

Лекция 1

Тема 1: Phonetics as a science, its connection with other disciplines

План

1. Phonetics as a science. Origin of the term “phonetics”.
2. Three branches of Phonetics.
3. IPA – International Phonetic Alphabet.

1. Phonetics as a science. Origin of the term “phonetics”.

Phonetics (from the Greek word φωνή, phone = sound/voice) is the study of sounds (voice). It is concerned with the actual properties of speech sounds (phones) as well as those of non-speech sounds, and their production, audition and perception, as opposed to phonology, which operates at the level of sound systems and abstract sound units (such as phonemes and distinctive features). Phonetics deals with the sounds themselves rather than the contexts in which they are used in languages. Discussions of meaning (semantics) therefore do not enter at this level of linguistic analysis.

While writing systems and alphabets are in many cases closely related to the sounds of speech, strictly speaking, phoneticians are more concerned with the sounds of speech than the symbols used to represent them. So close is the relationship between them, however, that many dictionaries list the study of the symbols (more accurately semiotics) as a part of phonetic studies. On the other hand, logographic writing systems typically give much less phonetic information, but the information is not necessarily non-existent. For instance, in Chinese characters, a phonetic refers to the portion of the character that hints at its pronunciation, while the radical refers to the portion that serves as a semantic hint.

Characters featuring the same phonetic typically have similar pronunciations, but by no means are the pronunciations predictably determined by the phonetic due to the fact that pronunciations diverged over many centuries while the characters remained the same. Not all Chinese characters are radical-phonetic compounds, but a good majority of them are.

2. Three branches of phonetics.

Phonetics has three main branches:

- articulatory phonetics, concerned with the positions and movements of the lips, tongue, vocal tract and folds and other speech organs in producing speech
- acoustic phonetics, concerned with the properties of the sound waves and how they are received by the inner ear
- auditory phonetics, concerned with speech perception, principally how the brain forms perceptual representations of the input it receives.

3. The IPA.

There are over a hundred different phones recognized as distinctive by the International Phonetic Association (IPA) and transcribed in their International Phonetic Alphabet.

Phonetics was studied as early as 2500 years ago in ancient India, with Pānini's account of the place and manner of articulation of consonants in his 5th century BC treatise of Sanskrit. The major Indic alphabets today, except Tamil script, order their consonants according to Pānini's classification.



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Лекция 2

Тема 2. The phoneme theory.

1. The phoneme.
2. Main trends in phoneme theory. Main phonological schools.
3. Methods of phonological analysis.

1. The Phoneme Theory in our country and abroad.

The Phoneme Theory. The term "phoneme" appeared in the linguistic literature of the 19th century in the works of the French linguist **F. de Saussure**. According to him a **phoneme is defined as a total sum of acoustic impressions and articulatory movements**. The linguistic aspect is lacking in this definition. He ignores the sense differentiating function of the phoneme / his physiologism / and draws a line between language and speech, considering it as a system of signs, expressing ideas /his psychologism /. His conceptions greatly influenced a great number of linguists and schools.

The phoneme theory came into being in Russia. Its originator was **Prof. B. de Courtenay**, the founder of the Kazan linguistic school. His work on the phoneme theory may be roughly subdivided into two periods. Firstly, he considered a phoneme to be a component of a morpheme. He stated that one and the same morpheme was always represented by the same combination of sounds.[as in Slavonic languages].He centered his attention mainly on the phenomenon of phonetic and historical alternations. Secondly, he abandoned this conception in the 90th of the XIX century and began to search for a unit not bound by the limits of a morpheme. He defined a **phoneme as an idea of a sound which appears in the mind of a speaker before the sound is uttered**. A speech sound is an invention of the scientists. What really exists is the perception of a sound, the complex perception of the articulatory movements, muscular sensation and acoustic impressions. This complex perception is a phoneme.

This theory was developed by **Prof.Scerba, Krushevsky** and by other Soviet and foreign linguists. According to **Scerba** sounds must be studied not only from the acoustic points of view, but as sounds capable of distinguishing one word of a language from other words of the same language. They fulfill a communicative function in speech. According to **Scerba, a phoneme is realized in speech in concrete sound combinations, which he calls allophones**. The most typical, which may be pronounced in isolation, represent a speech element, opposed to other sounds. It is "tipichnyy ottenok". The number of phonemes in a given language is defined by the principal members. In English there are 44 phonemes, in Russian – 36. Phonemic variants are very important, because they may develop into new phonemes: O.E.or they may stop functioning the theory of the phoneme was then further developed by Scerba's disciples. [Zinder]. A phoneme is understood as a historical category. It functions in a language at a certain stage of its development. It may be characterized as a unit of different aspects: 1. its material and objective aspects. It really exists in a language. It is a concrete sound, characterized by definite formation and definite acoustic qualities. It exists independently in the speech of all the members of the community; it does not depend on the will of an individual, it is obligatory for all, as it is a product of the historical development of a given collective body. Thus, it is a social phenomenon. 1. The functional value. The phoneme has two main functions: a) to serve as a material integument of words and morphemes; b) to differentiate the meaning of words, their grammatical forms and morphemes.

2. The phoneme is the result of generalization. It is a dialectical unit of the general and the particular. It is realized in speech in concrete sound combinations as allophones, being at the same time something typical and general when opposed to other phonemes in speech.

The theory of the phoneme is being developed into two main directions in our country: the Moscow linguistic school, the St. Petersburg linguistic school. There are many different linguistic schools of the phoneme abroad: the Prague phonological school, the London phonological school, the American phonological school and the Copenhagen phonological school.

The Prague Phonological School.

The phoneme theory was further developed by the **Linguistic Society of Prague**. The head of the school is **N.S. Trubetzkoy**. He first became acquainted with the phoneme theory through the works of Baudouin de Courtenay and Scerba. He propounded his **phonological views** in a number of works, the principal of which is "Grundzuge der Phonologie." The main points of his theory are: 1. the separation of phonology from phonetics; 2. The theory of phonological oppositions; 3. the theory of the arc-phoneme.

He developed de Saussure's principle of the separation of speech from language by proclaiming a new science- phonology as distinct from phonetics. According to him, phonology is a linguistic science. It should concern itself with the distinctive features only which are connected with meaning, while phonetics is a biological science, it should concern itself with the sounds of a language, as they are pronounced and as they are heard, without paying any special attention to their function in the language. Trubetzkoy further develops his system of oppositions by giving special prominence to the most essential members: 1. the phoneme, which he defines as a unity of the phonologically relevant features of a sound; 2. the speech sound, which he defines as a unity of all the features, both relevant and irrelevant, of a sound representing the phoneme in connected speech. Some oppositions may be neutralized, the phoneme in the position of neutralization is the arc-phoneme, "a unity of relevant features common to two phonemes".

The London Phonological School.

It is headed by Prof. **D. Jones** of London and is concerned with the physical conception of the phoneme. His views are expressed in a number of works. According to him a phoneme is defined as "a family of sounds in a given language which are related in character and are used in such a way that no one member ever occurs in a word in the same phonetic context as any other member". He breaks up the phoneme into atoms and considers different features of a phoneme as independent phenomena. He distinguishes tones and tonemes in tone languages, strones and stronemes as different degrees of stress, chrones and chronemes as different length of vowels. His aim is to give a phoneme a purely practical application.

The American Phonological School.

The American phonological school is headed by **L. Bloomfield and E. Sapir**. Their approach of the phoneme theory is synchronic. They treat the linguistic phenomena from the point of view of structuralism- "pattern is habit, behavior is culture". They compare linguistic processes with a fire in a wooden stove, they are invisible. One can judge about what is going on within by an individual's behavior. The system of the language may be compared with any system of signs, for example, with Morse code.

3. Methods of Phonological Analysis.

What is the aim of the phonological analysis? Firstly, the aim of it is to establish distinctive differences between sounds, i.e. to establish relevant features. Secondly, to create the inventory of the phonemes and establish the phonemic system of a language. The final aim of phonological analysis is the identification of the phonemes and their classification.

There are **2 main approaches**:

1) formally distributional that is practiced by American structuralists and it pays special attention to the position of the sound in the word or its distribution;

2) semantically distribution (sematic) It gives special attention to meaning.

The analysis is conducted through the system of phonological oppositions. It's based on the following rule:

the phoneme can distinguish meaning when opposed to one another in the same phonetic context. Ex: [dei] – [thei], [ship] – [sheep] (minimal pairs)

To establish the phonemic status of a sound it is necessary to oppose one sound to another in the same phonetic context.

This procedure is called **commutation test**. We must find the so-called minimal pairs. A **minimal pair** is a pair of words which differ in once sound only. So we replace one sound by

another and try to see if the meaning is the same or different and if the sound belongs to one or different phoneme.

Ex: [pin] – [sin] (1)

[p^hin] – [pin] (2)

[pin] – [hin] (3)

The commutation test may have **3 results**:

(1) the meaning is different, so the opposed sounds belong to different phoneme;

(2) the meaning is the same, so the opposed sounds belong to the same phoneme;

(3) a meaningless word, so we can't make any conclusion – we can't identify the sound

To create the system of phonemes the sounds are opposed in 3 positions: initial, middle, final.

There are some problems - sometimes sounds cannot be opposed:

Ex: [h] is never used in final position;

[n-носовое] is never in the initial position.

In such cases we rely on the knowledge of the native speaker and phonetic similarities or dissimilarities.

There is another interesting case. We have a number of different sounds occur in the same position and phonetic context but the meaning is unchanged. Ex: [калоши] – [галoши], [шкаф] – [шкап]. Such sounds are called free variants. The existence of free variants is explained by regional, stylistic and individual variations. Ex: city ['sidi – 'siti], letter ['ledə – 'letə]

The semantic method of phonological analysis is widely used and it helps to create the system of the sounds of a language.

The application of this method shows that the English language has 24 consonant phonemes and 20 vowel ones. They are grouped into classes according to the distinctive features.

In English the following features are distinctive for consonants:

- place of articulation;
- manner of articulation, type of obstruction;
- presence or absence of voice (force of articulation)

The phonemic feature of vowels:

- quality => 1) stability of articulation, 2) tongue position (horizontal, vertical)

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Лекция 3

Тема 5. Syllabic and Accentual structure of English words

План

1. Syllable notion. Overview of syllable formation theories.
2. The structure and functions of syllables in English.
3. Accent notion.
4. Word stress and sentence stress.
5. Types of the accents

1. Syllable notion. Overview of syllable formation theories.

Speech can be broken into minimal pronounceable units into which sounds show a tendency to cluster or group. These **smallest phonetic groups are generally called syllables**. Being the smallest pronounceable units, syllables form morphemes, words and phrases. Each of these units is characterized by a certain syllabic structure. The complexity of the phenomenon gave rise to many theories: expiratory (chest pulse or pressure) theory, sonority theory, theory of muscular tension, loudness theory.

1) Expiratory (chest pulse or pressure) theory by R.H. Stetson is based on the assumption that **expiration in speech is a pulsating process and each syllable should correspond to a single expiration**. So the number of syllables in an utterance is determined by the number of expirations made in the production of the utterance. This theory was strongly criticized by Russian and foreign linguists. G.P. Torsuyev, for example, wrote that in a phrase a number of words and consequently a number of syllables can be pronounced with a single expiration. This fact makes the validity of the theory doubtful.

2) The sonority theory (prominence theory) by O. Jespersen. According to O. Jespersen, each **sound is characterized by a certain degree of sonority which is understood as acoustic property of a sound that determines its perceptibility**. In this theory the term “sonority” is used in the meaning which is conveyed by the precise acoustic term “carrying power”. The latter means the acoustic property of speech sounds which determines the degree of their perceptibility. Thus, **sonority theory is based upon the fact that each sound has a different carrying power**. According to this sound property a ranking of speech sounds could be established: <the least sonorous> voiceless plosives → voiced fricatives → voiced plosives → voiced fricatives → sonorants → close vowels → open vowels <the most sonorous>. So in any sequence the most sonorous sounds tend to form the center of the syllable and the least sonorous – the marginal segments; a syllable contains one peak of sonority (or prominence) separated from other peaks by “valleys” of lower sonority (or prominence).

The most serious drawback of this theory is that it fails to explain the actual mechanism of syllable formation and syllable division. Besides, the concept of sonority is not very clearly defined. (V.A. Vassilyev)

Further experimental work aimed to description of the syllable resulted in lot of other theories. However the question of articulatory mechanism of syllable is still an open question in phonetics. We might suppose that this mechanism is similar in all languages and could be regarded as phonetic universal.

3) The theory of muscular tension by Russian linguist L.V.Shcherba explains **the phenomenon of syllable formation by muscular tension impulses**. The fact that syllables cannot be further subdivided in connected speech proves that in speaking muscular tension impulses follow one another. Each impulse has its strongest point – the peak of prominence and its weakest point – the valley of prominence.

In most languages there is the syllabic phoneme in the centre of the syllable which is usually a vowel phoneme or a sonorant. The phonemes preceding or following the syllabic peak are called marginal. The tense of articulation increases within the range of prevocalic consonants and then decreases within the range of postvocalic consonants.

4) Russian linguist and psychologist N.I. Zhinkin has suggested the so-called **loudness theory** which seems to combine both production and perception levels. The experiments carried out by N.I. Zhinkin showed that the arc of loudness of perception level is formed due to variations of the volume pharyngeal passage which is modified by contractions of its walls. The narrowing of the passage and the increase in muscular tension, which results from it, reinforce the actual loudness of a vowel thus forming the peak of the syllabic. So, **the syllable is the arc of loudness** which correlates with the arc of articulatory effort on the speed production level since variations in loudness are due to the work of all speech mechanisms.

Conclusion: It is perfectly obvious that no phonetician has succeeded so far in giving an adequate explanation of what the syllable is. The difficulties seem to arise from the various possibilities of approach to the unit. There exist two points of view:

1. Some linguists consider the syllable to be a purely articulatory unit which lacks any functional value. This point of view is defended on the ground that the boundaries of syllables do not always coincide with those of morphemes.

2. The majority of linguists treat the syllable as the smallest pronounceable unit which can reveal some linguistic function.

A syllable can be defined as a phonetic unit, which is pronounced by one articulatory effort, by one muscular contraction, which results auditorily in one uninterrupted arc of loudness.

The definition of the syllable from the functional point of view tends to single out the following **features of the syllable:**

- a) a syllable is a chain of phonemes of varying length;
- b) a syllable is constructed on the basis of contrast of its constituents (which is usually of vowel - consonant type);
- c) the nucleus of a syllable is a vowel, the presence of consonants is optional; there are no languages in which vowels are not used as syllable nuclei, however, there are languages in which this function is performed by consonants;
- d) the distribution of phonemes in the syllabic structure follows by the rules which are specific enough for a particular language.

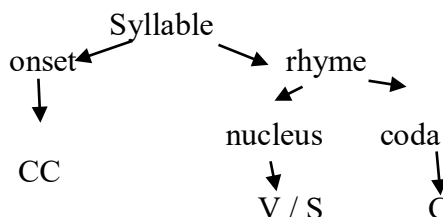
2. The structure and functions of syllables in English.

Syllable formation in English is based on the phonological opposition vowel - consonant.

Vowels are usually syllabic while consonants are not with the exceptions of [l], [m], [n], which become syllabic in a final position preceded by a noise consonant: *bottle* [bɒtl], *bottom* [bɒtm], *button* [bʌtn] and [r] (in those accents which pronounce [r]) perhaps [præps].

The structure of English syllables can be summarized as follows:

- Many syllables have one or more consonants preceding the nucleus. These make up the syllable onset: *me*, *so*, *plow*.
- Many syllables have one or more consonants, following the nucleus. They make up the syllable coda. They are traditionally known as closed syllables: *cat*, *jump*.
- The combination of nucleus and coda has a special significance, making up the rhyming property of a syllable.



V - for a vowel and the letter C - for a consonant. S-the syllabic sonorant

Types of syllables. According to the syllable structure the types of syllables can be defined. A syllable, which begins in a consonant is called **covered**, a syllable which begins in a vowel is called **uncovered**. A syllable which ends in a consonant is called **closed**, a syllable which ends in a vowel is called **open**.

There are four main types of syllables:

V – uncovered open, or fully open, e.g. or [o:], I [aɪ];

VC – closed uncovered, e.g. it [ɪt], add [æd];

CV – covered open, e.g. see [si:], no [nəʊ];

CVC – covered, closed, or fully closed, e.g. catch [kæʃ], pit [pɪt].

Torsuev G.P. :

V – fully open

CVC – fully closed

CV – initially covered

VC – finally covered

In English the typical and the most fundamental syllabic structure is of CVC type. It means that the English language has developed the closed type of syllable as the fundamental one. In Russian CV types are more common, so the open type forms the basis of syllable formation.

The other aspect is **syllable division**. The problem of syllable division in case of intervocalic consonants and their clusters, like in such words as *city*, *extra*, *standing* and others.

Let us consider the first word ['sit.i]. There exist two possibilities:

a) the point of syllable division is after the intervocalic consonant:

b) the point of syllable division is inside the consonant.

In both cases the first syllable remains closed because the short vowel should remain checked. The result of instrumental analyses shows, that the point of syllable division in such words is inside the intervocalic consonant.

The second case. There are two syllables in the word *extra* but where should the boundary between them fall?

1) [e - kstrə]. It is unlikely that people would opt for a division between [e] and [kstrə] because there are no syllables in English which begin with consonant sequence [kstr].

2) Similarly, a division between [ekstr] and [ə] would be unnatural.

3) [ek - strə], [eks - trə], [ekst - rə] are possible. People usually prefer either of the first two options here, but there is no obvious way of deciding between them.

In some cases we may take into account the morphemic structure of words. For example, *standing* consists of two syllables; on phonetic grounds [stæn - dɪŋ]. on grammatical grounds [stænd - ɪŋ].

Functions of the syllable.

The first is **constitutive function**. It lies in its **ability to be a part of a word** itself. The syllables form language units of greater magnitude than words, morphemes, and utterances. In this respect two things should be emphasized. First, the syllable is the unit within which the relations between distinctive features of phonemes and their acoustic correlates are revealed. Second, within a syllable (or syllables) prosodic characteristics of speech are realized, which form the stress pattern of a word and the intonation structure of an utterance. In sum, the syllable is a specific minimal structure of both segmental and suprasegmental features.

The other function is **distinctive** one. In this respect **the syllable is characterized by its ability to differentiate words and word-forms**. One minimal pair has been found in English to illustrate the word distinctive function in the syllabic: *nitrate* — *night-rate*. There is an analogical distinction between word combinations can be illustrated by many more examples: *an aim - a name; an ice house - a nice house, etc.* Sometimes the difference in syllable division may be the basic ground for differentiation in such pairs as *I saw her rise. - I saw her eyes; I saw the meat — I saw them eat.*

3. Accent notion.

The sequence of syllables in the word is not pronounced identically. The syllable or syllables, which are uttered with more prominence than the other syllables of the word, are said to be stressed or accented. It is necessary to distinguish between “stress” and “accent”. The latter includes changes in the pitch of voice besides the force of utterance. Stress in the isolated word is termed **word stress**; stress in connected speech is termed **sentence stress**.

Stress is defined differently by different authors. B.A. Bogoroditsky, for instance, defined stress as an increase of energy, accompanied by an increase of expiratory and articulatory activity. D. Jones defined stress as the degree of force, which is accompanied by a strong force of exhalation and gives an impression of loudness. H. Sweet also stated that stress, is connected with the force of breath. According to A.C. Gimson, the effect of prominence is achieved by any or all of four factors: force, tone, length and vowel colour.

Word stress or accent can be defined *as the singling out of one or more syllables in a word, which is accompanied by the change of the force of utterance, pitch of the voice, qualitative and quantitative characteristics of the sound, which is usually a vowel.*

In different languages one of the factors constituting word stress is usually more significant than the others. According to the most important feature, different types of word stress are distinguished in different languages.

1) If special prominence in a stressed syllable or syllables is achieved mainly through the intensity of articulation, such type of stress is called *dynamic*, or *force stress*. It is observed in the English and Ukrainian languages.

2) If special prominence in a stressed syllable is achieved mainly through the change of pitch, or musical tone, such accent is called *musical*, or *tonic*. It is characteristic of the Japanese, Korean and other oriental languages.

3) If special prominence in a stressed syllable is achieved through the changes in the quantity of the vowels, which are longer in the stressed syllables than in the unstressed ones, such type of stress is called *quantitative*.

4) *Qualitative* type of stress is achieved through the changes in the quality of the vowel under stress.

From the point of view of **the position of stress** in words and their grammatical forms, accent can be characterized as *free (or shifting) and fixed*.

In the English and Ukrainian/Russian languages word accent is free, that is stress may fall on the first syllable: 'mother, мама; it may fall on the second syllable: ig'nore, экзамен; it may fall on the final syllable: consideration.

Stress in the English and Ukrainian/Russian languages is not only free, but at the same time it is also shifting:

- in different parts of speech, or in different forms of one and the same word: ig'nore — 'ignorant, рука — руки.

- to perform semantic function: (a) it distinguishes words semantically: мук'а – м'ука; (b) it may also serve to differentiate grammatical forms of words заплач'у – заплачу.

In spite of the fact, that word accent in the English word stress system is free, there are certain factors, that determine the place and different degree of word stress: recessive tendency, rhythmic tendency, retentive tendency, semantic factor.

1) *Recessive tendency* results in placing the word stress on the initial syllable. It can be of two sub-types: (a) unrestricted recessive accent, which falls on the first syllable: father /'fa: pə/, mother /'mʌpə/ and (b) restricted recessive accent, which is characterized by placing the word accent on the root of the word if this word has a prefix, which has lost its meaning: become /bi'kam/, begin /bi'gin/.

2) *Rhythmic tendency* results in alternating stressed and unstressed syllables. It falls on the third syllable from the end in three and four syllable words, e. g. family /'fæmili/, occasion /ə'keɪzn/, nation /'neɪʃn/ and in words with a secondary stress on the second pretonic syllable, e. g. pronunciation /prənansi'eɪʃn/.

3) *Retentive tendency* consists in the retention of the primary accent on the parent word, e.g. person – personal /'pɜːsn – 'pɜːsən/. More commonly it is retained in the parent word as a secondary accent, e. g. similar – similarity /'similə – simi'laeriti/.

4) *Semantic factor* that can be observed in compound words, and according to this factor the most important part of the compound is usually stressed.

It is, as a rule, the first element of the compound, e. g. 'bluebottle, 'booking office, 'buttonhole, 'musical box, 'fire extinguisher, etc. But there are compounds in English which have two strong stresses, because both of their elements are semantically important.

3) **Word stress and sentence stress.**

They are different in their sphere of application as they are applied to different language units: word stress is naturally applied to a word, as a linguistic unit, sentence stress is applied to a phrase. Secondly, the distinction of the rhythmic structure of a word and a phrase is clearly observed in the cases when the word stress in notional words is omitted in a phrase, e.g. *I 'don't think he is 'right* or when the rhythmic structure of the isolated word does not coincide with that of a phrase, e.g. 'Fifteen. 'Room Fifteen. 'Fifteen 'pages.

So in a speech chain the phonetic structure of a word obtains additional characteristics connected with rhythm, melody, and tempo. Though the sentence stress falls on the syllable marked by the word stress it is not realized in the stressed syllable of an isolated word but in a word within speech continuum. Since the spheres of word stress and sentence stress fall apart their functions are actually different. **Sentence stress organizes a sentence into a linguistic unit, helps to form its rhythmic and intonation pattern, and performs its distinctive function on the level of a phrase.**

Stress difficulties peculiar to the accentual structure of the English language are connected with the vowel special and inherent prominence. In identical positions the intensity of English vowels is different. The highest in intensity is /a:/, then go /oː, ɜː, iː, uː, æ, σ, e, v, i/.

All English vowels may occur in accented syllables, the only exception is /ə/, which is never stressed. English vowels /i, ɪ, ə, v/ tend to occur in unstressed syllables. Syllables with the syllabic /l, m, n/ are never stressed. Unstressed diphthongs may partially lose their glide quality. In stressed syllables English stops have complete closure, fricatives have full friction, and features of fortis/lenis distinction are clearly defined.

5. **Typology of accentual structures**

The numerous variations of English word stress are systematized in the typology of accentual structure of English words worked out by G.P. Torsuyev. He classifies them according to the number of stressed syllables, their degree or character (the main and the secondary stress). The distribution of stressed syllables within the word accentual types forms accentual structures of words. Accentual types and accentual structures are closely connected with the morphological type of words, with the number of syllables, the semantic value of the root and the prefix of the word.

The accentual types are:

1. ['___]. This accentual type marks both simple and compound words. The accentual structures of this type may include two and more syllables, e.g. 'father, 'possibly, 'mother-in-law, 'gas-pipe.

2. ['_ '_]. The accentual type is commonly realized in compound words, most of them are with separable prefixes, e.g. 'radio-'active, 're'write, 'diso'bey.

3. [''_ '_ _] and 4. [''_ '_ '_ _]. The accentual types are met in initial compound abbreviations like 'U'S'A, 'U'S'S'R.

5. ['_ , ___]. The type is realized both in simple and compound words, very common among compound words, e.g. 'hair-,dresser, 'substructure.

6. [, ' ____]. The accentual type marks a great number of simple words and some compound words as well. In simple words the stresses fall onto:

1. the prefix and the root: *maga'zine*;
2. the root and the suffix: *,hospi'tality*;
3. the prefix and the suffix: *disorganization*.

The other five types are rare and found in small number of words.

The most widely spread among the enumerated accentual types are supposed to be Type 1, Type 2, Type 5 and Type 6. Each type includes varieties of definite accentual structures with different numbers of syllables and marks thousands of words. So the four of them cover the main bulk of most common English words and are therefore most typical for the English vocabulary.

The variability of the word accentual structure is multiplied in connected speech. The accentual structure of words may be altered under the influence of rhythm, e.g. *An 'unpolished 'stone* but: *The 'stone was un'polished*.

The tempo of speech may influence the accentual pattern of words. With the quickening of the speed the carefulness of articulation is diminished, the vowels are reduced or elided, the secondary stress may be dropped,

e.g. *The 'whole organi'zation of the 'meeting was 'faulty*.

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Лекция 4

Тема 6: Intonation. Rhythm

План

1. Peculiarities of English intonation.
2. Rhythm.
3. Musical rhythm.

1. Intonation.

In linguistics, intonation is the variation of pitch when speaking. Intonation and stress are two main elements of linguistic prosody.

Many languages use pitch syntactically, for instance to convey surprise and irony or to change a statement to a question. Such languages are called intonation languages. English and French are well-known examples. Some languages use pitch to distinguish words; these are known as tonal languages. Thai and Hausa are examples. An intermediate position is occupied by languages with tonal word accent, for instance Norwegian or Japanese.

Rising intonation means the pitch of the voice increases over time; falling intonation means that the pitch decreases with time. A dipping intonation falls and then rises, whereas a peaking intonation rises and then falls.

The classic example of intonation is the question-statement distinction. For example, northeastern American English, like very many languages (Hirst & DiCristo, eds. 1998), has a rising intonation for echo or declarative questions (He found it on the street?), and a falling

intonation for wh- questions (Where did he find it?) and statements (He found it on the street.). Yes or no questions (Did he find it on the street?) often have a rising end, but not always. The Chickasaw language has the opposite pattern, rising for statements and falling with questions.

2. Rhythm.

Rhythm (Greek ρυθμός = 'flow', or in Modern Greek, 'style') is the variation of the accentuation of sounds or other events over time. "Rhythm involves patterns of duration that are phenomenally present in the music" with duration perceived by interonset interval (London 2004, p.4). When governed by rule, it is called meter. It is inherent in any time-dependent medium, but it is most associated with music, dance, and the majority of poetry. The study of rhythm, stress, and pitch in speech is called prosody; it is a topic in linguistics. All musicians, instrumentalists and vocalists, work with rhythm, but it is often considered the primary domain of drummers and percussionists.

3. Rhythm in music.

In Western music, rhythms are usually arranged with respect to a time signature, partially signifying a meter. The speed of the underlying pulse, called the beat, is the tempo. The tempo is usually measured in 'beats per minute' (bpm); 60 bpm means a speed of one beat per second. The length of the meter, or metric unit (usually corresponding with measure length), is usually grouped into either two or three beats, being called duple meter and triple meter, respectively. If each beat is grouped in two, it is simple meter, if in three compound meter.

Syncopated rhythms are rhythms that accent parts of the beat not already stressed by counting. Playing simultaneous rhythms in more than one time signature is called polymeter. See also polyrhythm. In recent years, rhythm and meter have become an important area of research among music scholars. Recent work in these areas includes books by Maury Yeston, Fred Lerdahl and Ray Jackendoff, Jonathan Kramer, Christopher Hasty, William Rothstein, and Joel Lester.

Some genres of music make different use of rhythm than others. Most Western music is based on divisive rhythm, while non-Western music uses more additive rhythm. African music makes heavy use of polyrhythms, and Indian music uses complex cycles such as 7 and 13, while Balinese music often uses complex interlocking rhythms. By comparison, a lot of Western classical music is fairly rhythmically simple; it stays in a simple meter such as 4/4 or 3/4 and makes little use of syncopation. In the 20th century, composers like Igor Stravinsky, Philip Glass, and Steve Reich wrote more rhythmically complex music using odd meters, and techniques such as phasing and additive rhythm. At the same time, modernists such as Olivier Messiaen and his pupils used increased complexity to disrupt the sense of a regular beat, leading eventually to the widespread use of irrational rhythms in New Complexity. This use may be explained by a comment of John Cage's where he notes that regular rhythms cause sounds to be heard as a group rather than individually; the irregular rhythms highlight the rapidly changing pitch relationships that would otherwise be subsumed into irrelevant rhythmic groupings (Sandow 2004, p.257). LaMonte Young also wrote music in which the sense of a regular beat is absent because the music consists only of long sustained tones (drones). In the 1930s, Henry Cowell wrote music involving multiple simultaneous periodic rhythms and collaborated with Léon Theremin to invent the Rhythmicon, the first electronic rhythm machine, in order to perform them. Similarly, Conlon Nancarrow wrote for player piano.

Clave is a common underlying rhythm in African, Cuban music, and Brazilian music.

A rhythm section generally consists of percussion instruments, and possibly chordal instruments (e.g., guitar, banjo) and keyboard instruments, such as piano (which, by the way, may be classified as any of these three types of instruments).

Narmour (1980, p.147-53) describes three categories of prosodic rules which create rhythmic successions which are additive (same duration repeated), cumulative (short-long), or countercumulative (long-short). Cumulation is associated with closure or relaxation, countercumulation with openness or tension, while additive rhythms are open-ended and

repetitive. Richard Middleton points out this method cannot account for syncopation and suggests the concept of transformation.

A rhythmic unit is a durational pattern which occupies a period of time equivalent to a pulse or pulses on an underlying metric level, as opposed to a rhythmic gesture which does not (DeLone et. al. (Eds.), 1975, chap. 3).

In recent years, music theorists have attempted to explain connections between rhythm, meter, and the broad structure and organization of sound events in music. Some have suggested that rhythm (and its essential relationship to the temporal aspect of sound) may in fact be the most fundamental aspect of music. Hasty (1997, p. 3), for example, notes that "Among the attributes of rhythm we might include continuity or flow, articulation, regularity, proportion, repetition, pattern, alluring form or shape, expressive gesture, animation, and motion (or at least the semblance of motion). Indeed, so intimate is the connection of the rhythmic and the musical, we could perhaps most concisely and ecumenically define music as the 'rhythmization' of sound."

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Лекция 5

Тема 7-8: Territorial varieties of English pronunciation

План

1. Spread of English. Standard English.
2. Regional Varieties of English: Welsh English, Scottish English, American English.
3. Canadian English.
4. American English.

1. Canadian English

Overall, the pronunciation of English in most of Canada, and especially in Central and Western Canada, is very similar to the pronunciation of English found in the Western United States; the so-called Canadian raising is often regarded as the most distinctive feature. The island of Newfoundland has its own distinctive dialect of English known as Newfoundland English (often referred to as 'Newfie') while many in the Maritime provinces of Nova Scotia, New Brunswick and Prince Edward Island have an accent sounding more similar to Scottish and, in some places, Irish pronunciation than General American. There is also some French influence in pronunciation for some English-speaking Canadians who live near, and especially work with, French-Canadians.

Canada shares similarities with British English (and many other varieties of English) in pronouncing words like fragile, fertile, and mobile. While speakers of American English pronounce them as [fɹædʒl̩], [fɜːrɪ], and [mɔʊbəl], Canadians pronounce them as the British do, sounding like /fɹædʒajl̩/, /mɔʊbajl̩/ The American pronunciation of fertile is also becoming very popular in Canada, even though the British pronunciation remains dominant.

In American English, words like *semi*, *anti*, and *multi* are often pronounced as /semaj/, /æntaj/, and /mʌltaj/, whereas the British pronounce them like /semi/, /ænti/, and so on. Canadians tend to prefer the British pronunciation of these words, though American pronunciation has made headway. Often, a Canadian will use the former in general use, but the latter in order to add emphasis.[citation needed]

The word *lieutenant* is pronounced /ləftənənt/ as in the UK (but not in the British Royal Navy).

In Canada, the word *premier*, as meant to be the leader of a provincial or territorial government, is pronounced [ˈpɹi.ɛ.mjɛɪ], [ˈpɹi.mjɪ], or [ˈpɹi.mjɛɪ] in most places. *Premiere*, denoting a first performance, is pronounced the same in Canada as the rest of the world.

The herb and given masculine name *basil* is usually pronounced /ˈbæzəl/.

French names like *René* are pronounced by some Canadians as *Rennie* /ˈrɛn.i/ rather than *Renay* /rɛ.ˈneɪ/ by speakers of some other English dialects.

Another pronunciation that is typically Canadian is to pronounce *asphalt* as *ash-falt* /æʃ.falt/. This pronunciation is also common in Australian English. It is however not the pronunciation used in either American English or British English.

2. American English

On the other hand, North American English has undergone some sound changes not found in Britain, at least not in standard varieties. Many of these are instances of phonemic differentiation and include:

The merger of [ɑ] and [ɒ], making *father* and *bother* rhyme. This change is nearly universal in North American English, occurring almost everywhere except for parts of eastern New England, like the Boston accent.

The replacement of the lot vowel with the strut vowel in most utterances of the words *was*, *of*, *from*, *what*, *everybody*, *nobody*, *somebody*, *anybody*, *because*, and in some dialects *want*.

The merger of [ɒ] and [ɔ]. This is the so-called *cot-caught* merger, where *cot* and *caught* are homophones. This change has occurred in eastern New England, in Pittsburgh and surrounding areas, and from the Great Plains westward.

Vowel merger before intervocalic /r/. Which (if any) vowels are affected varies between dialects.

The merger of [ʊɪ] and [ɜ] after palatals in some words, so that *cure*, *pure*, *mature* and *sure* rhyme with *fir* in some speech registers for some speakers.

Dropping of [j] after alveolar consonants so that *new*, *duke*, *Tuesday*, *suit*, *resume*, *lute* are pronounced /nu:/, /du:k/, /tu:zdeɪ/, /su:t/, /ɪzɜ:m/, /lu:t/.

æ-tensing in environments that vary widely from accent to accent. In some accents, particularly those from Philadelphia to New York City, [æ] and [eə] can even contrast sometimes, as in *Yes, I can* [kæn] vs. *tin can* [keən].

Laxing of /e/, /i/ and /u/ to /ɛ/, /ɪ/ and /ʊ/ before /r/, causing pronunciations like [pɛɪ], [pɪɪ] and [pʊɪ] for *pair*, *peer* and *pure*.

The flapping of intervocalic /t/ and /d/ to alveolar tap [ɾ] before reduced vowels. The words *ladder* and *latter* are mostly or entirely homophonous, though distinguished by some speakers by a lengthened vowel preceding an underlying 'd'. For some speakers, the merger is incomplete and 't' before a reduced vowel is sometimes not tapped following [eɪ] or [ɪ] when it represents underlying 't'; thus *greater* and *grader* are distinguished. Even among those words where /t/ and /d/ are flapped, words that would otherwise be homophonous are, for some speakers, distinguished if the flapping is immediately preceded by the diphthongs /aɪ/ or /aʊ/; these speakers tend to pronounce *writer* with [əɪ] and *rider* with [aɪ]. This is called *Canadian raising*; it is general in Canadian English, and occurs in some northerly versions of American English as well (often just applying to the diphthong /aɪ/, but not to /aʊ/).

Both intervocalic /nt/ and /n/ may be realized as [n] or [ŋ], making winter and winner homophones. This does not occur when the second syllable is stressed, as in entail.

The pin-pen merger, by which [ɛ] is raised to [ɪ] before nasal consonants, making pairs like pen/pin homophonous. This merger originated in Southern American English but is now found in parts of the Midwest and West as well.

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