## НАУКА, НОВЫЕ ТЕХНОЛОГИИ И ИННОВАЦИИ КЫРГЫЗСТАНА № 2, 2023

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# АНГЛИС ТИЛИНИН ТЕОРИЯЛЫК ФОНЕТИКАСЫНЫН МАСЕЛЕЛЕРИ 

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# ПРОБЛЕМЫ ТЕОРЕТИЧЕСКОЙ ФОНЕТИКИ АНГЛИЙСКОГО ЯЗЫКА 

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## PROBLEMS OF ENGLISH THEORETICAL PHONETICS

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Бул макалада англис тилинин теориялыкк фонетикасынын көйгөйлөру баяндалат. Фонетика - бул өтө олуттуу илим, ар кандай тилди изилдөө андан башталат. Англис тилинин фонетикасы грамматика же лексика сыяктуу эле маанилүу бөлүктөрду ээлейт. Албетте, көптөр тил үйрөнүүдө айтыылыши сөзгө маани беришпейт. Тилдин тыбыштык курамы тынымсыз өзгөрҮүлөргө дуушар болот, ал эми сөздөрдүн жазылышшы өтө жай өзгөрөт. Ошондуктан англис тилинде сөздөрдүн тыбыштык жана тамга курамынын ортосунда айырмачылыкктар бар. Бул карама-каршылььк англис тилин үйрөнүүдө негизги кыйынчылыктардын бири болуп саналат. Бул макалада үндүҮ жана үнсүздөрдүн көйгөйлөру баяндалат. Вокализм кубулуиунун аныктамасы, монофтонг, дифтонг, дифтонгоид, трифтонг жана аффрикат түшүнүгу берилген. Консонантизм маселеси жана африкаттардын артикуляциясындагы кыйынчылыктар баяндалат. Монофонемалуулук түшүнүгү берилген, б.а. дифтонгтун да, аффрикаттыын да артикуляциялык жана фонологиялык бөлүнбөстүгу.

Негизги сөздөр: үндҮҮ тыбыштар, Үнсүз тыбыштар, вокализм, консонантизм, монофтонг, дифтонг, дифтонг өзөгү, дифтонг сыйгалануу, моно фонематикалык бирдиктер, трифтонг.

В данной статье рассмотрены проблемы теоретической фонетики английского языка. Фонетика - очень серьезная наука, с нее начинается изучение любого языка. Фонетика является такой же важной частью английского языка, как грамматика или словарный запас. Конечно, многие люди не обращают внимания на произношение при изучении языка. Фонетический состав языка постоянно меняется, а написание слов меняется очень медленно. Поэтому в английском языке существуют различия между звуковым и буквенным составом слов. Это противоречие является одной из главных трудностей в изучении английского языка. В этой статье описаны проблемыь с гласными и согласными. Дано определение феномена вокализма, понятия монофтонг, дифтонг, дифтонгоид, трифтонг и аффриката. Описана проблема консонантизма и трудности артикуляиии аффрикатов. Дано понятие монофонемности, т.е. артикуляичонная и фонологическая неразделимость как дифтонга, так и аффрикаты.

Ключевые слова: гласные звуки, согласные звуки, вокализм, консонантизм, монофтонг, дифтонг, ядро дифтонга, скольжение дифтонга, моно фонемные единицы, трифтонг..

This article deals with the problems of theoretical phonetics of the English language. Phonetics is a very serious science, the study of any language begins with it. Phonetics is as important a part of the English language as grammar or vocabulary. Of course, many people don't pay attention to pronunciation when learning a language. The phonetic composition of the language is constantly changing, and the spelling of words changes very slowly. Therefore, in English there are differences between the sound and letter com-
position of words. This contradiction is one of the main difficulties in learning English. This article describes problems with vowels and consonants. The definition of the phenomenon of vocalism, the concepts of monophthong, diphthong, diphthongoid, triphthong and affricate are given. The problem of consonantism and the difficulty of articulating affricates are described. The concept of monophonemicity is given, i.e. articulatory and phonological inseparability of both the diphthong and the affricate.

Key words: vowel sounds, consonant sounds, vocalism, consonantism, monophthong, diphthong, diphthong core, diphthong glide, mono phonemic units, triphthong.

Phonetics is a very serious science, the study of any language begins with it. Of course, many do not attach importance to pronunciation, but how can one learn to speak another language correctly without imitating the pronunciation of native speakers?

The study of the phonetic structure of the English language is of exceptional importance in the formation of strong pronunciation skills, the absence of which can in some cases lead to a distortion of the meaning of the statement. The study of the features of the phonetic system and the formation of the skill of English pronunciation is one of the most important tasks in teaching a foreign language.

The study (on a scientific basis) of any language begins with familiarization with at least elementary phonetic rules.

The English language, although in terms of pronunciation it seems simple at first glance, has a very insidious character. The number of phonemes greatly exceeds the number of letters in the alphabet.

So, in the English language there are at least 44 phonemes (of which 20 are vowels and 24 consonants), and there are 26 letters of the alphabet (of which 6 are for conveying 20 vowel phonemes and 20 for 24 consonants). Therefore, the bottom letter must convey several phonemes, i.e. have multiple sound values.

So, for example, the English letter a conveys phonemes: [ $\mathrm{e}_{1}$ ] - take, [a:] - star, glass, [ǽ] - bad, [ $\varepsilon ə$ ] - bare, [ $\mathrm{o}:]$ - tall, war, [ $\mathrm{\imath}$ ] - ago, [1] - sit [2, 116]

The goal of this work - to characterize the main problems of diphthongs, diphthongoids affricate and triphthongs.

The subject of this study is the study of diphthongs, diphthongoids affricate and triphthongs

The object of research is the main problems of theoretical phonetics of the English language.

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Relevance of the research topic. The pronunciation is the most difficult aspect in learning English, which in most cases are overlooked, associating this seems to be apparently with the fact that it is more important to know grammar or vocabulary in order to communicate in a foreign language. Such misleading judgments lead to that many continue to speak English with a strong Russian accent even after several years of study.

Especially often this problem occurs when obtaining an average education, because most schools today are overcrowded, and in many cases, the teacher does not have the physical ability to approach each student and evaluate their pronunciation. Meanwhile, over the years, the problem only increases against the background of the successful completion of grammatical and lexical tasks, many students continue to face problems formation of phonetic skills.

A striking example of the historical traditional spelling principle is the word enough [in $\wedge \mathrm{f}]$ - where the combination of 4 letters conveys only one sound. Similar words - laugh, thought, bought.

Diphthongs and diphthongoids present a particular problem among vowels, and affricates among consonants.

In the phenomenon of vocalism (the formation of vowels), usually monophthongs, diphthongs and diphthongoids are distinguished in the classification of vowels by the stability of articulation. The quality and quantity of English vowels can vary so much that they can be reduced in quality to a neutral sound and change in quantity, losing their longitude in an unstressed position.

In English, the most stable in articulation are monophthongs, especially long ones. Short ones are stable only in a stressed position, while in an unstressed position they lose their quality and are reduced. There are no long vowels in Russian, therefore, pure vowels are only in a stressed position, unstressed - they can also be reduced to neutral sounds.

Diphthongs are vowels, the articulation of which may change somewhat, because. This is a combination of two vowels in one phoneme. During articulation, the organs of speech first occupy one position, and then slide within the same syllable, towards the position of another vowel. Accordingly, a diphthong consists of two elements, one of which is complete, the other is non-syllabic. They can also be called vowels with sliding articulation. The stronger and tense element of the diphthong is called its core, and the weaker and less tense element is called the glide. [2, 116]

Another definition of diphthong as a single sound is based on the instability of the second element. The third group of scientists defines a diphthong from the accentual point of view: since only one element is accented and the other is unaccented, a diphthong is a single sound.
D.Jones defines diphthong as unisyllabic gliding sounds in the articulation of which the organs of speech
start from one position and then glide to another position and then glide to another position.
N.S. Trubetskoy states that diphthongs should be (a) unisyllabic, that is the parts of a diphthongs cannot belong to two syllables, (b) monophonemic with gliding articulation, (c) its length should not exceed the length of a single phoneme.
L.R. Zinder adds that phonemically diphthongs are sounds that can not be divided morphologically. E.g. the Russian /ай, ой/ in чай, стой can be separated: ча-ю, стою.
L.L. Bulanin calls combinations like Russian [ай, ей, ой] phonetic diphthongs and English inseperable units like [ai, ei,] - phonemic diphthongs.

Diphthongs [ei, $\partial u$, au, pi, ai] are called closing, diphthongs [ $\varepsilon ə$, iə, uə] are called centring, according to the articulatory character of the second element. [4, 33]

The analitic treatment suggested by some American and Copenhagen linguistics regards diphthongs to be biphonematic combinations. The criterion used by American linguists is based on the method of complimentary distribution. As a complex segment (diphthongs) consist of two components. The first components of two diphthongs [en], [an], [əu], [au] are in the complimentary distribution with the simple vowels $\mathbf{e}$ and a used in such words as let, sun. the second elements are also in complementary distribution with the semi-vowels or glides $\mathbf{j}$ and w. The diphthongoids [i:] and [u:] are also treated as [ij] and [uw]. According to these approach English diphthongs are regarded as the combinations of two phonemes, because their first and second elements can function as single phonemes

The fundamental thing about a diphthong is that for native speakers these are not two different sounds, but one. This is manifested, firstly, in the fact that the diphthong (together with the accompanying consonant, of course) forms one syllable, not two. The core of the diphthong is a syllable-forming element. So the English word clear is monosyllabic. Secondly, this is also manifested in the fact that the non-syllabic part of the diphthong, i.e. sliding, does not separate from the first when changing the grammatical form or when word formation.

This is what allows us to assert that there are no diphthongs in the Russian language, and combinations like -ай are not diphthongs, but a combination of a vowel with a consonant.

For example, in the word tea (чай), the combination of sounds -ай is preserved when changing by cases (чая, чаем, чаю), but at the same time the sound -й goes to the next syllable. [5, 82]

This is also because in Russian syllable division occurs according to the vowel sound and the open type of the syllable. In Russian, how many vowels, so many syllables. Therefore, in this example, in the words чая, чаем - two syllables each: ча - йя, ча - йем.

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Depending on the order of the nucleus and sliding, diphthongs are divided into:

- falling or descending, in which the core is first pronounced, and then the slide;
- ascending, which begin with a slip and end with a nucleus, as, for example, in Italian;

On this basis, all English diphthongs are descending or falling.

They are divided into three groups:

1. sliding to $[1]-\left[\mathrm{e}_{1}\right],[\mathrm{ar}],[\mathrm{O} 1]$.
2. sliding to $[\mathrm{u}]-[\mathrm{au}],[\mathrm{ou}]$.
3. sliding to [ə] - [oə], [uə], [əァ], [ $\epsilon ə]$.

The diphthong [oə] is an optional phoneme, because it can be replaced by the phoneme [ $\mathrm{o}:]$, and in the pronunciation of those who use it, it is opposed to the phoneme [o:]. Compare:
pore [por] - time and paw [po:];
soar [soə] - soar and saw [so:];[3, 17]
Diphthongoids are such vowels, during the articulation of which, the organs of speech change their position, but very slightly.

These in English include the [i:] phoneme, which is actually pronounced as [Ii] or even as [Iij], and the [u:] phoneme, which is pronounced as [Uu] or even [Uuw].

Diphthongs and diphthongoids are neither articulatory nor phonologically indivisible. Each of them represents a single sound and one phoneme, and not a combination of two sounds and two phonemes.

Triphthongs are vowels consisting of three elements pronounced within one syllable.

There are no such "true" triphthongs in English. The so-called triphthongs [aio], [auə], as well as [eiə], [oiə] and [ouə] are two-syllable combinations consisting of a diphthong and a neutral vowel, which is sometimes even a morpheme. Compare:
higher [haiə], lower [louə], destroyer [distroiə].
There is no stable articulatory and syllabic indivisibility among the elements of these combinations. Usually they are divided into two syllables: tire [tai-ə], fire [fai-ə], cower [kau-ə], shower [ $\left.\int a u-\partial\right]$. The element [ $\partial$ ] cannot be omitted in the pronunciation, otherwise words like high [hai] - higher [haie], tie [tai] - tire [taiə] may be mixed

There are no triphthongs in Russian. Combinations [ай] [ой], etc. consist of two separate phonemes, because each of these sounds can refer to different syllables. Compare: чай [чай] - [ча/йу]. Most Russian vowels are diphthongoid in nature. So, the phoneme [ o ] is actually pronounced [yo], and the phoneme [э] - [иэ].

The stability of articulation determines a certain position of the articulating organ in the process of articulating vowels.

There are two possible options here:

1. The position of the tongue is stable.
2. The position of the language changes, i.e. the
tongue moves from one position to another.
In the first case the articulating vowel is pure, and in the second case the vowel consists of two distinct elements.

This interpretation was presented by Russian and by British phonetists. So, for example, A.S.Jimson distinguished 20 vowel phonemes, which were formed by vowels and their glide.

He defined 7 of them as short phonemes: [1], [e], [ $\alpha$ ], [u], [ə], [х́], [^], and 13 as long ones: [ $\alpha:]$, [ $\mathrm{o}:]$, [ $\mathrm{i}:],[\mathrm{u}:]$, [ $\varepsilon$ :], [ e 1 ], [a1], [au], [ou], [1ə], [uә], [ $\varepsilon ə$ ], [ cu$]$.

He singled out 5 of them as absolutely pure: [ $\alpha$ :], [o:], [ $\varepsilon:],[i:],[\mathrm{u}:] .[1]$

The rest he attributed to long phonemes with various glide (glides):

- with a glide [1] - [e1], [a1], [ $\alpha_{1}$ ].
- with a glide $[\mathrm{u}]-[\mathrm{cu}],[\mathrm{au}]$.
- with a glide [ə] - [1ə], [ $\varepsilon ə$ ], [ u ].

As you can see, this system does not reveal a clear difference between long monophthongs and long diphthongoids, and it is necessary for English learners to know that the sounds [i:], [u:] are diphthongoids.

There is a problem of phonemic English diphthongs. Since diphthongs are complex units (like affricates), i.e. consisting of two elements, the question arises: are diphthongs monophonemic (represent one sound) or biophonemic (represent two sounds) units.

Russian linguists give diphthongs a monophonemic status, based on articulatory, morphological and syllabic indivisibility. As for the articulatory indivisibility of diphthongs, it can be justified by the fact that neither the morpheme nor the syllabic boundary, which separate the nucleus from the glide, can pass inside the diphthong.

For example: saying [se1-19]
crying [kra1-19]
clearer [klı - rə]
airing [ $\varepsilon ə-\mathrm{rly}$ ]
A study of the duration of diphthongs shows that the longitude of diphthongs is the same value that characterizes long monophthongs in the same phonetic context: [satt] - [si:t]

This example once again proves that diphthongs are monophonic, because any diphthong can be replaced by almost any vowel:

Bite-bit bite-but bite-bought
[bait - bit] [bait-b ${ }^{\wedge}$ t] [bait - bo:t]
The monophonic nature of diphthongs was proved by the linguist V. Vasiliev. This fact is very important for learning English.

As already mentioned, there are no diphthongs in Russian. Such combinations of sounds as [йа, йо, йу], [ой, ай], [ay, уа] - яд, йод, юг, рой, край, мяукать, вуаль - are biophonemic groups consisting of either a vowel and a Russian sonorant [й] or two vowels.

It follows that diphthongs, being a monophonemic
unit, form one syllable, because a syllabic boundary cannot pass inside a diphthong. The pronunciation of diphthongs should also be given great attention, since the core of the diphthong is a strong and distinguishable element, and the slip is very weak and indistinguishable. [4, 33]

As for the phenomenon of consonantism or the formation of consonants, there are also some problems in the articulation of affricates.

Although aspiration is not the main phonological feature of English plosives, it still plays a significant role, because with unaspirated pronunciation of the phonemes [p], [t], [k], they can be easily mistaken by native speakers for the phonemes [b], [d], [g].

The fricative and stop articulation of noisy consonants can serve as the basis for phonological opposition, both in English and in Russian. Compare: English phonemes [t], [s], [d], [z], as well as Russian [k], [x].

If the complete barrier is not removed suddenly, as with explosive consonants, but opens gradually and slowly into a gap, then as a result of such articulation, a type of consonants is formed, which are called affricates or occlusive consonants. These in English include phonemes [ $\mathrm{d}_{3}$ ], $[\mathrm{t} \mathrm{c}$ ], and in Russian - phonemes [ 4 ] and [ц].

If the bow opens into a flat gap, as, for example, with [d], [h], then a flat gap affricate is obtained, for example: [ t ] ] and [ t$]$.

When the bow is opened into a round slot, which is, for example, with [s], a round-slit affricate appears, for example, [ц]. [5, 82]

It should be emphasized that the affricate in the articulatory relation is a single continuous sound, and not a combination of two successively pronounced consonants

- stop-explosive and sheline-fricative. In other words, the affricate is articulatory indivisible, i.e. cannot be divided into two articulate sounds. Therefore, in phonological terms, the affricate is not a combination of two phonemes, for example, $[\mathrm{t}]+[\mathrm{c}]$, but one phoneme, for example, $[\mathrm{t} c]$, wholly opposed to both the stop-plosive phoneme [t] and the fissile-fricative [c].

Compare: [tcop] - chop, [top] - top, [sop] - shop.
Differences in the pronunciation of the affricate and the combination of the stop-plosive with the shelino-fricative consonant are clearly felt at the junction of two words, of which the first ends with a plosive, and the second begins with a fricative, for example: that shop [ðǽt sop] and that chop [ðǽt ţop].

Accordingly, we can conclude that the affricate and diphthong are monophonic, i.e. articulatory and phonological indivisibility. This fact serves as a vivid illustration of the position of Russian linguistics that the phoneme is the smallest, further indivisible unit of the language.

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