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(Baku, Azerbaijan) [rus\\_rahimli@yahoo.com](mailto:rus_rahimli@yahoo.com)**DIPHTHONGIZATION IN AZERBAIJANI LANGUAGE**

*It should be noted that many studies have been conducted on the structure of Azerbaijani phonemes. Famous linguists such as A. Demirchizade, F. Kasimov, S. Sadikhov, A. Akhundov, T. Hidayatzade, A. Alakperli, F. veysalli and others have valuable thoughts and have also written books on this topic. (A. Demirchizade, F. Kasimov, S. Sadikhov, A. Akhundov, T. Hidayatzade, A. Alakperli, F. veysalli). Our outstanding linguist G. Alakperli, A. Demirchizade, S. Sadigov, F. Kasimov, A. Akhundov, T. Hidayatzade, A. Alakperli, F. Veysalli dealt with phonemes to some extent.*

*Of course, when writing a spelling, the teacher tries to convey the written form of the word more clearly. As a result, students are used to speaking the language of the book.*

*The event of diphthongization is due to the fact that the “v” consonant, which came after the vowels “ö” and “o” in the Azerbaijani language, completely lost its consonant quality and became vowel when it was processed in the middle of the word. In the Azerbaijani language, as a result of the shifting “v” consonant in to two diphthonic vowels, or rather diphthongoids, are formed, in other words, diphthongization occurs. Diphthongs formed in the Azerbaijani language as a result of diphthongization: öy, oy. The first of them consists of soft, and the second-of hard vowels and respectively they are included in the soft and hard vowels. When pronouncing the “öy” diphthong, the tongue is extended forward, the tip of the tongue touching the recesses of the lower and front teeth. The lips are rounded and slightly protruding. In this position of the speech organs, the pronunciation of the mentioned vowel is not complete, the tip of the tongue falls into the recesses of the lower front teeth, and the front and middle parts rise to the hard palate. As the lips, in turn, become more tense and protruding, the tubular groove they form becomes even narrower. In such a complex variable denominator, the airflow, which is a musical tone coming from the lip formed by the lips, sounds like a double vowel sound.*

*This analysis was conducted with the study of the sources related to the subject, the analysis of the results obtained, the analysis and synthesis of the arguments, and also the comparative analysis method.*

**Key words:** diphthong, diphthongoid, diphthong-like, recursion, excursion, phonem.

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(Баку, Азербайджан) [rus\\_rahimli@yahoo.com](mailto:rus_rahimli@yahoo.com)**ДИФТОНГІЗАЦІЯ В АЗЕРБАЙДЖАНСЬКІЙ МОВІ**

*Слід зазначити, що було проведено багато досліджень щодо структури азербайджанських фонем. Відомі лінгвісти, такі як А. Демірчізаде, Ф. Касімов, С. Садіхов, А. Ахундов, Т. Хідаятзаде, А. Алакперлі, Ф. Вейсаллі та інші, мають цінні думки, а також написали книги на цю тему (А. Демірчізаде, Ф. Касімов, С. Садіхов, А. Ахундов, Т. Хідаятзаде, А. Алакперлі, Ф. Вейсаллі). Наші видатні лінгвісти Г. Алакперлі, А. Демірчізаде, С. Садігов, Ф. Касімов, А. Ахундов, Т. Хідаятзаде, А. Алакперлі, Ф. Вейсаллі певною мірою мали справу з фонемами.*

*Звичайно, під час написання орфограми вчитель намагається передати письмову форму слова чіткіше. В результаті учні звикли говорити мовою книги.*

*Явище дифтонгізації пов'язана з тим, що приголосний «v», який з'явився після голосних «ö» і «o» в азербайджанській мові, повністю втратив свою приголосну якість і став голосним під час обробки в середині слова. В азербайджанській мові в результаті переміщення приголосного «v» на два дифтонгічні голосні, а точніше дифтонкіди, утворюються, іншими словами, відбувається дифтонгізація. Дифтонги утворилися в азербайджанській мові в результаті дифтонгізації: öy, oy. Перший з них складається з м'яких, а другий з твердих голосних і відповідно вони включаються в м'які і тверді голосні. Під час вимови дифтонга «öy» язик витягується вперед, кінчик язика торкається виступів нижніх і передніх зубів. Губи округлі і злегка виступаючі. У такому положенні мовних органів вимова згаданої голосної не є повною, кінчик язика потрапляє в поглиблення нижніх передніх зубів, а передня і середня частини піднімаються до твердого піднебіння. Оскільки губи своєю чергою стають більш напруженими і виступаючими, трубчастий паз, який вони утворюють, стає ще вузьчим. У такому складному знаменнику змінних повітряний потік, який є музичним тоном, що йде від губи, утвореної губами, звучить як подвійний голосний звук.*

*Цей аналіз проведений з вивченням джерел, пов'язаних з темою, аналізом отриманих результатів, аналізом та синтезом аргументів, а також методом порівняльного аналізу.*

**Ключові слова:** дифтонг, дифтонг або дифтонгоподібний, рекурсія, екскурсія, фонема.

**Introduction.** It should be noted that many studies have been conducted on the structure of Azerbaijani phonemes. Famous linguists such as A. Demirchizade, F. Kasimov, S. Sadikhov, A. Akhundov, T. Hidayatzade, A. Alakperli, F. Veysalli and others have valuable thoughts and have also written books on this topic. (A. Demirchizade, F. Kazimov, S. Sadikhov, A. Akhundov, T. Hidayatzade, A. Alakperli, F. Veysalli). Our outstanding linguist G. Alakperli, A. Demirchizade, S. Sadigov, F. Kazimov, A. Akhundov, T. Hidayatzade, A. Alakperli, F. Veysalli dealt with phonemes to some extent.

The event of diphthongization is due to the fact that the “v” consonant, which came after the vowels “ö” and “o” in the Azerbaijani language, completely lost its consonant quality and became vowel when it was processed in the middle of the word. In the Azerbaijani language, as a result of the shifting “v” consonant in to two diphthonic vowels, or rather diphthongoids, are formed, in other words, diphthongization occurs. Diphthongs formed in the Azerbaijani language as a result of diphthongization: öy, oy. The first of them consists of soft, and the second-of hard vowels and respectively they are included in the soft and hard vowels. When pronouncing the “öy” diphthong, the tongue is extended forward, the tip of the tongue touching the recesses of the lower and front teeth. The lips are rounded and slightly protruding. In this position of the speech organs, the pronunciation of the mentioned vowel is not complete, the tip of the tongue falls into the recesses of the lower front teeth, and the front and middle parts rise to the hard palate. As the lips, in turn, become more tense and protruding, the tubular groove they form becomes even narrower. In such a complex variable denominator, the airflow, which is a musical tone coming from the lip formed by the lips, sounds like a double vowel sound.

**Discussion.** Thus, [öy] diphthongoid can be described as a double-voiced vowel in the first row in the Azerbaijani language. The first component [öy] of a double-voiced vowel consists of an open, bilabial, vowel in front row, and the second component consists of a closed, bilabial, vowel in front row. In other words, there is only one difference between the components of this diphthongoid, which is that the first part, the core of the diphthongoid, is open, and the second, the slippery part, is closed. Thus, according to the vertical position of the tongue, the [öy] diphthong can also be interpreted as a vowel with an open-closed vowel in front row. Naturally, the articulation aspect is mainly emphasized here.

As for the acoustic properties of [öy] diphthongoid, we are faced with a number of interesting aspects. For

example, diptongo [öy], used in the word “növbə” becomes stronger after the appearance. It is also much weaker during the excursion phase, although the diphthongs [ou], which is a hard correlate of [öe], are slightly larger. Diphthongation is also found in words ending in a combination of graphemes “öv”.

[ou] diphthongoid different from [öy] double-voiced to the fact that its components consist of back row vowels. The first component of this diphthongoid “o” is its core, and “u” is slippery part.

It should be noted that, unlike the diphthongoid [öu], the core of this double-voiced vowel exists in our language as an independent phoneme.

The vowel [ou] is formed first by pronouncing the long vowel “o”, and then by pronouncing the vowel “u”.

As a rule, during the pronunciation of the diphthong [ou] the tongue becomes tense and drawn in, and the tip of the tongue is slightly raised. Lips are rounded. This situation is a stage of the excursion phase to the complex vowel [ou]. The core recursion phase becomes the sliding part of excursion phase, in which the back of the tongue rises, as in the vowel “u”, and the tip drops. The slippery component also affects the lips – the lower lip is slightly retracted and narrows the groove formed by the lips, and thus the flow of air with a musical tone that enters the mouth cavity – the sound is heard as a vowel [ou] from this narrowed groove. [ou] vowel can be interpreted as a double-voiced back-row vowel in Azerbaijani language.

Like the diphthongoid [öu], the first component of a complex vowel [ou] consists of an open vowel and a second component consist of a closed vowel; in other words, the difference between them is due to the horizontal position of the tongue. Thus, [ou] diphthongoid can be characterized as a double-voiced open-closed bilabial, a back row vowel.

You can also note the following acoustic properties of the [ou] diphthong. For example, this diphthongoid in the word “douşan” is shorter than some long vowels (for example, in word “elan”), and longer than some others (for example, longer than vowel “u:” in the word “surət”). On the spectrogram this diptongo has almost the same amplitude from beginning to end. As mentioned above, this is much shorter than its fine correlation (see Chapter III of the dissertation).

The phenomenon of diphthongization was accepted as the norm in orthophonie of the Azerbaijani language (Veyselli, 2014: 65–72).

1) If [o] precedes [v] and then [u] in a word, the combination [ovu] must be pronounced as a diphthongoid in the tone [ou]: /ouc./ (ovuc), /ouşdurmax/ (ovuşdurmaq), /goun/ (qovun),

/gouşma/ (qovuşma), /gourma/ (qovurma), /sourmax/ (sovurmaq), /gou/ (qovuş).

2) If [o] precedes [v] and then any consonant in a word, the combination [ov] with a regular / o /, short [u], and instant [v] must be pronounced like diphthongoid tone (ou [v]): [ou] [v] xalamaş/ (ovxalamaş), /dou [v] şan/ (dovşan), /t[ou] [v] dar/ (çovdar), /d[ou] [v] ğun/ (çovğun), /tou [v] lamaş/ (tovlamaş), /sou [v] gat/ (sovqat), /lou [v] ğa/ (lovğa), /nou [v] ruz./ (novruz).

A. Demirchizade notes that in independent style, the combination [ov] in such words can also be pronounced in the diphthong tone [ou]: / oumax / (ovmaq), / oulax / (ovlaq), / nauruz / (novruz).

3) If in the middle of the word sound [v] comes before the [ö], and then the syllable beginning with a deaf consonant, the combination [ov] should be pronounced in the tones of [öu] diphthong. For example: /göuşək/ (gövşəmək), /cöuhər/ (cövher), /Rövşən/ (Rövşən), /Kövşər/ (Kövşər), /tövsiyə/ (tövsiyə), /Bənövşə/ (Bənövşə), /gulövşə/ (kulövşə), /Mövsum/ (Mövsum).

4) If in the middle of the word sound [v] comes before the sound [o], and then the syllable beginning with the voiced consonant, the combination [ov] should be pronounced in a diphthongoid tone consisting of a short [u] and usual [v] with a whole usual [ö]: /nöu [v] bə/ (növbə), /nöu [v] rax/ (növraq), /löu [v] bər/ (lövbər), /köu [v] rək/ (kövrək), / röu [v] nəx/ (rövnəq), /töu [v] bə/ (tövbə) etc.

In independent style, the combination [ov] in such words can also be pronounced in the diphthong tone [öu]: /nöu.bə/ (növbə), /röu.nək/ (rövnəq), /töu.bə/ (tövbə)... (Demirchizade, 1960:40)

The event of closure is also related to the changes in the phoneme position in the Azerbaijani language.

In our language, open vowels before the consonant / j / at the morpheme border are usually replaced by their closed correlations. This phonetic phenomenon is an orthophonic norm in the Azerbaijani language. Our outstanding linguist A. Demirchizade writes in his book "Fundamentals of orthopedics of the Azerbaijani language": When a word ending in a vowel is combined with a suffix beginning with a vowel, the syllable before the conjunctive consonant added in accordance with the general phonetic law, which is pronounced in the following tones:

-in polysyllabic words, the open vowel in the syllable before the conjunctive [j] is pronounced in the corresponding closed vowel tone (in a special independent style):

-/ a – ı / : /ana-j-a/ ( anaya), /alma-j-a/ ( olmaya), /gajna-j-ır/ (qaynayır)....

-/ə – i / : /nənə-j-ə/ (nəniyə), /tələbə-j-ə/ ( tələbəyə), /dinlə-j-ır/ (dinləyir)....

If the first syllable of such two-syllable words is a bilabial consonant, the non-bilabial open vowel syllable before the conjunctive [j] can also be pronounced in the corresponding closed vowel tone with the bilabial vowel in the first syllable:

-/ o – a – u / : /doğra-j-ır/ ( doğrayır), /oğra-j-an/ (oğruyan)....

-/u – a – u / : /buğda-j-a/ (buğduya), /tulla-j-ar/ (tulluyar)....

-/ö – ə – u / : /söylə-j-ır/ ( söylüyür), /ölkə-j-ə/ (ölküyə)....

-/u – ə – u / : /kütə-j-ə ( küçüyə), /kunə-j-ə/ (kunəyə)...." (16; 40).

Apparently, scientists studying the phonetics of the Azerbaijani language (A. Demirchizade and others) do not give a specific answer to the question whether diphthongs are separate phonemes. They simply note that such diphthong-like vowels are characteristic of our language, and list their articulatory and acoustic qualities. We believe that Akhundov's conclusion on this issue is more correct, and we will accept his views in the future. The most extensive information about the presence of diphthongoids in the Azerbaijani language instead of diphthongs can be found in the works of A. Akhundov. (Akhundov 1984a). A. Akhundov noted that a variation of the "öy" has a diphthongoid character and is used before "v" consonant. For example, bütöyv, qöyv, bülöyv and so on. Then the author writes in parentheses: "(Apparently, this is the result of regressive assimilation)" (Akhundov, 1984b:40). A. Akhundov writes that this pronunciation is processed in words of Persian origin: Diphthong "öy" in Persian language back row, consisting of bilabial vowel elements, is represented by front row [ö] and back row [o:] vowels, which were came into Azerbaijani language from Persian words. /rouşən/, /noubəhar/"and so on. (Akhundov, 1984c:40). A. Akhundov's conclusion is somewhat undesirable, since it is necessary to distinguish between foreign words and borrowed words in the same language. These words of Persian origin are pronounced in modern Azerbaijani language like / Rövşən / and / növbəhar /. While A. Babayev talks very little about diphthongs, he does not talk about diphthongoids at all. (Babayev, 2004)

Thus, this small study shows that there are no diphthong phonemes in the Azerbaijani literal language that are fully formed and correspond to monophonic vowels. However, according to the norms of independent style, the pronunciation of a diphthong is allowed in the sound structure of a

number of words and expressions, as well as in some dialects of the Azerbaijani language, especially in the combination of vowels, sometimes with consonants such as / j, v, f /. For example, in the Sheki dialect / toux/ /ojux/, /tʃual (çuval), /böüx/ and so on. In some Baku dialects, /köül/ (könül), /nöüt/ (neft), /goum/ (qohum), and so on. processed.

In General, it should be taken into account that double-voiced vowels are vowel phonemes formed in the number of one vowel in the denominator of two vowels. Therefore, based on the diphthong-like pronunciation of vowels-consonants such as / oy, ay, uy,öy, əy, iy, üy, ov, av, uv, öv, əv, iv, üv/ in the Azerbaijani literary language, speakers make both theoretical and factual errors talking about the presence of such diphthongs in the phoneme.

Because the original of such a diphthong-like pronounced composition has one vowel denominator and one consonant denominator. The fact that such vowel-consonant compositions are sometimes pronounced like diphthong according to the orthophonic norm, and even the process of formation of diphthongs on their basis in dialects, in general, does not indicate the existence of diphthong phonemes in the Azerbaijani literary language. Such facts show that only diphthong vowel variants are used in literary pronunciation (Demirchizade, 2007).

In the Azerbaijani literary language, there are no long vowels that have completely stabilized and acquired the quality of a phoneme. However, just as there are such vowels in dialects, there are extensions and abbreviations in literary pronunciation that are somewhat related to orthophonic norms, or rather long and short vowel variants. For example, the first /a/ in /asan/ word is longer than the first /a/ in the /asan/ participle.

By the way, it should be noted that the quantitative difference of vowels in modern Azerbaijani literary pronunciation cannot be the main reason for differentiating the meaning of individual words. However, there are a number of languages (for example, Turkmen, German, English) that leave no doubt that the vowels differ in number. For example, in the Turkmen language, the word / daʃ / (with the usual / a /) means “far (uzaq)”, and the word / da: ʃ / (with long / a: /) means “stone (daş)”.

In dialects of the Azerbaijani language, it sometimes happens that words differ in meaning due to quantitative differences. For example, in the Sheki dialect, the word / ja: jı /, pronounced with a long / a: /, means “enemy (düşmən)”, and the word / jağı /, pronounced with the usual / a /, means the effective meaning of the word “Yağ (oil)”. From

this it is clear that the Azerbaijani dialects can be found quantitatively different sounds. Against their background, the identity must be proven. Even such long vowels are allowed in the pronunciation of certain derived words in the literary language based on orthophonic norms. To indicate that vowels are pronounced with this extension, the letter of the same vowel is sometimes doubled: “saat (clock)”. However, the double “aa” written here is not pronounced in two normal normal / a / quantities, the double “aa” is pronounced in one long / a / quantity (as / a: /): / sa: t /. In some words, because the first vowel is pronounced longer depending on the type of the next vowel, they are written using the grapheme: / alim / (alim), / katib / (katib), and so on.

The question may be asked that, how Azerbaijani people pronounce words like “katib (secretary)”, “qalib (winner)”, “alim (scientist)” etc. in Azerbaijani? Of course, to solve the problem in experimental phonetic research, a wide range of language material should be used. To claim that these words contain long vowels is simply to ignore how these words are pronounced in the act of speech. Ordinary people also believe that Azerbaijani people do not pronounce long vowels in these words. In any case, the usual pronunciation of vowels in these words does not seriously damage the meaning.

On the other hand, in the examples above, the length of vowels may be related to the fact that they are included in stressed syllables. As in words like “saat”, “maaş”, etc. they don’t have long vowels in normal speech. In any case, to solve this problem, you need to study the language material in a large building. This is beyond our reach.

According to the orthophonic norm of the modern Azerbaijani language, F. veysalli explains the fall of the second vowel in the root when taking the suffix in some words by the phenomenon of reduction (27). For example, /burun/ – /burnu/, /ağız/ – /ağzi/, /bojun/ – /bojnu/ etc.

In General, G. Alakbarli’s views on the phoneme are very contradictory. G. alakbarli considers the phoneme as a unit that was historically formed in accordance with the laws of language development, is not divided into independent parts, serves to differentiate the meaning of words, is reflected in our thinking, abstracting from various acoustic differences at the individual and intonation levels. (Alakperli, 1953a)

G. Alakperli understands the essence of the phoneme as a representative of the essence of the spoken voice, the objectively existing common sound in voices, the internal basis of sounds, their internal

relations and laws of position change. According to this scientist, the phoneme is reflected in our sense as speech sounds. G. Alakperli perceives the sound as part of a syllable, and the phoneme as part of a morpheme. From this it is clear that G. Alakbarli does not see the unity of sound and phoneme, she treats them as things of different levels. (Alakperli, 1953b). She doesn't talk about diphthongs and diphthongoids at all.

The most controversial issue in Azerbaijani linguistics is related to geminates. Starting with F. Kazimova, the idea of having long consonants in the Azerbaijani language has taken root. Other scientists are cautious, sometimes confirming the existence of geminates, sometimes denying them, and sometimes avoiding the problem. The first one is based on the criteria for distinguishing the phoneme value and is based on minimal pairs. For example, / əmək /, / əm:ək /.

F. Veysalli shows that it is erroneous because here are compared to words of different classes. He writes: "...the so-called geminates cannot be considered phonemes, because they can never form the sound shell of any morpheme. Although double consonants are pronounced long in words such as / əm+mək /, / tʃim+mək / etc., they have a morphological boundary between them, meaning they develop at the morpheme junction as uniform consonants. As for words like "amma", "əvvəl" etc., we must say that they are pronounced with / m / and / v / in accordance with the orthophonic rules of our language. For example, /ama/, /əvəl/, and so on. The sequence / k + g / occurs in words such as "çaqqal", "baqqal", "saqqal", "toqqa" and etc. In any case, my observations and my own pronunciation prove it. This /k/ consonant is formed by sound imitation is also used in words such as / tak + tak /, / lak-lak / and so on. (Veyselli, 2005:307).

The author continues: "The idea of long consonants is sometimes based on writing. This cannot be considered scientifically correct. Because the phonological status of each sound should only be determined based on the act of speech. To claim that our language has long consonants based on the meeting of the words "süni" and "sünni", "əl + li" and "əlli" (50), is also to ignore the act of living speech. First of all, the difference between these words is primarily related to their semantics. These words can never come in the same context. Second, they belong to different classes of words, that is, they do not belong to the same paradigm. The word "süni (artificial)" can be an adjective or adverb, and "Sunni" is a noun meaning a person who carries a particular sect in Islam. If "əlli (fifty)" is in the same paradigm

as the word "ayaqlı (with legs)", then "50" is in the numeric string. Consonants written in pairs at the end of a word are never pronounced for a long time. For example: / həl+etmək /, / həledir / onda mühüm qərar qəbul etmək bacarığı / and etc. / fən+məlimləri /, / bu fənnərdən dərs deyən məlimlər // and etc.

Of course, when writing a spelling, the teacher tries to convey the written form of the word more clearly. As a result, students are used to speaking the language of the book.

In contrast to the Azerbaijani language, we observe long consonants in Italian. Compare: „nonno" / non: o / - „, baba / = nono" - / nono, the ninth number, „, shite - / jite / jit: e /, "smart", "understandable" and so forth.

Vowel phonemicity is one of the most controversial issues in the Azerbaijani language. We must first address the vowel phoneme, because if this problem, which is of great interest, is solved, we can easily solve other problems of vocalism.

Here, as in consonants, the removal of each syllable from the act of speech should not be based on mechanically compared minimal pairs. The methodology of working in minimal pairs is based on the criterion of distinguishing the meaning of phonemes. We do not take the phoneme as the smallest unit of language that distinguishes meaning. In our approach, the phoneme also serves to distinguish, but it serves to distinguish between words and their forms, not the meaning of words. This approach is based on the fact that a phoneme, like other phonological means (intonation, stress, prosody, etc.), can distinguish units of language above it in order to differentiate.

Azerbaijani linguists interpret the phonemic structure of our language in different ways. For example, the famous linguist A. Akhundov writes that the phoneme of the Azerbaijani language includes 40 independent phonemes, of which 15 are vowels and 25 are consonants (this linguist considers / k / and / k ' / consonants as independent phonemes) (Akhundov, 1984d).

A. Akhundov mentions that in addition to the traditional 9 vowels (/a, ı, o, u, e, ə, i, ö, ü/), there are six more (/l: , ö:, ə:, e:, a:, u:/) long vowels. But 2 pages later he writes that the vowel phoneme structure of the Azerbaijani language consisted of 9 phonemes. "Thus, when talking about the composition and system of vowels in the Azerbaijani language, only short vowels specific to our language will be discussed".

From the very beginning, it should be noted that long vowel pronunciation occurs mainly in derived words, also in the syllable before the stress of these



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