# ПОРІВНЯЛЬНО-ІСТОРИЧНЕ I ТИПОЛОГІЧНЕ МОВОЗНАВСТВО 

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## MEANS OF EXPRESSION THAT SIGNAL WORD AND MORPHEME BOUNDARIES IN THE ENGLISH AND THE AZERBAIJANI LANGUAGES


#### Abstract

Each language has its own system of phonemes and their combinations, sequence of sounds within words and morphemes, and there are phonetic means that signal the boundaries of meaningful units in speech. Therefore, each language is characterized by its own articulation and orthophonic features. As mentioned, phonemes, on the one hand, distinguish the meaningful units of the language, on the other hand, they serve as demarcative function of those units in connected speech.1. Phoneme forms a functional system due to certain distinguishing features.Thus, the phoneme as the main unit of the phonological system of the language serves to differentiate the word and word forms taken separately. 2.Phonemes are represented in material form in speech in certain variants (allophones). Variants are characterized by a set of both differential and integral features.Integral features are those obtained from the norm, and they are conditioned by neighbouring sounds, distribution of phonemics stress, as well as components of intonation in connected speech. 3. In speech,such phonetic means that signal the delimination of meaningful units, i.e., their beginning and end, in the continuous stream of sounds, are realized mainly by variants of phonemes. In addition to distinguishing the forms of words and morphemes, as well as their meanings, the units of expression planealso signal the boundaries ofmeaningful units in speech. In other words, the phonological units of the expression plane perform a delimitative (or demarcative) function in addition to distinguishing function. According to N.S. Trubetzkoy, it is necessary to distinguish these two functions of the language -meaning differentiation and delimitation. The research shows that all demarcativemeans in the language are called "boundary signals" and they are classified from different points of view: 1) relation to the meaning differentiation function; 2) being simple and complex; 3) the boundary of which it indicates (word, morpheme, sentence).


Key words: boundary signals, aspiration, linking " $r$ ", glottal stop, clear and dark l, vowel harmony.

The problem statement. The meaning differentiation function manifests itself at the level of morphemes and word forms. In order to distinguish meaningful sound complexes in speech, these sound complexes must have "sound symbols" (features) arranged in a certain order.However, if any language has special phonological means that indicate whether there is a sentence, word, or morpheme boundary at a certain point of a continuous sound stream, those means play only subsidiaryrole [2, p. 341]. Taking into account mentioned above, we conclude that the meaning differentiation function of phonological units is considered the main one, whereas the delimitative function is taken into consideration as subsidiary or secondary function.

The purpose of this article is to show on the material of English and Azerbaijani languages the means of expression denoting the boundaries of words and morphemes.

The main material. According to the type, the means of demarcation are divided into phonemic, non-phonemic, single and grouped, negative and positive, etc. signals [2, p. 342]. As it is known, the boundary signals of meaningful units are either in the initial or final position. Research shows that voiceless occlusive consonants in English can be usedin the initial position with aspirated or unaspirated beginning.

In English, there are many phonetic devices that signal the beginning and end of words and demarcate them. Aspiration is especially important in English.

So, aspiration is strong in this language before the vowel in the stressed position. If the aspiration in this position is weak or absent, there is misunderstanding of the meaning of minimal pairs like [pin-bin]. This is due to the fact that, from a perceptive point of view, English speakers are used to perceiving consonants $[\mathbf{p}, \mathbf{t}, \mathbf{k}]$ as consonants $[\mathbf{b}, \mathbf{d}, \mathbf{g}]$, since there is no aspiration in [ $\mathbf{s p}, \mathbf{s t}, \mathbf{s k}]$ combinations. Aspiration is perceived if there is a delay between the sound explosion and the onset phase of the vowel, but this is not the case in [ $\mathbf{s p}, \mathbf{s t}, \mathbf{s k}]$ combinations. Another factor is that in English $[\mathbf{b}, \mathbf{d}, \mathbf{g}]$ is not preceded by any consonant, but consonants $[\mathbf{p}, \mathbf{t}, \mathbf{k}]$ are preceded by [ $\mathbf{s}$ ], which also causes loss of aspiration. In this respect, aspiration in English serves two functions: 1) It distinguishes minimal pairs such as [pin-bin], and on the other hand, 2) it acts as a demarcation unit. English phonetician A.Gimson, when dealing with plosives of the English language, he takes aspiration as the main distinguishing feature for voiceless plosives.According to this linguist, in English aspiration occurs in words like pin, tin, kin, as well as in the voiceless plosive+sonorant combination in the initial position. Thus, in the combinations of $[\mathbf{p l}, \mathbf{p r}, \mathbf{p j}, \mathbf{t w}$, $\mathbf{t r}, \mathbf{k l}, \mathbf{k w}, \mathbf{k j} \mathbf{l}$, there is aspiration and the sonorant consonants become voiceless and in this positionthey are opposed to voiced variants. Therefore, speakers of the English language distinguish these minimal pairs from each other by the presence and absence of aspiration. For example, plight-blight, try-dry, creategreat, tune-dune, twelve-dwell [6, p. 153].

From this point of view, it can be said that aspiration in English performs two functions: 1) differentiating function, 2) delimitative (word demarcation) function.

It should be noted that in some languages, for example, in Tai language, minimal pairs are distinguished by aspiration. Thus, in the words [phaa] (split) and [paa] (forest), the phonemes $\left[\mathbf{p}^{\mathrm{h}}\right]$ and $[\mathbf{p}]$ form an opposition due to the features of aspiration/ absence and presence of aspiration. Aspiration in this language performs both differentiating and demarcating functions.Aspiration (breathing) is also observed in the voiceless occlusive plosivesin the Azerbaijani language. In this language, the phenomenon of aspiration manifests itself in the consonants [ $\mathbf{p}, \mathbf{t}, \mathbf{k}$ ] both in the initial and final positions. However, the degree of aspiration of voiceless occlusive plosives in the final position is greater than the degree of aspiration of those consonants in the initial position. The kymographic analysis conducted on the basis of the material of the Azerbaijani language shows that in the words "at"(horse)and "boyat"(stale), the con-
sonant [ t$]$ in the two-syllable word "boyat" has a higher degree of aspiration than the consonant [ t ] in themonosyllabic word "at" [1, p. 235]. As in English, the degree of aspiration in Azerbaijani is greater in stressed syllables. Despite the fact that in English, the stress falls on the first syllable, and in Azerbaijani, on the last (second) syllable, both means perform the same demarcation function. If aspiration in English marks the beginning of a word, in Azerbaijani it signals the end of a word.According to N.S.Trubetzkoy, the place of phonemes in peripheral positions allows them to act as boundary signals [2, p. 345]. Peripheral phonemes are those phonemes that have a limited distribution, differ from the phonemes in the center of the phoneme system, and are weakly involved in oppositions. Studies show that the phonemes $[\mathbf{w}, \mathbf{j}, \mathbf{h}$, $\mathbf{r}, \mathbf{3}, \mathbf{y}]$ in English and $[\mathbf{h}, \mathbf{x}, \gamma(\stackrel{\mathbf{g}}{)}, \mathbf{3}, \mathbf{k}]$ in Azerbaijani are peripheral phonemes [3, p.14].In English, the consonant phonemes $[\mathbf{w}, \mathbf{j}, \mathbf{h}]$ do not occurin the final position, and the consonant [ f$]$ does not occur in the initial position, the consonant [3] occurs very rarely in the initial and final positions, and this consonant in those positions is used in the French borrowings: g [3]igolo, $\mathbf{g}$ [3] anr, rouge [3], bei [3]ge, lie [3] ge. This phoneme can form a limited number of oppositions: rouge [ru:3] - [ru:t]route; [berj]base. However, in lirge [li:ds] - league it can form a semi-vowel.As for the consonant [r] in English, this sonorous consonant occurs before a vowel at the beginning of word, and is not used in final position unlike in American English. In British English (BBC) the consonant [r] is used as a linking consonant at the junction of two words, which is conditioned by a certain phonetic context.

As mentioned above, in English the peripheral consonant [ r$]$ is not used in word-final position (BBC). However, the consonant [r] can function as a boundary signal at the junction of two morphemes, words, which is conditioned by a certain phonetic context. The consonant [r] can have a boundary signal function, if the first word consists of the morphemes -er, -or, -ar or the letter combination "re" in graphic form, and the first sound of the second word begins with a vowel sound.For example, within two-morpheme words such as hear-hearing, airairing, swear-swearing, tear-tearing morphemes are separated and linked by [r]. The demarcative function of the consonant $[\mathbf{r}]$ is more clearly noticeable at the junction of two words.For example, thanks for everything, the weather - out to improve. I don't care if they do. It should be noted that BBC speakers also use the consonant $[\mathrm{r}]$ as a boundary signal between two vowels in two -word junctions, although the grapheme " $r$ " is not found at the end of the first word. For
example, mediar event, no idear_ of it, dramar and music, lawer and order, Genevar_agreements, etc. [r] appearing in such combinations is called "intrusive" (false) [r].Due to the general phonetic features of the Azerbaijani language, two vowel sounds cannot be used at the junction of a root and a morpheme, that is, between two morphemes [1, p. 266].

Unlike the Azerbaijani language, there is a case of two adjoining vowels occurring between two morphemes (prefix+root, root+suffix ) in English. Such means of defining morpheme boundaries are widely spread in English. For example, in the words react [ri:'ækt], anti- aircraft [, ænti'eəkra:ft], morpheme boundaries are marked by the neutralization of the vowel [I] at the end of the first morphemes (symbolized by the neutralization of the vowel [ $\mathbf{I}$ ] as [i]), and by the stress of the second morphemes.However, in the words happier [hæpi $\cdot \boldsymbol{\partial}$,easier [ $\mathbf{i}: \mathbf{z i} \cdot \boldsymbol{\jmath}$, easiest [i:z•i•əst], the physical exponent of the second morpheme is not with the diphthong [Iə], which forms one syllable, but with the vowels [i] and [ $\boldsymbol{\partial}$ ] and demarcated by each of them forming a separate syllable. A similar demarcation can be seen in the words "appreciate" and "hilarious". So, in these words, the bound morphemes -iate and -ious are not monosyllabic, but consists of two syllables each: [ə'pri: $\int \mathbf{i}$ eit], [hi'leari $\cdot \boldsymbol{\partial s}$ ]. The phenomenon of epenthesis in English also manifests itself in a number of phonetic contexts. As it is known, the phenomenon of assimilation affecting the work of vocal cords in English is widely manifested either in the junction of two words or in the realization of bound morphemes. Thus, in this language, the use of the plural form of the noun and the present indefinite tense the suffix $[\mathbf{s}, \mathbf{z}]$ is determined by the ending of the root morpheme with a voiceless and a voiced consonant and a vowel.However, in this phonetic context, when $\left[\mathbf{s}+\mathbf{s}, \mathbf{s}+\int, \mathbf{f}+\mathbf{s}, \mathbf{z}+\mathbf{z}, \mathbf{z}+\mathbf{z}, \mathbf{d} \mathbf{j}+\mathbf{z}\right]$ are used together with consonants of the same quality, serious difficulties arise in their pronunciation and understanding. Therefore, in order to make such consonant combinations dissimilar, short [ $\mathbf{I}$ ] is added to the BBC pronunciation model, and neutral sound [ $\boldsymbol{\nabla}$ ] schwa is added to the American English. In this case the realization of the root and suffix forms two syllables. For example, bus $+e s$ [ $\mathbf{b} \mathbf{\wedge} \mathbf{\jmath} \mathbf{i z}]$, bush $+e s$ [ $\left.\mathbf{b u} \int \mathbf{i z}\right]$, buzz+es [bazzz], bench+es [bentfiz], to wash + es [wndiz], to judge [ḑsadziz] etc.

However, research on triphthongs shows that in English there are not five, but two true triphthongs and three complex vowel combinations. Thus, there are certain root morphemes in English that are expressed by triphthongs within one syllable: fire [faıə], hour [avo], sire [saıə], tyre [taıə],
towel [tavol], tower [tavo]etc. In addition, there are many words in the English language that, despite of having a similar structure as triphthongspronounced as two-syllable words,since they consist of two morphemes. Ex: play+er [plei•ə], slower [slovə], joyous [ḑor•əs], lower [lov•ə], liar [laı•ə] və s. [6, s. 139].In the realization and perception of such words with two syllables after the diphthong, i.e. after the second vowel, weakening and neutralization occur in pronunciation, and it can be noted that this is conditioned by marking the boundary of the morpheme.In English, a "glottal stop" (occlusive-plosive) is used as a phonetic device to signal the boundary between two vowels. Although the glottal plosive is often found in the speech of English speakers, it is not an important, significant sound in the consonant system of this language. However, this sound has a wide range of usage as a phonetic means. This voiceless consonant is formed in the larynx with completely closed glottis and belongs to plosive consonants. In English, the glottal plosive regularly serves to signal a syllable boundary between two vowels in the speech of BBC speakers. For example, co-operate [kov?ppəreIt], ge? ometry, re?action, day?after day.Studies show that some speakers use the glottal consonant instead of the "intrusive-r" consonant. Here it would be appropriate to give some examples for comparison. For example,lawyer and order, dramar and music (intrusiv-r), law? and order, drama? and music (glot-tal-?). The glottal consonant is also widely used as a phonetic means in signaling word boundaries within speech. This happens when the word(s) with a vowel in initial positionis specially emphasized: It is ?empty, I haven 't seen? anybody, She is? awfully good. It is un? eatable, such dis?order, etc. It should be noted that glottalization occurs before consonants [p, t, k, $\mathbf{t f}$ ] in English, and glottalization before consonant [ ff ] is more common in modern English [9, p. 44].Thus, the glottal plosive used before the consonant [ f ] is mainly observed between two vowels. In this case, the glottal stop marks the boundary between two vowels by strengthening the consonant $[\mathrm{f}]:$ :na? ture, ri?ches, ca?tching,etc. It should be noted that the glottal stop used before the consonant [ff] mainly occurs in the middle position of the utterance:The crea? turer is nervous, after all.A glottal stop signals the boundaries of words and morphemes by replacing the plosive consonant [t] at the junction of two words and morphemes:tha? ( $t$ ) table, ge? ( $t$ ) down, tha? (t) chair, grea?(t) joke, wi?(t)ness, no?(t) now, Sco?(t)land, a? (t) last, no?(t) for me, wha? (t) thing, grea? ( $t$ ) real, no? (t) mine, no?(t) yet, nu?(t) shell, $n o ?(t)$ veryetc. The glottal stop, along with the con-
sonant [ t ], also serves to signal the boundary of the consonants [ $\mathbf{p}$ ] and $[\mathbf{k}]$ at the junction of two words and morphemes:soap? Powder, ba?ck garden, boo?kcase, etc.

It should be noted that the realization of the consonant [1] in English in two variants (soft or clear and dark) allows them to act as a means of signaling the word boundary. So, in this language, the softor clear variant of the consonant [1] is used before vowels, and [j] the dark variant is used before the consonant and at the end of the word:letter, learn; illume, wild, teel, sell,etc. Within the one and the same word (little [litt]), the consonant [I] used at the beginning of the word before the vowel it is clear, but in final position, it is used in a dark variant: Will he earn much money? (dark) They lived in London in those days. As a result, in English, the clear and dark variants of the consonant [I] perform a word boundary (delimitation) function. In other words, a word boundary is crossed before open [I] and then dark [ I ]. However, in American English, the consonant [I] occurs in both positions (initial andfinal) as dark [I].

Studies show that the concepts of harmony or synharmonism and the harmony of "vowels" are not the same. According to N.S. Trubetzko, the phenomenon called synharmony in the true sense of the word should be distinguished from the "harmony" of vowels, which is clearly present in a number of Turkic languages (for example, in the Kipchak dialects of the Volga and Kazan Tatars, Bashkir, Kazakh and Uzbek languages, etc.) [2, s. 354].

One of the specific features of the words of the Azerbaijani language is the harmony of vowels and consonants. In this language, backlingual consonants are mainly used in the back, and forelingual consonants are used with front vowels. For example, 1) qaş, qus, qul, xorultu, (eyebrow, bird, slave, snore)etc. The opposite: ağ, ox, toqqa, uğur (white, arrow, buckle, success) va s.; 2) kişi, köç, gül, göz, güc, , ̧örək,(man, migration, flower, eye, power, bread),etc.The opposite: əkin, əkinçi, igid, özgə, üz, iz (sow, farmer, brave, strange, face, trace), etc.

It should be noted that the German language, which is one of the Germanic languages, has the phenomenon of Umlaut, which is the exact opposite of vowel harmony in the Azerbaijani language. So, if the first vowel of the word root in the Azerbaijani language is hard or soft, rounded, etc. the vowel following it must be one of them. But in German, the suffix morpheme added to a word affects the vowel in the root: (der) mam - (man) (der) männ+er (men).
F. Yadigar (Veysalli) connects the differences of Azerbaijani language words from other borrowed
words from the articulatory-acoustic and perceptual points of view with the fact that Azerbaijani words have two peaks. According to this linguistics, the harmony of vowels in the Azerbaijani language is the first and core of this peak, and the stressed syllable is the second peak of the words: adam-adamlar-adamlardan- man-men- from men, etc. Thus, the first of the peaks begins, and the second completes. When the balance of these peaks is broken, it becomes clear that the word is borrowed from another language. For example,ópera, muśiqi, tractoretc. [4, p. 50]. Thus, inflectional morphemes in English are not capable to form a syllable because they are expressed by a consonant, and as they are realized in one syllable with the root morpheme in pronunciation, they create difficulty and ambiguity from the acoustic and perceptual points of view. However, the ambiguity disappears as an additional syllable is formed in inflectional morphemes pronounced with epenthesis.In the Azerbaijani language, boundary signals in group are realized by the harmony of vowels in vowels (hard/ soft vowels) and vowels in consonants. Thus, in the Azerbaijani language, there is a phonetic homogeneity between the bound morphemes and the root morpheme. On the other hand, bound morphemes in the Azerbaijani language are mainly expressed by vowels and repeated consonants, and as a result, pronunciation and hearing become fluent and harmonious as bound morphemes form a syllable.

Conclusion. Thus, from the mentioned above, it can be concluded that the phonetic-phonological features of languages in the general and special linguistic plane are manifested and revealed in the speech of the speakers of the language.Although the elements that form the language system, their material side, phonemes (sounds) that carry the expression means and other means of expression (accent, intonation) have basically the same characteristics in the languages, the arrangement and combinatorics of the elements of the system differ from the structural point of view, which makes the phonetic characteristics of the languages different and causes differences in morphological structure.In this regard, in addition to the phonological means that serve to distinguish meaningful units in each language, there are also a number of other means that signal the boundaries of meaningful units in speech, which also perform a delimitative function. Studies show that English and Azerbaijani languages have phonetic means that signal the boundaries of meaningful units in connected speech. These means occur differently in the compared languages, except for the length factor.

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## Алізаде К. Дж. ЗАСОБИ ВИРАЖЕННЯ, ЯКІ ПОЗНАЧАЮТЬ МЕЖІ МІЖ СЛОВАМИ ТА МОРФЕМАМИ В АНГЛІЙСЬКІЙ ТА АЗЕРБАЙДЖАНСЬКІЙ МОВАХ

У кожній мові є своя система фонем і їх сполучень, послідовність звуків усередині слів і морфем, існують фонетичні засоби, що сигналізують про межі значущих одинииь у мовленні. Тому для кожної мови характерні свої артикулячійні та ортофонічні особливості. Як уже згадувалося, фонеми, з одного боку, розрізняють значущі одиниці мови, з іншого боку, вони виконують демаркативну функиію цих одиниць у зв'язному мовленні. 1. Фонема утворює функиіональну систему завдяки певним відмінним ознакам. Таким чином, фонема як основна одиниця фонологічної системи мови служить для диферениіаиії слова та словоформ, узятих окремо. 2. Фонеми представлені в матеріальній формі в мовленні в певних варіантах (алофони). Варіанти характеризуються сукупністю як диференційних, так і інтегральних ознак. Інтегральні ознаки - це ознаки, отримані від норми, і вони зумовлені сусідніми звуками, розподілом фонематичного наголосу, а також компонентами інтонаиії у зв'язному мовленні. 3. У мові такі фонетичні засоби, які сигналізують про виділення значучих одиниць, тобто їх початок і кінеиь, у безперервному потоці звуків, реалізуються переважно варіантами фонем. Окрім розрізнення форм слів і морфем, а також х̈хніх значень, одинииі площини вираження також сигналізують про межі значуцих одиниць у мовленні. Іншими словами, фонологічні одиниці площини вираження виконують делімітативну (або демаркативну) функиію на додаток до функиії розрізнення. На думку Н.С. Трубецьким, необхідно розрізняти ці дві функції мови - диферениіацію смислів і розмежування. Дослідження показує, що всі демаркативні засоби в мові називаються «граничними сигналами» і класифікуються з різних точок зору: 1) за відношенням до функції диференціаиії значення; 2) бути простими і складними; 3) межу якого воно вказує (слово, морфема, речення).

Ключові слова: межові сигнали, придихання, зв ’язкове «р», голосова стопа, ясне і темне л, співзвуччя голосних.

