

Introduction to English Linguistics

3. Phonetics and Phonology I

24 October 2019

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Test 1 – 31 October 2019

- First test: Thursday, **31 October, 12.15-14.00**, room B101.
 - Material allowed: Only a monolingual English dictionary with no annotations.
- Topic: Chapters 1 and 2 of the textbook (primarily chapter 2).
 - For revision cf. file « Chapter 2.Revision exercises » in the folder « Course Material ».

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Phonetics

- **Phonetics:**
The study of speech sounds.
- **Articulatory phonetics:** How speech sounds are produced.
- *Acoustic phonetics:* Study of the physical properties of the sound waves a speaker produces.
- *Auditory phonetics:* The way listeners perceive sounds.
- Transcription: The **International Phonetic Alphabet (IPA)**.
- Received Pronunciation (RP) (BBC/Oxford English).

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Sounds vs. spelling

- G. B. Shaw, Preface to *Pygmalion*:
“The English have no respect for their language, and will not teach their children to speak it. They cannot spell it because they have nothing to spell it with but an old foreign alphabet of which only the consonants – and not all of them – have any agreed speech value. Consequently no man can teach himself what it should sound like from reading it; ...”
- Shaw: *fish* could be spelt *ghoti*.
- Different ways of spelling [i:]:
me, key, keep, tea, believe, receive, machine, amoeba, people.

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Brush up your English

I take it you already know
Of tough and bough and cough and dough.
Others may stumble but not you,
On hiccough, thorough, slough and through.
Well done! And now you wish, perhaps,
To learn of less familiar traps.
Beware of heard, a dreadful word
That looks like beard and sounds like bird,
And dead--it's said like bed, not bead.
For goodness's sake, don't call it deed!
Watch out for meat and great and threat:
They rhyme with suite and straight and debt.

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Brush up your English (contd.)

A moth is not a moth in mother,
Nor both in bother, broth in brother,
And here is not a match for there,
Nor dear and fear for bear and pear,
And then there's dose and rose and lose —
Just look them up -- and goose and choose,
And cork and work and card and ward,
And font and front and word and sword,
And do and go and thwart and cart.
Come, come, I've hardly made a start.
A dreadful language?
Man alive, I'd mastered it when I was five.
And yet to write it, the more I tried,
I hadn't learned it at fifty-five!

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The sounds of English - Consonants

p	as in <i>top</i>	b	as in <i>web</i>	m	as in <i>room</i>
t	as in <i>kit</i>	d	as in <i>glad</i>	n	as in <i>sin</i>
k	as in <i>pick</i>	g	as in <i>big</i>	ŋ	as in <i>sing</i>
f	as in <i>cough</i>	v	as in <i>leave</i>	l	as in <i>still</i>
θ	as in <i>moth</i>	ð	as in <i>mother</i>	r	as in <i>strong</i>
s	as in <i>dose</i>	z	as in <i>rose</i>	j	as in <i>stew</i>
ʃ	as in <i>fish</i>	ʒ	as in <i>garage</i>	w	as in <i>suite</i>
h	as in <i>here</i>				
tʃ	as in <i>match</i>	dʒ	as in <i>badge</i>		

For videos illustrating all the sounds of English (and much more on English pronunciation), see:
<http://www.bbc.co.uk/worldservice/learningenglish/grammar/pron/sounds/index.shtml>

The sounds of English - Vowels

ɪ as in <i>still</i>	i: as in <i>meat</i>	eɪ as in <i>great</i>
e as in <i>threat</i> *	ɑ: as in <i>card</i>	aɪ as in <i>lie</i>
(*sometimes also: ɛ)	ɔ: as in <i>ward</i>	ɔɪ as in <i>noise</i>
æ as in <i>pat</i>	u: as in <i>through</i>	ɪə as in <i>here</i>
ʌ as in <i>front</i>	ɜ: as in <i>work</i>	eə as in <i>there</i>
ɒ as in <i>font</i>		ʊə as in <i>cure</i>
ʊ as in <i>foot</i>		aʊ as in <i>slough</i>
ə as in <i>about</i>		əʊ as in <i>dough</i>

N.B. In phonetic transcriptions the sound symbols are put between square brackets. E.g.: [stɪl]

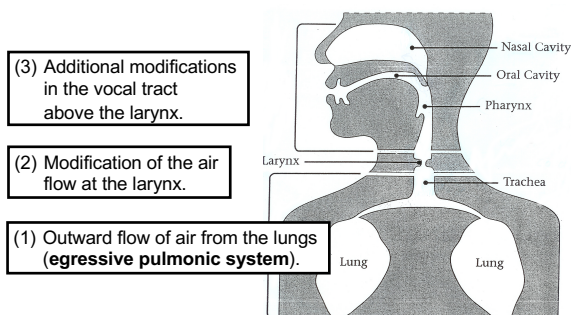
The full IPA chart

[illegible]

Sound production – general observations

- Professor Henry Higgins teaching articulatory phonetics in *Pygmalion* (end of act 2):
Higgins Put your tongue forward until it squeezes against the top of your lower teeth.
...
Try to do it by yourself: and keep your tongue well forward in your mouth instead of trying to roll it up and swallow it.
- **Speech:** All the sounds are produced by moving air.
- Speech as ‘**modified breathing**’.

Sound production



Sound production



It's ten below outside.

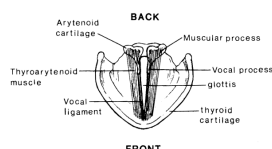


Why did Ken set the soggy net on top of his deck?

Source: http://psyc.queensu.ca/~munhallk/05_database.htm

Sound production

- Different from breathing:
 - Change in the breathing rhythm.
 - The airflow encounters resistance from obstructions.
- First potential obstruction: Larynx. A "box" containing the **vocal folds** (or vocal **cords**).



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The vocal folds

- The vocal folds can be moved into a number of positions between wide open and tightly closed. The opening is called the **glottis**.
 - Open: Rapid escape of air, e.g. regular breathing.
 - Slightly narrowed: [h] as in *hat*.
 - More narrowed: Whispering.
 - Closed enough for the folds to slightly touch each other: They vibrate. → **Voicing**.
 - For illustrations cf. <https://www.youtube.com/watch?v=b89RSYCaUBo> (Part III, starting at 1:30)

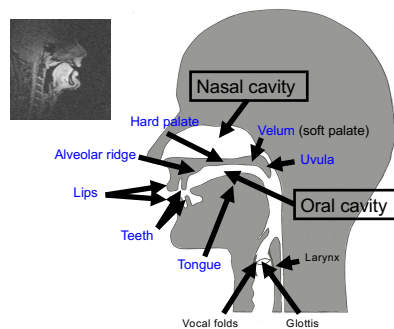
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The vocal folds

- Vowels: Always voiced (in English).
- Consonants: Distinction between voiced and voiceless. Certain sounds are distinguished only by voicing. Cf. e.g. in "Brush up your English":
 - *moth* [θ] vs. *mother* [ð].
 - *dose* [s] vs. *rose* [z].

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The vocal tract above the larynx



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Describing sounds – Consonants

- Each consonant can be described in terms of three properties:
 - **V**oicing.
 - **P**lace of articulation (where the airflow is obstructed).
 - **M**anner of articulation (how the airflow is obstructed).
- = VPM
- Voicing:
 - Voiced or voiceless (cf. states of the glottis).

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Consonants – Place

- **Place of articulation:**
 - Bilabial (p, b, m).
 - Labiodental (f, v).
 - Dental (θ, ð).
 - Alveolar (t, d, n, l, r, s, z).
 - Palatoalveolar (ʃ, ʒ, tʃ, dʒ).
 - Palatal (j).
 - Velar (g, k, ŋ, w) [w: labial-velar].
 - Glottal (h).

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Consonants – Manner

■ Manner of articulation:

- Plosive (p, t, k, b, d, g)
- Fricative (f, v, ð, θ, s, z, ʃ, ʒ, h)
- Affricate (tʃ, dʒ)
- Nasal (m, n, ŋ)
- Lateral (l)
- Approximant (r, w, j)

■ A division between

- **Obstruents** (increased air pressure due to strong obstruction): plosive, fricative, affricate.
- **Sonorants** (weak obstruction, small increase in air pressure): nasal, approximant, lateral.

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