



# **Lecture 4**

## **Classification of English speech sounds**



# Outline

- 1. Classification of speech sounds**
- 2. Classification of English vowels**
- 3. Classification of English consonants**

# Classification of Speech Sounds

20 vowel phonemes

24 consonant phonemes

sonority (n.), sonorous (adj.)

affricates [C, G]

plosives [p, b, d, t, k, g]

# The System of Vowels

- 1. ***the stability of articulation***
- Monophthongs (simple vowels)  
/V/, /I/, /e/, /x/, /R/, /P/, /L/, /V/, /A/, /W/
- Diphthongs (complex vowels)  
/eI/, /aI/, /OI/, /aV/, /EV/, /Iq/, /Fq/, /Vq/
- Diphthongoids (diphthongized vowels)  
/J/, /H/

# The System of Vowels

- a nucleus
- a glide
- a vowel +й [j]
- й [j] + a vowel

# The System of Vowels

## ***2. the position of the tongue***

### a). horizontal movement of the tongue

- Fully front /J/, /e/, /x/
- Front-retracted /I/
- Central (mixed) /W/, /q/, /A/
- Fully back /R/, /P/, /L/, /H/
- Back-advanced /V/

# The System of Vowels

kRt – back

kAt – central

Slp – front-retracted

SJp - front

b). *vertical movement of the tongue*

	<b>narrow variation</b>	<b>broad variation</b>
high (close)	J, H	I, V
mid (half-open)	e, W	q, A
low (open)	L	R, P, x



# The System of Vowels

- 3. *quantitative principle (duration or length)*
- 4. *the position of the lips*
  - rounded (labialized) [P, L,H, V]
  - unrounded (non-labialized)  
[J, I, e, W, q, A, x, R]
- 5. *the degree of muscular tension*  
lax-tense

# The English Consonants

- 1. *manner of noise production and the type of obstruction*
  - constrictive /s/, /z/, /S/, /Z/, /T/, /D/, /h/, /w/, /r/, /l/, /j/
  - occlusive /p/, /b/, /k/, /g/, /t/, /d/, /m/, /n/, /N/
  - occlusive-constrictive (affricates) /C/, /G/
  - trilled or rolled /r/
- teeth-ridge

# The English Consonants

- *2. Active organ of speech,  
the place of articulation*

## Labial

bilabial /m/, /p/, /b/, /w/

labio-dental /f/, /v/

## Lingual

- forelingual /s/, /z/, /t/, /d/, /r/, /C/, /G/, /S/, /Z/, /T/, /D/, /n/, /l/
- mediolingual /j/, /N/
- backlingual (velar) /k/, /g/

# Forelingual

## Position of the tongue

- dorsal /т/, /д/, /с/, /н/, /ч/, /ц/
- apical /s/, /z/, /t/, /d/, /C/, /G/, /S/, /Z/, /n/, /l/
- cacuminal *Br.* /r/;  
retroflex(ed) (sub-apical)  
*Am.* /r/

## Place of Obstruction

- interdental *Am.* /T/, /D/
- dental *Br.* /T/, /D/  
*Russ.* /т/, /д/, /с/, /з/
- alveolar /s/, /z/, /t/, /d/, /n/, /l/
- post-alveolar /r/
- palato-alveolar /C/, /G/, /S/, /Z/

- *3. the work of the vocal cords*  
voiced – voiceless
- *4. the soft palate*  
nasal - oral

# D. Jones' Classification

## *1. according to the organs which articulate*

- bilabial /m/, /p/, /b/, /w/
- labio-dental /f/, /v/
- dental /θ/, /ð/
- alveolar /s/, /z/, /t/, /d/, /l/, /n/
- post-alveolar /r/
- palato-alveolar /C/, /G/, /S/, /Z/
- palatal /j/
- velar /k/, /g/, /ŋ/
- glottal /h/

## *2. according to the manner in which the speech organs articulate*

plosives [p, b]

affricates

nasal

lateral

rolled (trilled)

flat [r] e.g. **very**, **sorry**

fricatives [s, z]