



Unit 3

Consonants (1)

Approaching consonants via anatomy and articulatory phonetics

Print version of the
Phonetics with Listening Practice (British)
presentation given on
le nonidi 19 floréal de l'année CCXXXI du calendrier républicain
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3.1

English Phonetics: Unit 3:
[ˈɪŋ.ɡlɪʃ fə.'net.ɪks ˈjuː.nɪ.t̪ ˈθri:]

Consonants (1)
[ˈkɒn.s(ə)n(.)ən(t)s ˈwʌn]

Approaching consonants via anatomy and articulatory phonetics
[ə.'pɹəʊtʃ.ɪŋ ˈkɒn.s(ə)n(.)ən(t)s ,vɑ(ɪ)(.)ə ə.'næt.əm.i ˌŋ ɑ:.'tɪk.jʊl.ət̪.i fə.'net.ɪks]

Robert Spence
[ˈrɒb.ət ˈspens]
based on material by William Barry and Ingmar Steiner
[ˈbeɪst ɒn mə.'tɪr̩.i(.)ət bɑː ˈwɪl.jəm ˈbæ.i ən ˈɪŋ.mɑ:ɪ ˈstaɪn.ɜː]

le nonidi 19 floréal de l'année CCXXXI du calendrier républicain
[lə nɔ̃.ni.di dis.nœf flɔ̃.re.al də l a.ne dø.sã.tʁã.te.œ dy ka.lã.dʁi.je ʁe.py.bli.kɛ]

(Tuesday 9 May 2023) [ˈtjuːz.deɪ ðə ˈnaɪnθ əv ˈmeɪ ˈtwent.i ˈtwent.i ˈθri:]

3.2

1 Looking ahead

Our topic for the next five meetings:

- Over this five-week block we shall be looking at consonants and vowels in more detail.
- We shall begin with **consonants**, approaching them (this week) via *anatomy* and *articulatory phonetics*, and concentrating on English consonants that foreign learners often find ‘difficult’.
- The week after, we shall switch our attention temporarily to **vowels**, approaching them via *physics* and *acoustic phonetics*; once again, we will be concentrating on English vowels or diphthongs which are ‘difficult’ for non-native English speakers in general.
- The week after that will be devoted to further practice on “difficult” vowels.
- We shall then proceed to look at vowels in more detail, taking a contrastive view of the vowel systems of English and German.
- Finally, we shall return to consonants, doing a contrastive study of the consonant systems of English and German.

3.3

2 Some words of warning

Some words of warning

- Remember that phonetics is the only part of language that actually interfaces with physical reality...
- Even a cursory glance at the human vocal tract is enough to confirm that it is not the result of conscious design; it is pure 'Bastelarbeit' – lungs were originally buoyancy tanks.
- Are you afraid of the IPA?
- On the one hand: only learn as many symbols as you need.
- On the other hand: you probably already produce way more sounds than you're aware of.
- Negative stereotypes that involve (perceived) ethnicity usually also involve (unexamined, un-understood) sounds: (Chinese; Arabic)
- Wrong consonants are more associated with foreignness
- Wrong vowels are more associated with social inferiority/superiority (class) and non-standardness/standardness (region).
- Keep your copy of the IPA chart handy!

3.4

3 How we make sounds

The human vocal tract (after Catford)

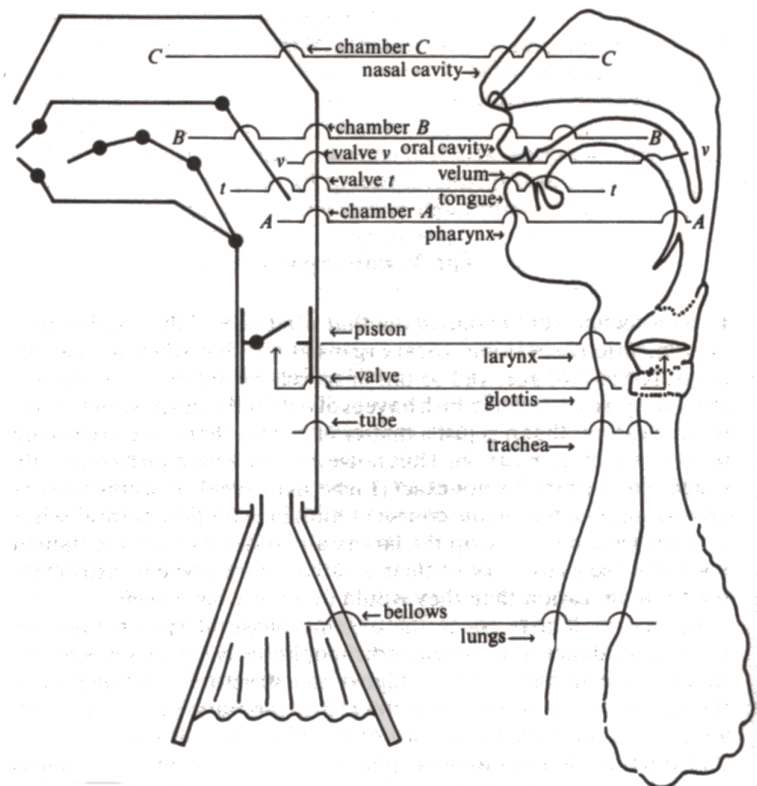


Figure 1: The vocal tract as a machine (J.C. Catford, *Fundamental Problems of Phonetics*, Bloomington: Indiana University Press, 1977)

3.5

4 (Pulmonic) Consonants: dimensions of articulation

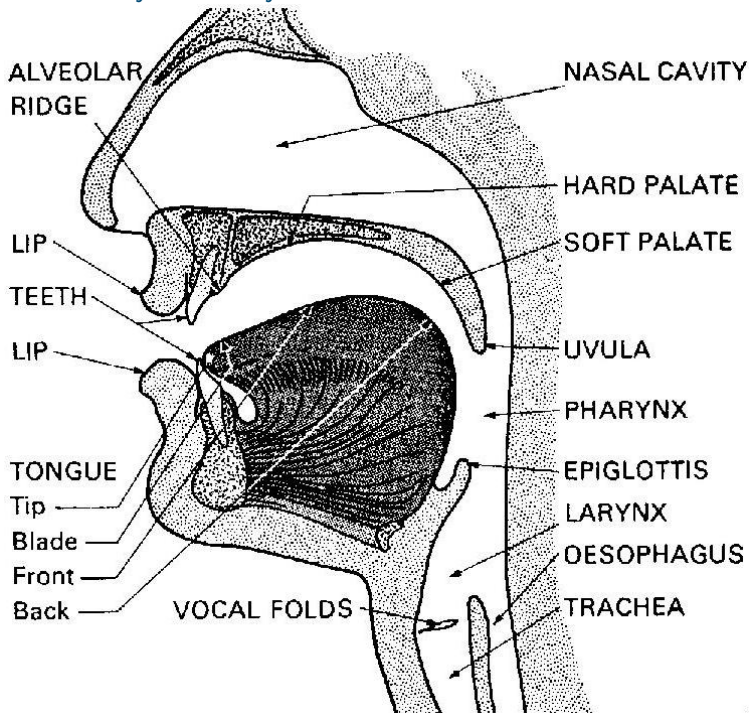
(Pulmonic) Consonants: dimensions of articulation

- Consonants (dt. Mitlaute) can be looked at in terms of their articulation, their acoustics, or their auditory perception
- Their articulation can be described in terms of:
 - AIRFLOW (for the moment, we assume ‘pulmonic’)
 - VOICING
 - * voiceless [stimmlos] or voiced [stimmhaft]
 - PLACE of articulation (the “horizontal” dimension) specifying upper (passive) and (if necessary, also:) **lower (active) articulators**
 - * bilabial, **labio**dental, dental, alveolar, postalveolar, **retroflex**, palatal, velar, uvular, pharyngeal, glottal
 - * more delicately: **apico-/apical**-alveolar, **lamino-/laminal**-alveolar, (**antero**)dorsal-palatal, (**postero**)dorsal-velar, etc.
 - MANNER of articulation (the “vertical”) dimension
 - * plosive, nasal, trill, tap or flap, fricative, lateral fricative, approximant, lateral approximant (make sure you understand what each of these terms means; note Eckert and Barry’s way of classifying these into “obstruents” and “sonorants” [E&B: 36–39]; and don’t forget to add affricate = plosive+fricative)

Check out: Glossika Phonics <https://www.youtube.com/channel/UCFu0FZ0wFoHK2deKFLdaLGA> (for the diagrams; some of the pronunciations are a bit strange...)

5 You can make any consonant you want

You can make any consonant you want



You can make any consonant you want

7 'Light' (or 'clear') vs. 'dark' / l / – one sound or two?

'Light' vs. 'dark' / l / – one sound or two?

Language	Initial	(e.g.)	Final	(e.g.)	What happens if you get it wrong?
Dutch	dark	lekker	dark	wel	you sound foreign
German	light	liegen	light	Milch	you sound foreign
English	light	leaf	dark	milk	you sound foreign
Russian	dark	лук (‘Zwiebel’)	dark	угол (‘Ecke’)	you risk being totally and
	<i>or</i>		<i>or</i>		
	light	люк (‘Luk(e)’)	light	уголь (‘Kohle’)	utterly misunderstood

N.B.: The Russian ‘light’ / l / is in fact ‘palatized’. (Wikipedia is your friend.)

8 We are mammals and have mammalian reflexes

What is this baby hominid doing?



3.13

We are mammals and have mammalian reflexes

- One of the first things a mammal does ...
- ... after trying out its lungs ...
- ... is ...
- ... to suck!
- (If it doesn't, it dies.)
- What does your mouth do when you suck?
- There are two basic 'postures' — / u / and / i /
- For / u / the oral cavity is long and thin, the lips are rounded, the back of the tongue is up, and the front of the tongue is down
- For / i / the oral cavity is short and wide, the lips are spread, the front of the tongue is up, and the back of the tongue is down
- 'Neither / u / nor / i /' is / ə /.
- What is 'both / u / and / i /'?

3.14