

# WORD STRESS

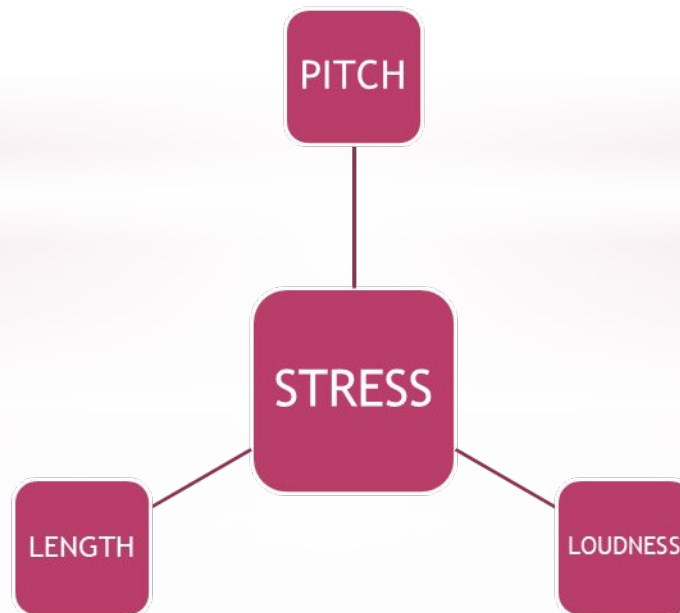
Lecture 7

## Outline

1. Definition. The nature of stress
2. Word Stress: diachrony, types, degrees
3. Functions of Word Stress
4. Correlation of word stress and sentence stress
5. English and Russian word stress patterns

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

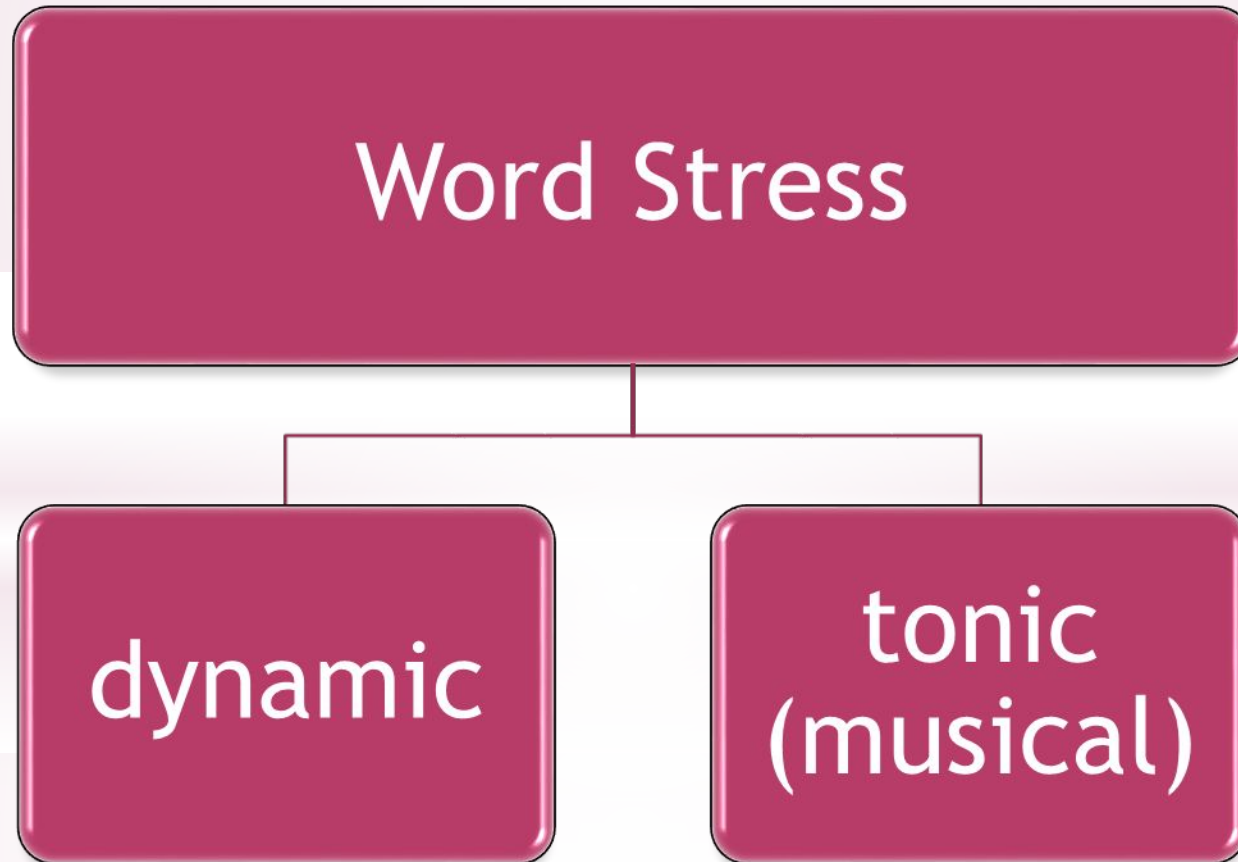
E.g. *contract* /'kɒntrækt/ - *to contract* /tə kən'trækt/



## Production and Perception of the Stressed Syllables

Production and Perception	Stressed Syllables
Production Level	Greater muscular effort
Acoustic Level	Increase of intensity, duration, fundamental frequency
Perception Level	Increase of loudness, length, pitch

# Types of Word Stress



# Types of Word Stress

**Dynamic stress** is achieved by greater force with which the syllable is pronounced (the effect of prominence).

E.g. English, German, French, Russian

**Musical stress** is the result of the change of pitch in the stressed syllable.

E.g. Chinese, Japanese, Vietnamese

# Types of Word Stress

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**.

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

Quantitative and qualitative types of word-stress do not exist separately from dynamic stress. They play a subsidiary role in accentuation of syllables.

E.g. in Russian a stressed syllable (and especially the vowel in it) has a greater relative duration than an unstressed syllable.

# Definitions of Stress

B.A. Bogoroditsky 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.

A.C. Gimson also admits that a more prominent syllable is accompanied by pitch changes in the voice, quality and quantity of the accented sounds.

# Word Stress: diachrony

Factors determining the place and different degrees of word stress (V.A. Vassilyev):

(1)recessive tendency;

(2)rhythmic tendency;

(3)retentive tendency;

(4)semantic factor.

## Word Stress: diachrony

The word-stock of Modern English has several layers of different origin, of which the basic ones are **Anglo-Saxon, Scandinavian, i.e. Germanic and Old French.**

Words of these origins are more frequently used in everyday English speech than words that have come from other languages.

# Word Stress: diachrony

**The recessive tendency** (characteristic of all Germanic languages) originally consisted in placing the accent on the initial syllable of nouns, adjectives and verbs derived from them and on the root syllable of words which belonged to other parts of speech and had a prefix. In most cases these prefixes have lost their referential meaning since then, with the result that recessive stress in Modern English is of two subtypes:

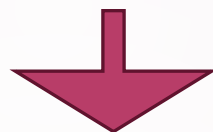
**Unrestricted recessive accent** falls on the initial syllable, provided it is not a prefix which has no referential meaning now.

*E.g. father, mother, wonder, husband, etc.*

# Word Stress: diachrony

Restricted (by an unstressed prefix) recessive stress falls on the root of native English words with a prefix which has no referential meaning now .

*E.g. among, before, forget, withstand, etc.*



*the incidence of stress in the huge number of disyllabic and trisyllabic French words which were borrowed into English during and after the Norman Conquest (until the 15th century)*

These words underwent in English **accentual assimilation**. The accent in them originally fell (as in Modern French) on the last syllable, but under the strong influence of the native English tendency to recessive stress it began to shift gradually to the initial syllable.

# Word Stress: diachrony

The presence in English of a great number of short (monosyllabic and disyllabic) words has caused the development of **the rhythmic tendency** (which results in alternating stressed and unstressed syllables), while the accent determined by it is called rhythmical.

E.g. *radical* (borrowed from French)

rhythmical stress	
historically, or diachronically, rhythmical	genuinely rhythmical
<i>radical, family, nation</i>	<i>pronunciation, examination</i>

# Word Stress: diachrony

The recessive and rhythmic tendencies ceased to determine the position of stress in English words which were borrowed from French after the beginning of the 15th century - the accent has remained on the final syllable, as in French

*e.g. machine, police, etc.*

# Word Stress: diachrony

## Retentive tendency

(constant accent in word derivation)

- a) the retention of the primary accent of the parent word, e.g. *pérson* - *pérsonal*
- b) the retention of the accent of the parent word in the form of secondary stress, e.g. *'personal* - *,perso'nality*, *'similar* - *simi'larity*, *as, simi'lation*

## The difference between constant accent and retentive accent

Constant accent remains on the same syllable in all the grammatical forms of a word or in all the derivatives from one and the same root, whereas retentive stress in some derivatives from the same root may be shifted, e.g. *'person* - *'personal* - *per'sonify*.

# Semantic factor

The majority of compound words and words with the so-called separable prefixes have two equally strong stresses, both stressed parts are considered to be of equal semantic importance (the semantic factor canceling the rhythmic tendency in word stressing),

- compound adjectives: *hard-working, blue-eyed*
- verbs with post positions: *sit down, take off*
- numerals from 13 to 19: *fourteen, sixteen*

The rhythmic tendency becomes operative when such words occur in sentences and the first stress of a double-stressed English word disappears when immediately or closely preceding word requires stress: *a 'very good-'looking 'girl.*

# Typology of accentual structure of English words worked out by G.P. Torsuev (1960)

According to the number of stressed syllables, their degree or character (the main and the secondary stress) there are 11 accentual types.

The most widely spread among the enumerated accentual types are supposed to be

Type I [ $\perp$  -] e.g. 'father, 'possibly

Type II [ $\perp$   $\perp$ ] e.g. 're'write, 'diso'bey

Type V [ $\perp$   $\top$ ] e.g. 'hair-,dresser, 'sub,structure

Type VI [ $\top$   $\perp$ ] e.g. ,maga'zine, ,hospi'tality

# Typology of accentual structure of English words worked out by G.P. Torsuev (1960)

The typical feature of English accentual structure is its instability. There are a great number of words having variants of their accentual patterns. They may differ in:

- 1.number of stresses: **RSVP** [  $\perp \perp \perp \perp$  ] or [  $\perp \text{ -- } \perp$  ];
- 2.the place of stress: **hospitable** [  $\perp \text{ ---}$  ] or [  $\text{--} \perp \text{ --}$  ];
- 3.the degree of stress: **individualization** [  $\top \text{ -- } \top \text{ -- } \perp \text{ --}$  ] or [  $\perp \text{ -- } \top \text{ -- } \perp \text{ --}$  ].

# The variability of the word accentual structure

- under the influence of rhythm

*e.g. An 'unpolished 'stone. But: The 'stone was un'polished.  
'Find 'page four'teen. But: We 'counted 'fourteen 'birds.*

- under the influence of the tempo of speech the secondary stress may be dropped

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

# The variability of the word accentual structure

- Most British phoneticians term the strongest stress **primary**, the second strongest **secondary** and all the other degrees of stress **weak**. The stress marks are placed before the stressed syllables, monosyllabic words are not marked.
- American descriptivists (B. Bloch, G. Trager) distinguish the following degrees of word-stress: **loud** /'/, **reduced loud** /<sup>^</sup>/, **medial** /`/, **weak**, which is not indicated. They suggest placing the stress marks above the vowels of the stressed syllable, and they place the stress marks even on monosyllabic words.
- In the Russian word-stress system there are two degrees of word accent: **primary** and **weak**. The stress marks in the Russian phonetic tradition are placed above the vowels.

# Functions of word stress

- I. **The constitutive function** - word stress constitutes a word, it organizes the syllables of a word into a language unit having a definite accentual structure; a word does not exist without the word stress.
- II. **The identificatory (or recognitive) function** - word stress enables a person to identify a succession of syllables as a definite accentual pattern of a word.
- III. Word stress alone is capable of differentiating the meaning of words or their forms, thus performing its **distinctive function**. There are about 135 pairs of words of identical orthography in English which could occur either as nouns or as verbs: 'import (noun) - im'port (verb), 'insult (noun) - in'sult (verb)

# Correlation of word stress and sentence stress (similarities)

Sentence stress usually falls on the very syllable of the word which is marked by word stress - the accentual structure of the word predetermines the arrangement of stresses in a phrase.

The common character of word stress and sentence stress is also observed in their rhythmical tendency to alternate stressed and unstressed syllables and pronounce them at approximately equal intervals.

# Correlation of word stress and sentence stress (differences)

Word stress and sentence stress are different in their sphere of application as they are applied to different language units: word stress is applied to a word, sentence stress is applied to a phrase.

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 Fif'teen. 'Fifteen 'pages.

Sentence stress organizes a sentence into a linguistic unit, helps to form its rhythmic and intonation pattern, performs its distinctive function on the level of a phrase.

# English and Russian word stress patterns

## English

- In identical positions the intensity of English vowels is different. The highest in intensity is /ɑ:/, then go /ɔ:, ə:, i:, u:, æ, ɒ, e, ʊ, ɪ/.
- The quantity of long vowels and diphthongs can be preserved in pretonic and post-tonic position: *idea* /aɪ'diə/, *placard* /'plækɑ:d/, *sarcastic* /sɑ: 'kæstɪk/, *railway* /'reɪlweɪ/, *archaic* /ɑ: 'keɪɪk/, *compound* /'kɒmpaʊnd/.
- All English vowels may occur in accented syllables, the only exception is /ə/, which is never stressed.
- English vowels /ɪ, ʊ, əʊ/ 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.

# English and Russian word stress patterns

## Russian

- The length of the Russian vowels always depends on the position in a word.
- The quality of unaccented vowels in Russian may differ greatly from the quality of the same vowel under stress, e.g. /a/ in травы, травы, травяной is realised as /ā, ă, ъ/.
- /a, o, э/ undergo the greatest changes; /y/ and /и/ are not so much reduced when unstressed.

# English and Russian word stress patterns

## English and Russian

- word-stress is **free**, that is it may fall on any syllable in a word: on the first - *'mother* (*мама*), on the second - *oc'casion* (*возможность*), on the third - *deto'nation* (*детонация*).

Within free word accent two subtypes are distinguished on morphological grounds: constant and shifting accents.

- **A constant accent** is one which remains on the same morpheme in different grammatical forms of a word or in different derivatives from one and the same root, e.g. *ноша* (*ноша, ноши, ноше, ношу, ношей, ноше; ноши, нош, ношам, ноши, ношаму, ношам*); *wonder, wonderful, wonderfully*.

# English and Russian word stress patterns

## English and Russian

- **A shifting accent** is one which falls on different morphemes in different grammatical forms of a word or in different derivatives from one and the same root,  
e.g. *сад* - *сады*, *вода* - *воды*; *сад* - *садовод*, *вода* - *водовоз*; *active* - *activity*.
- the place of stress helps to differentiate different parts of speech, e.g. *'insult* - *to in'sult* *'import* - *to im'port*; *узко*, *кисло*, *мало* are adjectives, *узко*, *кисло*, *мало* are adverbs.
- the place of stress helps to differentiate the meaning of the word, e.g. *'billow* is *морской вал*, *be'low* - *вниз*; *мука* - *мука*, *замок* - *замок*, *кружки* - *кружки*.

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