

PHONETICS OF ENGLISH

ARTICULATORY FEATURES

LECTURE 4

INTRODUCTION

- ✘ Definition – articulatory features define speech sounds
- ✘ 13 articulatory features
- ✘ Note: *Distinctive features* are traits which distinguish one phoneme from another. *Articulatory features* are traits which describe the articulation (=production) of speech sounds.

1. TYPE OF ARTICULATION

- ✘ Vowels
- ✘ Consonants

2. MANNER OF ARTICULATION

- ✘ CONSONANTS: plozivi (plosives), afrikati (affricates), frikativi (fricatives), nazali (nasals), laterali (laterals), kontinuant (continuant)
- ✘ VOWELS: monofonzi (monophthongs), diftonzi (diphthongs), triftonzi (triphthongs)

2. MANNER OF ARTICULATION

- ✘ Plosives
- ✘ Phases: implosion, occlusion (closure + hold), explosion (release), post-release phase

/p, t, k, b, d, g/

2. MANNER OF ARTICULATION

- ✘ Affricates – phases: implosion, occlusion, friction

/tʃ, dʒ/

2. MANNER OF ARTICULATION

- ✘ Fricatives– the obstacle is not completely closed and there is friction

/f, v, θ, ð, s, z, ʃ, ʒ, h/ +
sometimes /w, j, r/

2. MANNER OF ARTICULATION

- ✘ Nasals – the air goes through the nose, as the velum is lowered

/m, n, ŋ/

2. MANNER OF ARTICULATION

- ✘ Laterals: the airstream proceeds along the sides of the tongue, but is blocked by the tongue from going through the middle of the mouth.

/l/

2. MANNER OF ARTICULATION

- ✘ Continuants – semivowels (glides)

/w, j, r/

- ✘ If there is a **strong voiceless consonant in front of them and if they are in a stressed syllable** – then they are fricatives; PROUD /p^raud/, PURE /p^juə/.
- ✘ If there is a **weak voiced consonant in front of them or if they are word-initial** – then they are continuants; RED /r^ed/, YOUR /j^{ɔː}/, WAR /w^{ɔː}/.

2. MANNER OF ARTICULATION

- ✘ Alternative classification:

- ✘ plosives (plozivi): /p, b, t, d, k, g/
- ✘ fricatives (frikativi): /f, v, θ, ð, s, z, ʃ, ʒ, h/
- ✘ affricates (afrikate): /tʃ, dʒ/
- ✘ nasals (nazali): /m, n, ŋ/
- ✘ liquids (likvidi): /l, r/
- ✘ glides / semi-vowels (poluvokali): /j, w/

2. MANNER OF ARTICULATION

- ✘ Vowels:

1. Part, red, net, keep – **monophthongs**;
2. Pear /p^{eə}/, beer /b^{iə}/, know /n^{əʊ}/ – **diphthongs**;
3. Fire /f^{aɪə}/, power /p^{aʊə}/, player /pl^{eɪə}/ – **triphthongs**.

3. PLACE OF ARTICULATION

- ✘ This refers to consonants only;
- ✘ Usneni (bilabial): /p, b, m, w/*
- ✘ Usneno-zubni (labio-dental): /f, v/
- ✘ Zubni (dental): /θ, ð/
- ✘ Alveolarni (alveolar): /d, t, l, n, s, z/
- ✘ Postalveolarni (post-alveolar): /r/
- ✘ Nepčano-alveolarni (palato-alveolar): /ʃ, ʒ, tʃ, dʒ/
- ✘ Nepačani (palatal): /j/
- ✘ Velarni (velar): /k, g, ŋ/
- ✘ Glotalni (glottal): /h/

* Note: /w/ is sometimes described as labio-velar.

4. FORCE OF ARTICULATION

- ✘ Jaki (strong, fortis)
- ✘ Slabi (weak, lenis)

5. VOICING

1. Zvučni (voiced)
2. Bezvučni (voiceless)

- ✘ Zvučni: potpuno zvučni (fully voiced) i djelimično zvučni (partially voiced)
- ✘ Vowels are voiced;
- ✘ All strong consonants are voiceless;

FORCE OF ARTICULATION AND VOICING:

- ✘ Okvirna podjela suglasnika:

v-less (strong, fortis)	p	t	k	f	θ	s	ʃ	tʃ	h						
v-ed (weak, lenis)	b	d	g	v	ð	z	ʒ	dʒ	m	n	ŋ	l	r	j	w

6. TYPE OF EXPLOSION

- ✘ This refers to plosives only;

1. **Oral** pot, talk, kite
2. **Nasal**, behind /m/ and /n/
mutton – /mʌtʌn/ sudden /'sʌdn/
topmost /'tɒp.məʊst/
3. **Lateral**, before /l/
bottle /'bɒtl/ middle /'mɪdl/
4. **No explosion** (at the end of the word)
part /pɑ:t/ deep /di:p/ talk /tɔ:k/

7. DEGREE OF ASPIRATION

- ✘ Aspiration – burst of breath heard after explosion;
 - ✘ This refers to plosives only;
1. Aspirovani (aspirated): /p, t, k/
 2. Neaspirovani (unaspirated): /b, d, g/

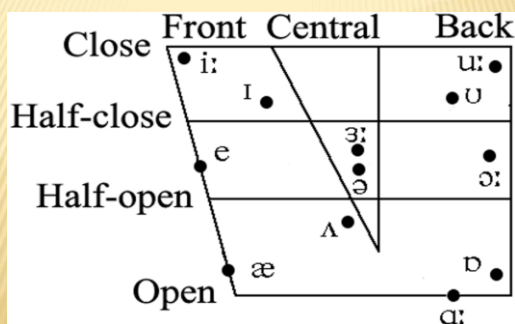
8. TONGUE POSITION

- ✗ This refers to /l/ only;
- 1. **Palatalised /l/** (tongue is raised toward the velum) – occurs before a vowel (*lap, lord*) or before the glide /j/- (*billiard, scallion*) ... CLEAR/LIGHT L
- 2. **Velarised /l/** (tongue is pulled back and the tip of the tongue is on the alveolar ridge) - occurs at the end of words (*call, trial*) and before consonants (*milk, hold*)... DARK L

9. PART OF TONGUE

- ✗ This refers to vowels only;
 - ✗ It refers to the part of tongue which is raised when articulating vowels:
1. Prednji (**front**)
 2. Prednji do srednji (**front to central**)
 3. Srednji (**central**)
 4. Zadnji do srednji (**back to central**)
 5. Zadnji (**back**)

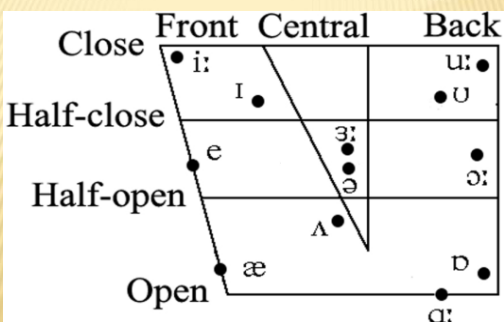
9. PART OF TONGUE



10. DEGREE OF RAISING

- ✗ This refers to vowels only;
 - ✗ It is based on the degree of tongue's raising;
1. Zatvoreni (**close**)
 2. Poluzatvoreni (**half-close**)
 3. Poluotvoreni (**half-open**)
 4. Otvoreni (**open**)

10. DEGREE OF RAISING



11. DEGREE OF TENSION

- ✗ This refers to vowels only;
1. Napregnuti mišići (**tense**) – npr. kod /u:/, /i:/, /ɜ:/
 2. Srednje napregnuti mišići (**medium**) – npr. kod /e/
 3. Opušteni mišići (**lax**) – npr. kod /ʌ/, /ɑ:/

12. LIP POSITION

1. Zaokružene (**rounded**) – npr. kod /o/, /u/
2. Neutralne (**neutral**) – npr. /æ/
3. Raširene (**spread**) – npr kod /i/

13. LENGTH

1. Dugi (**long**) - /i:/, /ɑ:/, /o:/, /u:/, /ɜ:/
2. Kratki (**short**) - /i/, /ʌ/, /æ/, /ɒ/, /ʊ/, /ə/, /e/

STUDY Q'S (1)

1. What are articulatory features?
2. Explain the classification of speech sounds according to the type of articulation.
3. Explain the classification of consonants according to the manner of articulation.
4. Explain the classification of vowels according to the manner of articulation.
5. What are the phases in the articulation of plosives?
6. What are the phases in the articulation of affricates?
7. Explain the articulation of nasals. Which speech sounds are nasal?
8. Explain the articulation of laterals. Which speech sounds are lateral?
9. Which sounds are called semivowels?
10. Name the division of consonants according to the place of articulation.

STUDY Q'S (2)

11. Explain the division of sounds according to the force of articulation.
12. Explain voicing.
13. What types of explosion may occur in the articulation of plosives?
14. What is aspiration?
15. Explain the difference between the *clear* and the *dark l*.
16. According to the part of the tongue, what are the categories of vowels?
17. According to the degree of raising the tongue, what are the categories of vowels?
18. What positions can lips take when articulating speech sounds?
19. What degree of tension may the muscles assume when articulating speech sounds?
20. According to the criterion of length, how can we classify vowels?