow \begin{bmatrix} \alpha \text{ back} \\ \beta \text{ round} \end{bmatrix} \Big/ C \begin{bmatrix} \alpha \text{ back} \\ \beta \text{ round} \end{bmatrix} \cdot C$$

This is not a phonological rule but a morphological one because it happens in the roots, not between the roots and the suffixes.

2.1 VH on the basis of [back] feature
According to this rule, if the first vowel of a word is a back vowel, the next one should be a back vowel, too. The related data are presented in four categories, i.e. in verbs, nouns, adjectives and adverbs:

a. Verbs containing back vowels: oyna- (play), anla- (understand), dolan- (walk around)
b.Verbs containing front vowels: itələ- (push), çeynə- (chew), göndər- (send), eşit- (hear)
c. Nouns containing back vowels: qaşıx (spoon), ağaş (tree), alma (apple), burun (nose)
d. Nouns containing front vowels: dəvə (camel), köynəh (shirt), dədə (father)
e. Adjectives containing back vowels: ağır (heavy), qalın (thick), yanıx (burnt)
f. Adjectives containing front vowels: qərə (black), yüngül (not heavy), sərin (cool)
g. Adverbs containing back vowels: sabah (tomorrow), hara (where), yavaş (slowly)
h. Adverbs containing front vowels: hərdən (sometimes), dünən (yesterday), niyə (why)

We show the harmony observed in the above-mentioned data through the following rule:
V → [α back] / C [α back] C

2.2 VH on the basis of [round] feature
According to this rule, if the first vowel of a word is a round vowel, the next one should be a round vowel, too. (Of course, the next vowel may also be a non-round back vowel.) Look at the following examples:

a. Verbs containing round vowels: soruş- (ask), yuyun- (wash yourself), düşün- (think)
b. Verbs containing unround vowels: apar- (take), başla- (start), saxla- (keep, hold)
c. Nouns containing round vowels: boyun (neck), bulut (cloud), üzüm (grapes), ölüm (death)
d. Nouns containing unround vowels: ağaş (tree), darax (comb), dəvə (camel), keşir (carrot)
e. Adjectives containing round vowels: soyux (cold), yoxsul (poor), yüngül (not heavy)
f. Adjectives containing unround vowels: xırda (small), yaxın (near), diri (alive), dərin (deep)
g. Adverbs containing round vowels: büyün (today), gün (d)üz (during the day)
h. Adverbs containing unround vowels: yavaş (slowly), axşam (evening), bildir (last year)

We show the harmony observed in the above-mentioned data through the following rule:
V→ [α round] / C [α round] C

3. Vowel harmony between the roots and the suffixes
In this part, we talk about the harmony observed between the roots and the suffixes in the dialects. When a suffix is added to a root, the vowel of the suffix will certainly assimilate with that of the root. Here, we observe no irregularities or violations, i.e vowel harmony is always realized between the root and the suffix (both in native words and in loanwords). In these dialects, it is the last vowel of the word which determines the vowel of the suffix. In other words, this rule is realized iteratively in these dialects, i.e. by adding new suffixes, the rule will be repeated. The rules realized between the roots and the suffixes belong to the phonological rules. There exist nine vowels in the dialects under discussion but only six of

them participate in forming the suffixes. The vowels /o/, /ö/ and /e/ are not observed in the suffixes. So, there are six varieties of suffixes of which four suffixes are formed on the basis of [back] and [round] features and two only on the basis of [back] feature.

3.1 VH on the basis of [back] feature

According to this rule, if the (last) vowel of the root is one of the back vowels (/a/- /o/ -/u/- /ı/), the vowel of the suffix should belong to back vowels, too, but if it is a front vowel (/e/- /i/- /ə/- /ü/- /ö/), the vowel of the suffix should belong to front vowels. Again, the related data are presented in four categories.

a. Verbs containing back vowels plus different tense suffixes:
 oyna- dım (I danced.)
 oyna- mışam (I have danced.)
 oyna- mışdım (I had danced.)
 oyna- ram (I dance.)

b. Verbs containing front vowels plus different tense suffixes:
 pişir- dim (I cooked.)
 pişir- mişəm (I have cooked.)
 pişir- mişdim (I had cooked.)
 pişir- ərəm (I cook.)

c. Nouns containing back vowels plus different case suffixes:
 alma- (apple- nominative)
 alma- nın (of apple, genitive)
 alma- ya (to apple)
 alma- nı (apple, accusative)
 alma- dan (from apple)

d. Nouns containing front vowels plus different case suffixes:
 səndəl- (chair, nominative)
 səndəl- in (of chair, genitive)
 səndəl- ə (to chiar)
 səndəl- i (chair, accusative)
 səndəl- dən (from chair)

e. Adjectives containing back vowels plus different case suffixes:

We mention that in these dialects, in addition to nouns, we can add case suffixes to the adjectives and adverbs, too. The reason is that we can substitute adjectives and adverbs for the nouns.

qoca- (old, nominative)
qoca- nın (of old, genitive)
qoca- ya (to old)
qoca- nı (old, accusative)
qoca- dan (from old)

f. Adjectives containing front vowels plus different case suffixes:
gözəl-(nice, nominative)
gözəl- in (of nice, genitive)
gözəl- ə (to nice)
gözəl- i (nice, accusative)
gözəl- dən (from nice)

g. Adverbs containing back vowels plus different case suffixes:
sabah- (tomorrow, nominative)
sabah- ın (of tomorrow, genitive)
sabah- a (to tomorrow)
sabah- ı (tomorrow, accusative)
sabah- dan (from tomorrow)

h. Adverbs containing front vowels plus different case suffixes:
gecə- (night, nominative)
gecə- nin (of night, genitive)
gecə- yə (to night)
gecə- ni (night, accusative)
gecə- dən (from night)

We may show the harmony observed in the above-mentioned data through the following rule:
V → [α back] / [α back] (C) + (C) _____

3.2 VH on the basis of [round] feature
According to this rule, if the (last) vowel of the root is one of the round vowels (/u/- /o/- /ü/- /ö/), the vowel of the suffix should belong to round vowels, too, but if it is an unround vowel (/a/- /ə/- /i/- /e/- /ı/), the vowel of the suffix should belong to unround vowels. Again, the related data are presented in four categories.

a. Verbs containing round vowels plus different tense suffixes:
oxu- dum (I studied.)
oxu- muşam (I have studied.)
oxu- muşdum (I had studied.)
oxu- yaram (I study.)

b. Verbs containing unround vowels plus different tense suffixes:
al- dım (I bought.)
al- mışam (I have bought.)
al- mışdım (I had bought.)
al- aram (I buy.)

c. Nouns containing round vowels plus different case suffixes:
xoruz- (cock, nominative)
xoruz- un (of cock, genitive)
xoruz- a (to cock)
xoruz- u (cock, accusative)
xoruz- dan (from cock)

d. Nouns containing unround vowels plus different case suffixes:
darax- (comb, nominative)
darağ- ın (of comb, genitive)
darağ- a (to comb)
darağ- ı (comb, accusative)
darax- dan (frrom comb)

e. Adjectives containing round vowels plus different case suffixes:
soyux- (cold, nominative)
soyuğ- un (of cold, genitive)
soyuğ- a (to cold)
soyuğ- u (cold, accusative)
soyux- dan (from cold)

f. Adjectives containing unround vowels plus different case suffixes:
sırtıx- (loose, nominative)
sırtığ- ın (of loose, genitive)
sırtığ- a (to loose)
sırtığ- ı (loose, accusative)
sırtıx- dan (from loose)

g. Adverbs containing round vowels plus different case suffixes:
bura- (here, nominative)
bura- nın (of here, genitive)
bura- ya (to here)
bura- nı (here, accusative)
bura- dan (from here)

h. Adverbs containing unround vowels plus different case suffixes:
 aşağı- (down, nominative)
aşağı- nın (of down, genitive)
 aşağı- ya (to down)
aşağı- nı (down, accusative)
 aşağı- dan (from down)

We may show the harmony observed in the above-mentioned data through the following rule:
V → [α round] / [α round] (C) + (C) _____

4. The harmony between vowels and some consonants

In these dialects, in addition to the harmony observed between vowels, we observe some degree of harmony between vowels and some consonants. We will examine this kind of assimilation in two parts:

4.1 The harmony on the basis of [back] feature

Like vowels, we may lable some consonants, due to their place of articulation, as back and front consonants in these dialects. Therefore, back vowels, e.g. /a/ and back consonants, e.g. /ğ/ from one hand, front vowels, e.g. /ə/ and front consonants, e.g. /m/ from the other hand assimilate with each other. In other words, if the first phoneme of the word is a back vowel, the second one will often be a back consonant. Similarly, if the first phoneme of the word is a front vowel, the second one will often be a front consonant and vice versa. For example: ağa (sir, gentleman), əmi (uncle)

4.2 The harmony in the intervocalic environment

Ergin (1971, p.101) believes that in Azerbaijan Turkish when /k/ occurs between two vowels, it changes into /y/. He cites the words gələcək (future) and çiçək (flower) as examples:
gələcək + -im → gələcəyim (my future), çiçək + -im → çiçəyim (my flower)

Regarding the vibration of the vocal cords, vowels and voiced consonants are of the same kind. Accordingly, some of the voiceless consonants change into their voiced counterparts when they occure between two vowels, i.e. they assimilate with the vowels on the basis of [voice] feature. This rule is not applied for all of the consonants,i.e. it covers only some of the consonants of which we may cite /x/, /h/, and /t/.

A. /x/→/ğ/
qulax + -ım → qulağım (my ear),   torpax + -a → torpağa (to soil)
yarpax + -a → yarpağa (to leaf),   yanax + -ın → yanağın (your cheek)

B. /h/→/y/

çörəh + -im → çörəyim (my bread),sümüh + -üm → sümüyüm (my bone)

bələh + -i → bələyi (his or her swaddling cloth),   cəndəh + -ə → cəndəyə (to dead body)

C. /t/→/d/

arvat + -ım → arvadım (my wife),   bulut + -a   →   buluda (to cloud)

umut + -um → umudum (my hope),   yoğut + -um → yoğudum (my yogurt)

We see that the voiceless consonants /x/, /h/ and /t/ take the [+voiced] feature of the surrounding vowels and change into their voiced counterparts.

This kind of assimilation is not realised in the monosyllabic words of these dialects. For example:

 mıx + -ım → mıxım (my nail)

 ruh + -um → ruhum (my soul)

 süt + -üm → sütüm (my milk)

It is realised only in bisyllabic and multisyllabic words.

We show the harmony observed in the intervocalic environment through the following rule:

$$\begin{bmatrix} - \text{voiced} \\ - \text{sonorant} \end{bmatrix} \longrightarrow [+ \text{voiced}] \Big/ \text{V} \underline{\quad} \text{V} \quad \cdot$$

5. Concluding remarks

The pronunciation of the words in these dialects is mainly based on vowel harmony and if it is removed, it will certainly be very difficult and even impossible to speak these dialects , e.g. pronuoncing the word dəvə (camel) as either dəva or davə is both unnatural and difficult. Another matter is that it is the mother tongue of many people in Iran. Furthermore, many non-natives of these dialects have to learn and use it to establish social relations with the natives (specially the illitrates) of these dialects and to do their economic, social and business activities. We can use the results of the study in education and teach the phonological rules of vowel harmony both to non-natives who are interested in this language or need to learn it, and also to the natives such as students, teachers, and linguists to help them do their jobs correctly and effectively. Moreover, it can be an aid to introduce the language of these dialects as a musical one. In other words, music and vowel harmony are directly related to each other and in fact one of the main reasons of the beauty and prominence of Azerbaijani music is the existence of a high degree of vowel harmony in this language and its dialects. Finally, it can contribute to know these dialects well and this will naturally be helpful to the dialectology of Azerbaijan Turkish in general.

Paying attention to the above-mentioned data and rules, we come to the conclusion that vowel harmony is realized to a relatively high degree in different dialects of Azerbaijan Turkish in Iran. In fact, it would be impossible to delete it from the speech of Azerbaijan Turks as it plays a very distinctive role in the phonology of this language. In addition to the harmony between the vowels of these dialects, we observe some degree of harmony between vowels and some consonants and also between the consonants. Furthermore, it affects the loanwords borrowed from other languages as far as possible. As an example, we cite the word /Ka:zem/ which is an Arabic loanword in these dialects. It is pronounced as /kazım/ in these dialects. No vowel harmony is observed in the Arabic pronunciation of this word (the first vowel is a [+back] and the second one is a [-back] vowel), but in the pronunciation of Azerbaijan Turks, we observe the vowel harmony on the basis of [back] feature, i.e. both vowels of the word belong to the back vowels. Moreover, the long vowel /a: / is changed into short vowel /a/ because there are no long vowels in these dialects. This is an example of complete harmony under the influence of vowel harmony. Another type of harmony observed in the loanwords under the influence of vowel harmony is partial harmony. We can cite the word /keta:b/ as an example. This is pronounced as /kitab/ in these dialects. We do not observe a complete harmony in such words and whatever happens is a vowel change (/e/ into /i/) and the deletion of vowel length (/a: / into /a/) occurred on the basis of the phonology of Azerbaijan Turkish.

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