

Phonetics and Phonology
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1. Sounds, Spelling, and Symbols

There is no one-to-one correspondence between the English spelling and pronunciation

- There are 26 alphabets, but there are 44 sounds (24 consonants, 12 vowels, 8 diphthongs)
- the case of the imaginary word *ghoti*
- one letter is represented by more than one sounds: u → [a] in shut, [ju] in cute, [u] in put
- one sound may be represented by more than one letters: [u] → put, book

2. Pronunciation practice

The IPA Symbols of the English Sounds

Vowels		Diphthongs		Consonants			
i:	<u>bea</u> d	ei	<u>ca</u> ke	p	<u>pi</u> n	s	<u>sue</u>
I	<u>hi</u> t	oi	<u>to</u> y	b	<u>bi</u> n	z	<u>zoo</u>
u	<u>boo</u> k	ai	<u>hi</u> gh	t	<u>to</u>	ʃ	<u>she</u>
u:	<u>foo</u> d	iə	<u>bee</u> r	d	<u>do</u>	ʒ	<u>meas</u> ure
e	<u>lef</u> t	uə	<u>few</u> er	k	<u>ca</u> t	h	<u>hello</u>
ə	<u>abou</u> t	eə	<u>wher</u> e	g	<u>got</u>	m	<u>more</u>
ɜ:	<u>shir</u> t	əu	<u>go</u>	tʃ	<u>chai</u> r	n	<u>no</u>
o:	<u>cal</u> l	au	<u>hou</u> se	dʒ	<u>jud</u> ge	ŋ	<u>sing</u>
æ	<u>ha</u> t			f	<u>fa</u> n	l	<u>live</u>
ʌ	<u>ru</u> n			v	<u>va</u> n	r	<u>red</u>
a:	<u>fa</u> r			θ	<u>thin</u> k	j	<u>yes</u>
o	<u>do</u> g			ð	<u>the</u>	w	<u>woo</u> d

3. Organs of Speech

4. Airstream Mechanism

The English airstream mechanism is called the pulmonic egressive airstream mechanism:

- pulmonic: because air from the lung is used
- egressive: because the air is pushed out (not breathed in / ingressive like the click language)
- the mechanism of air flow in sound production in which the air from the lung is pushed out

Describing Consonants

Consonants can be described in terms of:

1. Places of articulation
2. Manner of articulation
3. Voicing

Major consonantal features based on the place of articulation:

- Bilabials: the two lips are the primary articulators; [p], [b], [m]
- Labiodentals: the upper teeth is placed on the lower lip; [f], [v]
- Interdentals: the tip of the tongue is inserted in between the upper and lower teeth [θ], [ð]
- Alveolars: the front part of the tongue is raised/placed at the alveolar ridge; [t] [d] [n] [s] [z] [l] [r]
- Palatals: the front part of the tongue is raised to a point on the hard palate; [ʃ] [ç] [tʃ] [dʒ] → sometimes also called as the alveopalatals
- Velars: the back of the tongue is raised toward the soft palate; [k] [g] [ŋ]
- Glottals: the glottis is open; air is not obstructed in the mouth; [h]
- *Uvulars: the back of the tongue is raised toward the uvula; [ʁ]*
- *Pharyngeals: sounds made through the modification of air at the area between the uvula and the larynx (pharynx) [q] [G]*

Based on the manner of articulation:

Stops: the air is blocked completely at the oral cavity [p b t d k g n ŋ tʃ dʒ]

Continuants: there is no stoppage in the oral cavity; all sounds which are not stops

Fricatives: air is not stopped but is obstructed from flowing freely; [s z f v θ ð ʃ ç]

Affricates: a stop closure but followed immediately by a slow release; [tʃ dʒ]

Laterals: tongue front makes contact with the alveolar ridge, the sides of the tongue down, permitting air to escape laterally through the sides of the tongue; [l]

Glides:

Liquids:

Nasals:

Orals:

Aspirated:

Unaspirated:

Plosives:

trill/flap/tap:

Phonetic Features

Write the phonetic features of the following speech sounds:

1. [p]
2. [b]
3. [t] [d] [n]
4. [ʃ] [ʒ]
5. [θ] [ð]
6. [m] [n] [ŋ]
7. [v] [ð] [z] [ʒ]
8. [tʃ] [dʒ]
9. [l] [r]
10. [w] [j]
11. [a]
12. [u]
13. [u:] [o:]
14. [i:] [i]
15. [æ]
16. [ə] [ʌ]
17. [aʊ] [əʊ] [oʊ]
18. [iə] [uə]
19. [oi] [ai]

Note:

1. Describing consonants: based on the PLACES OF ARTICULATION, MANNER OF ARTICULATION, VOICING, NASAL/ORAL
2. Describing vowels: whether they are CLOSE/HIGH, OPEN/LOW, FRONT, CENTER, BACK, ROUNDED, UNROUNDED, TENSE, or LAX
3. Describing diphthongs: whether they are CENTRING or CLOSING

Phones, Phonemes, Allophones

1. Define the terms phonemes, phones, and allophones!
2. What is free variation, how does it differ from allophones?
3. Aspiration may contribute to the formation of allophones. Why?
4. What other phonological process contribute to the formation of allophones?
5. What is minimal pair? What contribution does it give to you as an English learner?
6. What is complementary distribution? What are the examples?
7. Do [t] and [ʔ] in the word *button* complement each other? Why/why not?
8. What about the voiced and voiceless [l] (O'Grady p. 72)? Do they complement each other? Are they allophones of the same phoneme /l/?
9. What is distinctive feature? Illustrate your argument with examples!