

VOWEL HARMONY IN TURKISH

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Özet

Bu çalışmada Türk lehçelerinin Oğuz grubuna giren Türkiye Türkçesinin sesbilgisi için karakteristik olan ses uyumu konu edilmektedir. Çalışmada ses uyumunun Türkiye Türkçesindeki durumu ve işleyişi değerlendirilmiştir; ses uyumunun işleyişine dair fonolojik kurallar gerekli dilbilimsel verilerin ışığı altında ortaya konmuştur. Çalışmada konu eş zamanlı bir yaklaşımla ele alınmıştır.

Anahtar kelimeler: Ses uyumu, Türkiye Türkçesi, minimal çiftler, ayırıcı özellikler.

Abstract

The purpose of this paper is to study Vowel Harmony in Turkish, a member of Oghuz languages and, like other Turkic languages, known for having this phonetic characteristics. Using the necessary linguistic data, the author of the paper has tried to evaluate the present-day situation of VH in Turkish and to present the related phonological rules which permit its operation in Turkish. In other words, the author has tried to do a synchronic study on VH in this language.

Key words: vowel harmony (VH), Turkish, minimal pairs, distinctive features.

Turkish is a member of the Western subgroup of the Oghuz languages which includes Gagauz, Turkish, and Azerbaijani. The Oghuz languages form the South-Western subgroup of the Turkic languages, a language family comprising some 30 living languages spoken across Eastern Europe, Central Asia, and Siberia. Turkish, the official language of Turkey, is spoken as the first language by over 70 million people worldwide, making it the most commonly spoken of the Turkic languages. Its speakers are located predominantly in Turkey and Cyprus, with smaller groups in Iraq, Greece, Bulgaria, the Republic of Macedonia, Kosovo, Albania, France, the Netherlands, Austria, Belgium, Switzerland, and the United Kingdom. It is particularly spoken by several million immigrants in Germany

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The distinctive characteristics of Turkish are vowel harmony (a kind of assimilation) and extensive agglutination. After the foundation of the Republic of Turkey and the script reform, the Turkish Language Association (TDK) was established in 1932 under the patronage of Mustafa Kemal Atatürk, with the aim of doing a language reform to replace Arabic and Persian loanwords and foreign grammatical constructions with Turkish equivalents. The standard dialect of the Turkish language is İstanbul dialect.

As mentioned above, vowel harmony is the subject matter of this paper. Before going any further, we will review some definitions on vowel harmony. Katamba (1989:211) defines it as follows: "Vowel harmony is a process whereby within a certain designated domain, usually the word, all vowels are required to share one or more phonological properties." Goldsmith (1990:304) offers a similar definition in his book: "A vowel harmony system is one in which the vowels of a language are divided into two (or more) (possibly overlapping) subsets with the condition that vowels in a given word (or domain more generally) must come from a single such subset."

Carr (1993:248) provides a summary of the properties that the linear treatment of vowel harmony has:

1. Harmonic phonological features can be seen within root segments.
2. Affixes are affected from harmonic features.
3. Rules are formulated in such a way that neutral vowels do not control the vowel harmony.
4. The application of rules takes place linearly from left to right or from right to left while filling in or changing values for harmonic features.
5. Consonants and neutral vowels, which are not affected, must take place in the structural description of the rule in parentheses.

Since vowel harmony is the result of natural human tendency towards the use of the muscular effort economically, it is a good example for the Least Effort Theory. Now, before dealing with Turkish vowel harmony, it seems necessary to introduce the consonants and vowels of Turkish.

There are twenty-one consonants in Turkish shown in the following table:

| | Bilabial | Labiodental | Dental | Alveolar | Post-alveolar | Palato-alveolar | Palatal | Velar | Glottal |
|-------------|----------|-------------|--------|----------|---------------|-----------------|---------|-------|---------|
| Stops | p b | | t d | | | | | k g | |
| Affricates | | | | | tʃ dʒ | | | | |
| Fricatives | | f v | | s z | ʃ ʒ | | | ɣ | h |
| Nasals | m | | | n | | | | | |
| Lateral | | | | l | | | | | |
| Approximant | | | | | | r | | | |
| Glide | | | | | | | y | | |

As the paper focuses on the vowels, we do not explain the consonants and their allophones.

There are eight vowels in Turkish: e - i - ö - ü - a - ı - o - u which we are going to classify according to three features; [back], [high], [round] through the following table:

| | e | i | ö | ü | a | ı | o | u |
|-------|---|---|---|---|---|---|---|---|
| Back | - | - | - | - | + | + | + | + |
| Round | - | - | + | + | - | - | + | + |
| High | - | + | - | + | - | + | - | + |

As the main subject of this paper is directly related with vowels, we are going to demonstrate them through the method of minimal pairs:

1. /e/ is a front, unrounded, half-open vowel exemplified by the following pairs: bel (waist), bil (know)

/e/ → et (do) , it (dog) → /i/
eş (wife, husband) , iş (job, work)

2. / i / is a front, unrounded, closed (high) vowel shown through the following pairs:

diş (tooth) , düş (dream)
/ i / → din (religion) , dün (yesterday) → /ü/
biz (we) , büz (bring together)

3. /ö/ is a front, rounded, half-closed vowel shown by the following pairs:

göl (lake) , gül (rose)
/ö/ → böl (divide) , bül (know) → /ü/
ön (front) , ün (fame)

4. /ü/ is a front, rounded, closed (high) vowel shown by the following pairs:

büz (bring together) , buz (ice)
/ü/ → düş (dream) , duş (shower) → /u/
tür (kind, variety) , tur (travel) 5. /a/ is a back,
unrounded, half-open vowel which according to the following minimal
pairs functions as a phoneme in Turkish:

bal (honey) , bol (loose)
/a/ → at (horse) , ot (grass) → /o/
sar (hug) , sor (ask)

6. /ı / is a central, unrounded, closed vowel where phonemic status is shown by the following pairs:

kıl (hair) , kal (stay)
/ ı / → kız (girl) , kaz (dig) → /a/
sır (secret) , sar (hug)

7. /o/ is a back, rounded, half-closed vowel shown by the following pairs:

ol (be, become) , al (take)
/o/ → dol (be filled) , dal (branch) → /a/
kol (arm) , kal (stay)

8. /u/ is a central, rounded, closed vowel shown by the following minimal pairs:

| | | |
|--------------------|---|-----------------|
| bul (find) | , | bol (loose) |
| /u/ → kul (person) | , | kol (arm) → /o/ |
| dul (widow) | , | dol (be filled) |

There are no diphthongs in Turkish; when two vowels come together, which occurs only with loanwords, each vowel retains its individual sound, e.g. maaş (wages, salary), saadet (welfare). The Turkish vowel system can be considered as being two-dimensional, where vowels are characterized by two features: front/back and rounded/unrounded.

Vowel harmony is the principle by which a native Turkish word incorporates either exclusively back vowels or exclusively front vowels, though there are some exceptions to the rules of vowel harmony, e.g. in compound words the vowels need not harmonize between the constituent words of the compound. Forms like ortaköy (orta+köy) (middle village), başkent (baş+kent)(capital), bugün (bu+gün)(today) are permissible. Furthermore, vowel harmony does not apply in most of the loanwords (e.g. zalim, vakit, tahammül, aile, ...) and some invariant suffixes such as -yor(present tense) e.g. gidiyor, seviyor, ...There are also some native Turkish words that do not follow the rule, e.g. anne, kardeş, âbi, merhaba, tabi.

It goes without saying that vowel harmony is a famous and prominent phonological rule in Turkish. In this system there are two distinct spreading processes of vocalic features. The first process involves [back] and the second one involves [round] feature. The conditions for the appearance of [round] feature are more restricted. Here, only the high vowels take the role of the receptors and this feature has no way of jumping over non-low vowels to spread the feature [round].(Goldsmith 1990:305).

Vowel harmony in Turkish system is represented with three equipollent features [+/-back], [+/-round], and [+/-high]. (Clement and Sezer cited in Goldsmith 1990:305). We can explain the three rules as follows:

1. Backing harmony spreads the feature [back] to a suffix whose vowel has only the feature [low], e.g.

| | | | | |
|--------|---|---------|---|--------|
| bel | + | ler | → | beller |
| ↓ | ↓ | ↓ | ↓ | |
| [+low] | | [-back] | | |

2. In a similar way, the feature [+round] spreads to a suffix whose vowel is only [-low], e.g.

kul + un → kulun
 ↓ ↓ ↓ ↓
 [-low] [+round]

3. The process of [-round] harmony spreads the feature [-round] to a suffix whose vowel has the feature [-low], e.g.

zil + i → zili
 ↓ ↓ ↓ ↓
 [-low] [-round]

Underhill (1976:25) explains the above-mentioned rules of vowel harmony in Turkish in another way as follows:

1. Front vowels follow front vowels and back vowels follow back vowels.

2. High vowels get the feature of [+round] after a round vowel and the feature of [-round] after an unrounded vowel.

3. A succeeding low vowel must be unrounded.

Now, in order to show the vowel harmony in Turkish, we are going to provide some Turkish words. Here, we will present the words in two forms; first only the roots of the words (in four categories) and then the roots along with different suffixes (four categories) will be presented.

A. Roots with feature [+back]:

| | | | | | | |
|--------|-------|--------|-------|--------|---------|-------|
| ada | oda | tohum | ulu | sucuk | ocak | arka |
| sığır | adım | yalan | ama | ağaç | sıcak | uğur |
| saygı | gaga | gala | Konya | yangın | cuma | doğa |
| soğan | tarak | ağrı | iğdir | tuğla | rahat | acı |
| paha | yuva | çuval | kavun | tavuk | hayat | bayat |
| doğan | yığın | hasta | tava | gonca | karga | kapı |
| kısa | okul | hata | sakız | sakin | kurbağa | tarak |
| satır | kaban | saban | hala | kadın | takim | ordu |
| numara | usta | salı | pazar | yaka | yoğun | fazla |
| kaza | araba | parmak | dudak | | | |

We present the following rule for the above-mentioned data:

V → [+back] / C [+back] C

B. Roots with the feature [-back]

| | | | | | | |
|--------|-------|-------|-------|-------|---------|--------|
| arzu | kömür | küçük | yeni | ince | ceviz | dede |
| emir | dönem | düğün | böyle | düğme | deve | neden |
| ilke | yenge | öbür | öyle | elçi | teneke | isim |
| ipek | ömer | şöyle | şehir | gelin | keten | yengeç |
| resim | ödev | yiğit | sevgi | tere | fikir | kibrit |
| erkek | öğüt | iğne | kere | hekim | kelebek | bebek |
| kök | evet | güzel | erken | şeker | seksen | etki |
| ömür | büyük | kemik | sihir | neşe | terlik | tepki |
| gerçek | kimse | | | | | |

We present the following rule for the above-mentioned data:

$V \rightarrow [-\text{back}] / C [-\text{back}] C$

C. Roots with the feature [+round]:

| | | | | | | |
|-------|-------|-------|-------|-------|------|--------|
| yoğun | büyük | düğün | öbür | ömür | öğüt | küçük |
| sucuk | kömür | gümüş | çoğul | doğum | doğu | toplum |
| çözüm | usul | okul | sorun | uğur | buğu | bulut |
| şükür | konus | süpür | | | | |

We present the following rule for the above-mentioned data:

$V \rightarrow [+round] / C [+round] C$

D. Roots with the feature [-round]:

| | | | | | | |
|--------|--------|---------|-------|-------|-------|-------|
| seksen | gerçek | kemik | sihir | tepki | yeni | dede |
| ince | ceviz | emir | deve | neden | ilke | arka |
| gaga | karga | takım | araba | hala | tuğla | kavga |
| yarın | evet | arkadaş | | | | |

We present the following rule for the above-mentioned data:

$V \rightarrow [-round] / C [-round] C$

E. Roots along with different suffixes having the feature [+back]:

| Nominative case | Genitive case | Dative case | Accusative case | Plural form |
|-----------------|---------------|-------------|-----------------|-------------|
| kuzu | kuzu-nun | kuzu-ya | kuzu-nu | kuzu-lar |

| | | | | |
|-------|----------|---------|---------|-----------|
| soğan | soğan-in | soğan-a | soğan-ı | soğan-lar |
| kız | kız-in | kız-a | kız-ı | kız-lar |
| hala | hala-nın | hala-ya | hala-yı | hala-lar |

We present the following rule for the above-mentioned data:

$V \rightarrow [+back] / [+back] (C) + (C) \underline{\hspace{1cm}}$

F. Roots along with different suffixes having the feature [-back]:

| Nominative case | Genitive case | Dative case | Accusative case | Plural form |
|------------------------|----------------------|--------------------|------------------------|--------------------|
| ip | ip-in | ip-e | il-i | ip-ler |
| yenge | yenge-nin | yenge-ye | yenge-yi | yenge-ler |
| şeker | şeker-in | şeker-e | şeker-i | şeker-ler |
| gelin | gelin-in | gelin-e | gelin-i | gelinler |

We present the following rule for the above-mentioned data:

$V [-back] / [-back] (C) + (C) \underline{\hspace{1cm}}$

G. Roots along with different suffixes having the feature [+round]:

| | | | | | | |
|----------|----------|----------|----------|---------|-----------|---------|
| uğur-suz | ordu-muz | kömür-cü | toplum-u | okul-un | küçük-dür | döv-düm |
| tohum-u | düğün-üm | gör-düm | koş-uyor | koş-tu | sor-dum | düş-düm |
| üşü-düm | bozul-du | | | | | |

We present the following rule for the above-mentioned data:

$V \rightarrow [+round] / [+round] (C) + (C) \underline{\hspace{1cm}}$

H. Roots along with different suffixes having the feature [-round]:

| | | | | | | |
|-----------|---------|------------|----------|-----------|----------|---------|
| ceviz-ler | elçi-yi | gerçek-ler | dede-ler | şehir-den | kemik-de | deve-yi |
| sevgi-mi | ödev-I | ekne-ye | etki-li | tepki-ler | | |

We present the following rule for the above-mentioned data:

$V \rightarrow [-round] / [-round] (C) + (C) \underline{\hspace{1cm}}$

Paying attention to the presented data and rules, we come to the conclusion that vowel harmony is an active and strong phonological rule in Turkish which covers most of the words, though some native and especially loanwords are seen outside the coverage area of this rule.

It is a fact that if we remove this rule (VH) from the sound system of Turkish, it will certainly be impossible to speak it. As we know, There used to be a lot of non-native words (mostly from Persian and Arabic) in this language during the Ottoman Period and although a linguistic purism in Turkey led to the removal of most such words, there still exists many non-native words in Turkish which seems to be the main source of disharmony. It is clear that when a word is borrowed into a language, its pronunciation (partially or completely) becomes consistent with the phonetic system of the borrowing language, but it seems that in Turkish the effect of vowel harmony on the loanwords is in most cases partial, i.e. vowel harmony is not observed in most of the loanwords, although this rule has been effective in changing their pronunciations to some extent.

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