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ENGLISH PHONETICS

Фонетика англійської мови

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ВСТУП

Методичні рекомендації з курсу «Фонетика англійської мови» містять опорні конспекти лекцій з курсу, які допоможуть студентам покращити і систематизувати свої знання з фонетики, а також розвинути навички правильної англійської вимови.

Рекомендації складаються з 12 конспектів опорних лекцій. Після кожної лекції містяться питання не лише для перевірки отриманих знань і розуміння матеріалу, а й для пошуку додаткової самостійної інформації для поглиблення знань з фонетики. Завдяки цьому студенти навчаються як засвоювати запропоновану лекційну інформацію, так і ініціативно підходити до більш глибокого її опрацювання через практичні заняття.

Запропоновані для обговорення питання мають на меті заохотити студентів до дискусії, що сприяє розвитку комунікативних навичок та творчого мислення.

PHONETICS AS A LINGUISTIC SCIENCE

Phonetics as a science is concerned with the human noises by which the thought is actualized or given audible shape: the nature of these noises, their combinations, and their functions in relation to the meaning. The phonetic system of English consists of the following four components: speech sounds, the syllabic structure of words, word stress, and intonation (prosody). These four components constitute what is called the pronunciation of English. Phonetics studies them.

Phonetics is subdivided into **practical** and **theoretical**. Practical or normative phonetics studies the substance, the material form of phonetic phenomena in relation to meaning. Theoretical phonetics is mainly concerned with the functioning of phonetic units in the language.

Phonetics is itself divided into two major components: **segmental phonetics**, which is concerned with individual sounds (i.e. "segments" of speech) and **suprasegmental phonetics** whose domain is the larger units of connected speech: syllables, words, phrases and texts.

All speech sounds have four aspects (mechanisms): articulatory, acoustic, auditory, functional. We may consider the branches of phonetics according to these aspects. Four branches of the subject are generally recognized:

- 1) **Articulatory phonetics** is the study of the way the vocal organs are used to produce speech sounds.
- 2) Acoustic phonetics is the study of the physical properties of speech sounds.
- 3) **Auditory phonetics** is the study of the way people perceive speech sounds.
- 4) The fourth branch **'functional phonetics'** is concerned with the range and function of sounds in specific languages. It is typically referred to as **phonology**.

Besides the four branches of phonetics described above, there are other divisions of the science: general phonetics, special phonetics, historical (diachronic) phonetics,

comparative phonetics. All the branches of phonetics are closely connected not only with one another but also with other branches of linguistics.

Phonetics is also connected with many other sciences. Acoustic phonetics is connected with physics and mathematics. Articulatory phonetics is connected with physiology, anatomy, and anthropology. Historical phonetics is connected with general history of the people whose language is studied; it is also connected with archaeology. Phonology is connected with communication (information) theory, mathematics, and statistics. We see the development of quite distinct interdisciplinary subjects such as sociolinguistics (sociophonetics), psycholinguistics, mathematical linguistics and others. Close interaction and collaboration between phonetics and other sciences has given birth to new scientific branches such as technical acoustics, phychophonetics and other phonetic sciences which contributed considerably to the formation of speechology – the science of speech.

- 1. What does phonetics deal with?
- 2. What is Phonology concerned with?
- 3. How many letters and sounds does English language consist of?
- 4. Why do we use transcription in English?
- 5. What problems can we focus on when discussing the English pronunciation?

THE SOUNDS OF SPEECH. SOUNDS AND PHONEMES

In order to really understand phonetics and phonology, it is extremely helpful – if not even essential – to understand how sounds are physically produced and transmitted from speaker to hearer. We will therefore begin by taking a very brief look at the physical reality behind speech sounds and how their characteristics can be measured and explained.

Speech *sounds* are vibrations that travel through a medium (usually air) by displacing the molecules of this medium, pushing them against one another so that they move each other along in the direction of the hearer(s). Depending on the consistency of the given medium, the sounds move at different speeds and have varying intensities. This is why we sound differently when we speak under normal circumstances from when we try to talk under water and also why it is completely impossible for speech sounds to travel through a vacuum.

Speech sounds propagate in the shape of waves, similar to the ripples that arise when we throw an object – such as a stone – into the water. The degree of displacement corresponds to the height (amplitude) of the wave. Amplitude in sound waves corresponds to intensity – measured in decibel, or dB for short – which, in turn, corresponds to our subjective impression of loudness.

A pure tone is made up of a single sine wave with a fixed frequency or pitch. This means that each cycle of the wave occurs at regular intervals, so that the same pattern is repeated again and again. The following illustration shows a sine wave with a 300 Hz pitch. Hz is the abbreviation for *Hertz*, which is the unit in which frequency is measured, so named in honour of the physicist Heinrich Hertz.

However, each speech sound is made up of complex waves, i.e. a complex mix of different frequencies, where it is far more difficult to recognize any regularity, although these often do exist. It is these regularities in the frequency patterns which allow us to first classify the individual speech sounds phonetically and then establish classes of sounds.

Speech sounds are grouped into language units called *phonemes*. So what actually are phonemes? Probably the simplest explanation is that a phoneme is an abstract concept used to represent a group of sounds or sound combinations that are similar enough to each other to be preceived as performing the same function in a speech chain. A phoneme is the smallest contrastive language unit which exists in the speech of all people belonging to the same language community in the form of speech sounds and may bring about a change of meaning.

The phoneme is realized in speech in the material form of speech sounds of different types.

The phoneme is a functional unit. That means that being opposed to other phonemes in the same phonetic context it is capable of differentiating the meaning: /pit/ and /bit/, "classic" /ʃip/ and /ʃi:p/, /kap/ and /kat/, etc.

The idea of the phoneme is mainly based upon the fact that we can establish distinctions of meaning between words by replacing certain elements, i.e. sounds, by one another. One way in which we can distinguish the elements that can replace each other is to use a minimal pair test in the way we have just seen in the examples above. Another way of identifying the inventory of phonemes used in a language is to look at their distribution. Another classic example here is the difference between the occurrences of /h/ & /n/ in English, where the first can never occur at the end of a word - other than in the form of aspiration – and the second never at the beginning. Of course the two units we can distinguish in this way also need to be sufficiently different from one another in the way they are produced; otherwise it would not make any sense. So, returning to our example of the voiceless plosives above, we could say that the absence of voicing and same place and manner of articulation in all examples, including the positional variant after the fricative, makes these sounds sufficiently similar to each other to count them as one phoneme. On the other hand, if we add the voicing to e.g. the bilabial plosive, we do get a distinction in meaning between minimal pairs like /pit/ and /bit/, so that we can assume that there are two different phonemes.

In cases where we have instances of the same phoneme, but marginally different realisations, we speak of allophonic variation or allophones. This term comes from the Greek

word $\alpha\lambda\lambda$ o, which simply means *other*. Further examples for this are the occurrence of "clear" (/l/) and "dark I" (/l/) in (many, if not most, accents of) English, where the latter only occurs in final position and the difference in the pronunciation of /k/ in the words *key* and *coo*, where the obstacle for the plosive in the former is made considerably further to the front than for the latter articulation, due to the nature of the following vowel.

- 1. What is a sound?
- 2. What do the sounds of a language constitute?
- 3. What is a pure tone made up of?
- 4. What is a phoneme?
- 5. Why do we call the phoneme a functional unit?

THE ORGANS OF SPEECH AND THEIR WORK

The human speaking apparatus consists of the following main parts which participate in the formation of speech sounds.

- 1. The upper and the lower lips.
- 2. The upper and the lower teeth.
- 3. The palate (or the roof of the mouth). It consists of the following parts:
 - a) the alveoli (or the teeth-ridge the part behind the upper teeth);
 - b) the hard palate (the part behind the alveoli);
 - c) the soft palate (the back of the palate);
 - d) the uvula (the end of the soft palate).
- 4. The tongue. It is divided into the following parts:
 - a) the tip of the tongue;
 - b) the blade of the tongue (the part situated opposite the alveoli);
 - c) the front of the tongue (the part situated opposite the hard palate);
 - d) the back of the tongue (the part situated opposite the soft palate);
 - c) the root of the tongue.
- 5. The wind pipe (or the trachea).
- 6. The pharynx.
- 7. The larynx.
- 8. The vocal chords (stretched horizontally across the larynx). The space between the chords is called the glottis.
- 9. The upper and the lower jaws.
- 10. The mouth and nasal cavities.

Speech sounds in English are produced when we exhale. The flow of air passes through the wind pipe from the lungs into the larynx. There are two vocal chords in the larynx which are tense when brought together or lax when drawn apart. When they are tense, the flow of air passing through the narrowed glottis causes the vocal chords to vibrate and produce voice (thus vowels and voiced consonants are formed). When the vocal chords are lax, the flow of air passes through the glottis freely and does not cause the vocal chords to vibrate (thus voiceless consonants are produced). From the larynx the air passes into the pharynx. Then, if the soft palate is raised, the air passes out through the nasal cavity.

The organs of speech which are **movable** and take an active part in the formation of sounds are called active. They are:

the vocal chords,

the tongue,

the soft palate with the uvula,

the lips,

the lower jaw.

The most movable organ of speech is the tongue. The immovable organs of speech are called passive. They are:

the upper jaw,

the alveoli,

the hard palate,

the teeth.

- 1. Is speech apparatus the same in all people?
- 2. Define active organs of speech.
- 3. Define passive organs of speech.

- 4. What of the organs of speech is the most important and why?
- 5. How do the ways we use organs of speech communicating in Ukrainian and in English differ?

THE CLASSIFICATION OF ENGLISH VOWELS

Vowels form the nucleus of the syllable. They differ according to the position of the tongue and lips. According to the height of the tongue:

high, mid-high, mid-low, low;

front-back position: front, central, back;

lip position: rounded and unrounded.

The vowel space of English has the form of a trapezium; the Ukrainian vowel space, as in many other world languages, is shaped like a triangle (bottomed up).

The vowels of English may be **tense** or **lax**.

Tense vowels are longer in duration than lax vowels (by 1.5 in British English and by 1.2 in American English), and they normally appear in **open** syllables. Such properties of vowels as **checked** or **free**, **stressed** or **unstressed** are also manifested only in a syllable.

The traditional division of English vowels is into (historically) **long**, (historically) **short** vowels and **diphthongs**.

In English, **long** vowels and **diphthongs** are more **peripheral** sounds which need more **time** and **effort** for their articulation, and they also have specific **vowel quality** to identify them.

Today the terms **tense** and **lax** are used as **cover terms** for the two groups of vowels, while each particular vowel is identified by its **quality** which depends on the **height** and the **front-back** position of the tongue.

Vowels, like consonants, may be **nasal** and **oral**, though most vowels in all languages are oral. In English vowels are nasalized before a nasal consonant, which is more noticeable in American English.

The phonemic feature of vowels is **vowel quality** (tongue position).

Thus the 20 RP English vowels are grouped in the following way: twelve monophthongs (seven short vowels and five long ones) and eight diphthongs.

- 1. What are the classification of the English vowels?
- 2. What are the main principles of classification of English vowel phonemes?
- 3. How many types of vowels are there?
- 4. How are English vowels classified according to the height and the position of the tongue?
- 5. How many vowels are there in the English language?

THE CLASSIFICATION OF ENGLISH CONSONANTS

Consonants have some obstruction of the airstream in the vocal tract, and the location of the obstruction defines their place of articulation (bilabial, labiodental, dental, alveolar, palatal, velar, uvular, glottal). We can also define them according to the articulators (coronal, apical, laminal, dorsal) which are just as relevant as the points of articulation for comparing groups of English and Russian coronal consonants (apical vs. laminal, alveolar vs. dental).

There may be more than one place of obstruction. **Secondary articulations** are: labialization, velarization, palatalization, pre-glottalization.

Palatalization vs. velarization contrast is distinctive in the system of Russian consonants ("soft" vs. "hard").

Consonants are further classified according to their manner of articulation: they may be voiced or voiceless, oral or nasal. They may be stops, fricatives, affricates, approximants (liquids and glides). Voiceless sounds may be aspirated or unaspirated. Approximants may be trills or flaps; they may be central or lateral. Voiceless consonants are believed to be pronounced with greater force (fortis) in comparison with voiced consonants which are weaker (lenis).

English voiced consonants lose voice distinction in the word-initial position and, partially, in the word-final position. Ukrainian voiced consonants become fully devoiced in the word-final position. English loss of voice distinction is compensated by aspiration of truly voiceless (fortis) consonants in the word-initial position before a stressed vowel. In the word-final position the loss of voice is compensated by the length of the preceding vowel.

The following features are **distinctive** for consonants: type of obstruction (manner of articulation), place of articulation and active organ of speech and force of articulation.

- 1. What are the classification of English consonants?
- 2. What are the characteristics of English consonants?
- 3. Why are consonants important in English language?
- 4. What are consonants in English language?
- 5. How many consonants are there in English vocabulary?

MODIFICATIONS OF SOUNDS IN CONNECTED SPEECH

Sounds in actual speech are seldom pronounced by themselves. To pronounce a word consisting of more than one sound, it is necessary to join the sounds together in the proper way.

Every speech-sound pronounced in isolation has three stages of articulation. They are (1) the on-glide, or the initial stage, (2) the retention-stage, or the medial stage, and (3) the off-glide (release), or the final stage.

In English there are two principal ways of linking two adjacent speech sounds: I. Merging of stages. II. Interpenetration of stages. The type of junction depends on the nature of the sounds that are joined together. As all English sounds come under the classification of consonants and vowels we may speak of joining:

- (a) a consonant to a following vowel (C + V), as in the word [mi:] me;
- (b) a vowel to a following consonant (V + C), as in the word $[\sigma n]$ on;
- (c) two consonants (C + C), as in the word [blow] blow:
- (d) two vowels (V + V), as in the word [riæləti] reality.

The modifications are observed both within words and word boundaries. There are the following types of modification: **assimilation**, **accommodation**, **reduction**, **elision**, and **inserting**. The adaptive modification of a consonant by a neighbouring consonant in a speech chain is **assimilation**. **Accommodation** is used to denote the interchanges of VC or CV types. **Reduction** is actually qualitative or quantitative weakening of vowels in unstressed positions. **Elision** is a complete loss of sounds, both vowels and consonants. Inserting is a process of sound addition.

MODIFICATIONS OF CONSONANTS

1. Assimilation

1.1. Place of articulation

- t, d > dental before [\eth , θ]: eighth, at the, said that
- t, d > post-alveolar before [r]: tree, true, dream, the third room
- s, z > post-alveolar before []: this shop, does she
- t, d > affricates before [j]: graduate, could you
- m > labio-dental before [f]: symphony
- $n > dental before [\theta]$: seventh
- n > velar before [k]: thank

1.2. Manner of articulation

- loss of plosion: glad to see you, great trouble
- nasal plosion: sudden, at night, let me see
- lateral plosion: settle, at last

1.3. Work of the vocal cords

• voiced > voiceless: newspaper, gooseberry (and in grammatical ...)

has, is, does > [s]; of, have > [f]

Notice: In English typical assimilation is voiced > voiceless; voiceless > voiced is not

1.4. Degree of noise

- sonorants > are partially devoiced after [p, t, k, s]
- 2. Accommodation
- 2.1. Lip position
- consonant + back vowel: *pool*, *rude*, *who* (rounded)
- consonant + front vowel: *tea, sit, keep* (spread)

- 3. Elision
- 3.1. Loss of [h] in personal and possessive pronouns and the forms of the auxiliary verb *have*.
- 3.2. [1] lends to be lost when preceded by [o:]: always, already, all right
- 3.3. In cluster of consonants: next day, just one. mashed potatoes
- 4. Inserting of sounds
- 4.1. Linking [r] (potential pronunciation of [r]): car owner
- 4.2. Intrusive [r]: [r] is pronounced where no *r* is seen in the spelling *china and glass:* it is not recommended to foreign learners.

MODIFICATION OF VOWELS

- 1. Reduction
- 1.1. Quantitative
- 1.2. Qualitative
- 2. Accommodation
- 2.2 Positional length of vowels: knee need neat
- 2.3. Nasalization of vowels: preceded or followed by [n, m]: never, then, men

- 1. What are the kinds of sound modifications?
- 2. What are the phonological processes in connected speech?
- 3. What are the main features of connected speech?
- 4. How can sound be modified?
- 5. What is speeches of modification?

SYLLABLE

The syllable is the smallest pronounceable unit capable of forming morphemes, words and phrases. As a meaningful language unit it has two aspects: syllable formation and syllable division which form a dialectal unity.

The syllable is a complicated phenomenon which can be viewed on four levels: **acoustic**, **articulatory** and **functional**. There exist numerous theories of the syllable. Some of them consider the syllable to be a purely articulatory unit without any functional value. The majority of linguists regard the syllable as the smallest pronounceable unit which can perform some linguistic function.

In English syllable formation is based on the phonological opposition vowel – consonant. The syllable may consist of the **onset**, the **nucleus** and the **coda**. The nucleus plus coda constitute the **rhyme**. There is no syllable without the nucleus, the presence of the onset and the coda depends on the phonotactic rules of a particular language. Syllables can be **open**, when ending in a vowel (**V**, **CV**), **closed**, ending in a consonant (**VC**, **CVC**), **covered**, with a consonant for an onset (**CV**, **CVC**), **uncovered**, with no onset (**V**, **VC**), **light**, with a short vowel like [ə] or [ɪ] or [ʊ] and no consonants to follow, and **heavy**, with a long vowel or a diphthong, or a short vowel with a consonant to follow. **Heavy** syllables attract stress, they become stressed, while **light** syllables are **unstressed**.

The syllable division determines the syllabic structure of the language, its syllable typology. **Phonotactic** possibilities of a language determine the rules of syllable division. The syllable performs three functions: **constitutive** and **distinctive** and **identificatory**.

- 1. What is the syllable?
- 2. What are words of syllables?

- 3. What is syllable structure of English?
- 4. Does each syllable need a vowel?
- 5. Why are syllables important?

WORD STRESS IN ENGLISH

Word stress is a greater degree of prominence of a syllable or syllables as compared to the other syllables of a word.

The stressed syllables are pronounced with more muscular energy than the unstressed ones. On the acoustic level stressed syllables are characterized by increased intensity, duration and fundamental frequency, which correspond to increased loudness, length and pitch on the perception level.

There are two types of word stress: **dynamic** and **musical** (tonic).

English word stress is a complex phenomenon formed by interdependent components: loudness, pitch, length and vowel quality.

The syllables in a word have different degrees of prominence. In English they generally distinguish three linguistically relevant degrees of stress: **primary**, **secondary** and **weak**. Some scholars also include **tertiary** stress, but the first classification is more acceptable for teaching English as a foreign language.

According to its placement stress can be **fixed** or **free**. Both in English an in Russian word stress is not only free, but it is also shifting, it can change its position in different forms of the word. To define the position of word stress in an individual word it is helpful to consider the following factors: the phonological structure of a syllable (syllable weight), the number of syllables in the word, the morphological factor (if the word is simple, complex or compound) and the grammatical category the word belongs to.

They generally distinguish three tendencies that account for the variations of stress patterns in English: **recessive**, **rhythmical** and **retentive** tendencies.

Word stress can perform the following functions: constitutive (it organizes the syllables into a word), identificatory, or recognitive (it helps the listener to recognize the word in the chain of speech) and distinctive (it can distinguish grammatical forms and meaning of words).

The correct selection of a syllable or syllables to stress in an English word causes a lot of difficulties to Russian learners. So in teaching pronunciation special attention should be given to the aspects which present difficulties due to the instability of English stress structure, on the one hand, and the differences in English and Ukrainian word stress:

- stress in multi-syllable words, containing secondary stress;
- stress in complex words containing suffixes;
- stress in compound words;
- word-class pairs with shifting stress ('insult in'sult).

- 1. What is word stress?
- 2. How do you show stress in phonetics?
- 3. What are the types of word stress?
- 4. Why is word stress important?
- 5. What are the rules of stress?

INTONATION

Intonation is a language universal. It is indispensable in communication.

Intonation is defined as a complex, a whole, formed by significant variations of pitch, loudness and tempo (the rate of speech and pausation) closely related. The term "prosody" is used in suprasegmental phonetics alongside with the term "intonation".

The **syllable** is widely recognized to be the smallest prosodic unit. It has no meaning of its own, but it is significant for constituting hierarchically higher prosodic units.

The succession of syllables forms a **rhythmic group**. A rhythmic, or accentual, unit (or group) is either one stressed syllable or a stressed syllable with a number of unstressed ones grouped around it.

The **intonation group** is hierarchically higher than the rhythmic unit. This term shows that the intonation group is the result of the division in which not only stresses, but pitch and duration (i.e. intonation in the broad sense) play a role. Structurally the intonation group has some obligatory formal characteristics. These are the nuclear stress, on the semantically most important word and the terminal tone (i.e. pitch variations on the nucleus and the tail if any). The intonation group is a meaningful unit.

A higher unit in which prosodic features are actualized is the utterance. The **utterance** is the main communicative unit. It is characterized by semantic entity which is expressed by all the language means: lexical, grammatical and prosodic. The prosodic structure of an utterance is a meaningful unit that contributes to the total meaning of the utterance.

The **supraphaphrasal unity** is a totality of information groups or utterances, united by general subtopic and common intonation key.

Each component of intonation can be described as a system. **Pitch** is described as a system of tones (Fall, Rise, Fall-Rise and so on), pitch levels (keys), which can be high, medium and low, and pitch ranges (wide, medium and narrow). **Loudness** is described as normal, increased (forte) or low (piano). **Tempo** includes rate of speech and pausation. The

rate of speech can be normal, slow and fast. **Pauses** are classified according to their length, their position in the utterance (final – non- final) and their function (syntactic, emphatic and hesitation pauses). **Speech rhythm** is defined as a regular occurrence of stressed syllables in a speech continuum. English is a stress-timed language. In such languages rhythm is based on a larger unit than syllable, the rhythmic group. The stressed syllables in the rhythmic group form peaks of prominence. Speech rhythm is regulated by the style of speech. Maximum rhythmicality is observed in poetry. Rhythm performs the functions of delimitation and integration, aesthetic and pragmatic functions.

Viewed on the acoustic level each component of intonation has its own acoustic correlate. The acoustic correlate of pitch is **fundamental frequency** of the vibrations of the vocal cords; loudness correlates with **intensity**, tempo correlates with **time** (**duration**) during which a speech unit lasts. All of them are closely interconnected in the processes of speech production and speech perception.

The intonation pattern is the basic unit of intonation. It serves to actualize syntagms into intonation groups. The nuclear tone is the most important part of the intonation pattern. The nuclear tone may be followed by the tail. The two other components of the intonation pattern, the head and the prehead form its pre-nuclear part.

Intonation is a powerful means of communication. **The communicative function** of intonation embraces all its numerous uses, which can be grouped into the following functions: distinctive or phonological; organizing; pragmatic; rhetorical; social; stylistic.

Performing its **distinctive function** intonation can differentiate the syntactic (communicative) types of sentences, attitudinal meanings, the actual meaning of sentences. Intonation serves to structure the text. On the one hand, it delimitates the text into smaller units, on the other hand, it ties together smaller units into bigger ones.

Intonation conveys the information content of an utterance. It highlights the most important information in an utterance and helps to distinguish which information is new (the rheme) and which information is known to the listener (the theme).

Intonation plays a very important role in structuring spoken discourse. At the same time it reflects the influence of the context, both verbal and extralinguistic, on the speech realization.

Speech rhythm is defined as a regular occurrence of stressed syllables in a speech continuum. English is a stress-timed language. In such languages rhythm is based on a larger unit than syllable, the rhythmic group. The stressed syllables in the rhythmic group form peaks of prominence.

Speech rhythm is regulated by the style of speech. Maximum rhythmicality is observed in poetry. Rhythm performs the functions of delimitation and integration, aesthetic and pragmatic functions.

- 1. What is intonation in phonetics?
- 2. How many types of intonation do you know?
- 3. What are the types of intonation?
- 4. What is intonation in English with examples?
- 5. What is the structure of intonation?

VARIATION OF ENGLISH PRONUNCIATION

The varieties that are spoken by a socially limited number of people and used only in certain localities are called dialects. An accent is a variety of a language which is distinguished from others exclusively in terms of pronunciation. Accent variation may be **geographical**, social and situational. Geographically native English accents are divided into British-oriented (U.K., Australia, New Zealand, South Africa) and North-Americaoriented (U.S.A., Canada). Within each country national standards, regional standards and local accents reflect both geographical and social diversity. The orthoepic norm of a language is the standard pronunciation adopted by native speakers as the right and proper way of speaking. It comprises the variants of pronunciation of vocabulary units and prosodic patterns which reflect the main tendencies in pronunciation that exist in the language. It is used by the most educated parts of the population. National standards: RP, GA, Gen Aus, Gen Can. Regional standards in U.K.: Southern, Northern, Scottish, Northern Irish. Regional standards in U.S.A.: Northern, Northern Midland, Southern Midland, Southern, Western. National standards are associated with radio and TV newsreaders, certain professional groups and public figures. Regional standards are spoken by most educated people and they show regional deviation from the standard. In U.K. people in the South-East of the country are closest to RP, in the U.S.A. it is people from the North, North Midland and the West who show the least differences from the unofficial standard of American Network. Local accents are numerous, they can be urban and rural. Urban centres are leading in accent diversity today.

The major accent-classifying feature is the presence of r in 'rhotic' (r-full) accents and its vocalization in post-vocalic position in 'non-rhotic' (r-less) accents. Most of the American accents (except southern and eastern) are rhotic, most of the British accents are non-rhotic (except northern, Scottish, Irish).

Current changes in RP are grouped according to the degree of process completion: processes almost complete, changes well-established, recent innovations and innovations on the verge of RP.

A more subtle realizational feature is /r/ pronounced as a post-alveolar approximant in all positions and not, as formerly, as a tap in intervocalic positions following an accented syllable, e.g. *very*, *error*.

Comparing the sound systems of **RP** and **GA** we note differences in vowel systems (20 vs. 15), in consonant systems (r-vocalization, t-voicing, etc.), in accent placement, rhythm and intonation. The major differences in vowels are: $[\mathfrak{p}/\mathfrak{a}:/\mathfrak{d}:]$ in dog, stop, long, orange, $[\mathfrak{x}]$ distribution in ask, dance, [ov]-quality in go, home; less contrast in length between American tense and lax vowels; retroflexion quality of American vowels before r, nasalization before nasals, loss of contrast in cot/caught, Merry Mary married. In consonants, besides rretroflexion and vocalization, there is American flap in *better*, *letter*, *t*-omission before *n* in twenty, weakened [j] in news, Tuesday, dark [l] in little, less. There are also non-systemic, lexical occurrences which create differences in pronunciation of words and their accentuation, as [a:/ei] in tomato, vase, [ʃ/sk] in schedule, accent patterns of ['--/--'] in address, adult, detail, ballet, café, garage. Secondary (tertiary) stress occurrence, as in dictionary, ceremony, strawberry. American rhythm is more smooth, not clipped as the British one due to an additional number of stresses and to lower contrast between accented and unaccented syllables in length and pitch (1.5 vs. 1.7). The monotony of American **intonation** is due to recurrence of mid-level wavy, rise-falling and level-rise pitch patterns. On the whole American men's speech, especially, is specific for its narrow pitch range with rise-fall termination.

- 1. What is English variation?
- 2. What are the varieties of English pronunciation?
- 3. How many variations does English have?
- 4. Why language variation is important?
- 5. Is there a standard pronunciation in English?

ACCENTUAL STRUCTURE OF ENGLISH WORDS

The sequence of syllables in the word is not pronounced identically. The syllables which are uttered with more prominence than the other syllables of the word are said to be stressed or accented. The correlation of varying prominences of syllables in a word is understood as the accentual structure of the word or its stress pattern.

According to A.C.Gimson, the effect of prominence is achieved by four factors: force, tone, length and vowel colour. The dynamic stress implies greater force with which the syllable is pronounced. In other words in the articulation of the stressed syllable greater muscular energy is produced by the speaker. European languages such as English, German, French and Ukrainian are believed to posses predominantly dynamic word stress. In Scandinavian languages the word stress is considered to be both dynamic and musical. The musical (tonic) word stress is observed in Chinese, Japanese, and Vietnamese. It is affected by variations of voice pith in relation to neighbouring syllables. The English Linguists D. Crystal and A.C.Gimson agree that in English word stress or accent is a complex phenomenon, marked by the variations in force, pitch, quantity and quality. All of them are of significant importance in the process of the studying the nature of word stress. Experimental data show that **pitch** and **length** are particularly important cues for stress perception in English, whereas vowel length (quantity) and vowel colour (quality) are decisive for the Ukrainian language. The overall impression of greater stress in English is due to a greater contrast between stressed and unstressed syllables in pitch and duration.

It is the presence of **secondary stress** that distinguishes the rhythm of an English polysyllabic word from Ukrainian word of the same length. In Ukrainian there is only one word stress in a word, it is *culminative*, as the whole word is centered around it.

According to **the placement of word stress** languages are differentiated into those with **a fixed stress** and those with **a free stress**. In languages with a fixed stress the occurrence of the word stress is limited to a particular syllable in a polysyllabic word. For instance, in French the stress falls on the last syllable of the word (if pronounced in isolation), in Finnish and Czech it is fixed on the first syllable, in Polish on the last syllable. In English and Ukrainian word stress is **free and variable**.

In order to decide on stress placement in English it is necessary to make use of the following factors:

- · whether the word is morphologically simple, complex or compound;
- · the grammatical category to which the word belongs to (noun, verb, adjective);
- · the number of syllables in the word;
- · the phonological structure of syllable (syllable weight)

Thus the main factors are *morphological and rhythmical*. Stress models with a secondary stress are especially productive.

In discussing accentual structure of English words we should state the functions of word stress:

- **1. Constitutive**. Word stress organizes the syllables of a word into a language unit having a definite accentual structure, which is a pattern of relationship among the syllables; a word does not exist without the word stress.
- **2. Word identifying**. Word stress enables a person to identify a succession of syllables as a definite accentual pattern of a word. Correct accentuation helps the listeners make process of communication easier, whereas misplaced word stresses prevent normal understanding.
- **3. Distinctive.** Word stress alone is capable of differentiating the meanings of words or their forms. The accentual patterns of words form oppositions, e.g. import im' port, billow be' low.

The complicated system of the accentual structure of English words makes teachers of English be very attentive to the subject. The typical mistakes of Ukrainian learners in the sphere of word stress are mispronunciation of:

- 1) words with the main and secondary stresses (conver' sational);
- 2) words with two equal stresses in connected speech ('up 'stairs,' re 'organize);
 - 3) words with the full vowel in the unstressed syllable ('architect).

In case of doubt it is advisable to consult a pronouncing dictionary.

The accentual structure of English words in speech continuum is inseparably connected with the rhythmic organization of speech.

- 1. What are accents in words?
- 2. What is accent and its types?
- 3. How many types of accents are there in English?
- 4. How do accents form?
- 5. What are accent features?

PHONETIC STYLES. STYLE-FORMING MEANS IN ENGLISH

When used in speech phonetic units undergo various changes under the influence of extralinguistic factors. The bundle of these factors forms the **extralinguistic situation**. The extralinguistic situation determines the choice of language means, phonetic means in particular.

Phonostylistics is a branch of phonetics which studies the way phonetic units (both segmental and suprasegmental) are used in particular extralinguistic situations. It is concerned with the identification of style-forming means, i.e. the phonetic features that enable the native speaker to distinguish intuitively between different styles of pronunciation.

The extralinguistic situation can be described in terms of three components, i.e. **purpose**, **participants** and **setting**. These components distinguish situations as the context in which speech interaction takes place.

Purpose is the most important factor that guides the communication. It is the task that is achieved in the course of communication. **Participants** are people involved in communication. Speech is a marker of various characteristics of people, both individual and social: age, gender, family background, occupation, social roles. **The scene** (**setting**) includes the physical orientation of participants, which is connected with the type of speech activity they are engaged in. Scenes can also be described in the following terms: public – non-public (private), formal – informal, monologuing – dialoguing – poliloguing. The channel of communication is also to be taken into consideration: face-to-face interaction – telephone communication, mass media communication.

The extralinguistic factors, that determine the choice of phonetic means and result in phonostylistic variation are:

- the purpose, or aim of communication;
- the degree of formality of the situation;
- the degree of spontaneity;

– the speaker's attitude.

The purpose, or aim of communication may be called a style forming factor, while all the others cause modifications within a particular style, which account for the existence of different kinds and genres of texts within each phonetic style. All the factors are interdependent and interconnected.

The classification of phonetic styles is based on the purpose of communication, which is the most significant extralinguistic factor. **Five phonetic styles** can be singled out according to the purpose of communication:

- 1. Informational style;
- 2. Academic (Scientific) style;
- 3. Publicistic (Oratorial) style;
- 4. Declamatory (Artistic) style;
- 5. Conversational (Familiar) style.

Stylistic variations of sounds and intonation result from different combinations of extralinguistic factors. Stylistic modifications of sounds are caused primarily by the degree of formality, while variations of intonation are basically determined by the aim of communication.

In formal situations pronunciation tends to be careful and is characterized by articulatory precision. In informal situations speech is generally faster and less careful. In informal casual discourse (fast colloquial speech) the processes of simplification take place: assimilation, reduction, elision.

Each of the five phonetic styles is used in a particular sphere of discourse and is characterized by a set of prosodic features, which in their combination form the model of the phonetic style.

- 1. What is the meaning of phonetic style?
- 2. What are the styles of phonetics?

- 3. What is a phonetic style forming factor?
- 4. How many types of phonetic sounds are there in English?
- 5. Why is phonetics important in English language?

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