The Phonetics of English Pronunciation
Session 03

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[1] using material by William Barry

How far have we got, and what did I ask of you?

- I suggested that we need to be able to describe sounds if we are going to be able to deal with differences!
- We looked briefly at *consonants* acccording to their *place* & *manner* of articulation and their *voicing*.
- And the homework question was:
  What are the dimensions used for classifying consonants?
- Answer: No problem (for *most* of you!)
- For each dimension, give example German word pairs with two consonants that are different *only* because of a switch in that dimension.

Example word-pairs

Place: mein vs. nein Laus vs. Lauch kicken vs. kippen
[m] vs. [n] [s] vs. [x] [k] vs. [p]

(Why aren't "Tau" vs. "Stau" or "fett" vs. "nett" good examples?)

Manner: mein vs. Bein Laus vs. laut lacken vs. lachen
[m] vs. [b] [s] vs. [t] [k] vs. [x]

(Why isn't "gut" vs. "Wut" a good example?)

Voicing: Bein vs. Pein Wein vs. fein reisen vs. reißen
[b] vs. [p] [v] vs. [f] [z] vs. [s]

(Why isn't "Nuss" vs. "Muss" a good example?)

Another area was

- *Vowels*, which are classified according to their tongue *height*, tongue *position* and *lip shape*. . .
- . . . and the homework question was:
  What are the dimensions used for classifying vowels?

  And, of course, I've just given you the answer!
- For each dimension, give example German word pairs for two vowels that are different *only* because of a switch in that dimension.

Example word-pairs

Tongue position: Buße vs. büße löse vs. lose

[uː] vs. [yː] [øː] vs. [oː]

(Why isn't "trage" vs. "träge" a good example?)

Tongue height: sitzen vs. setzen Sühne vs. Söhne

[ɪ] vs. [ɛ] [yː] vs. [øː]

(Why isn't "Dach" vs. "Dich" a good example?)

Lip shape: fühle vs. viele Söhne vs. Sehne

[yː] vs. [iː] [øː] vs. [eː]

(Why isn't "Sühne" vs. "suhle" a good example?)

Example word-pairs (cont'd)

There is a fourth dimension,

Length: Aale vs. alle Aas vs. As

[aː] vs. [a] [aː] vs. [a]

(Why isn't "bieten" vs. "bitten" a good example?)

Except for the "A" vowels, *length combines with quality*

Miete	vs.	Mitte		beten	vs.	betten	
[iː]	vs.	[ɪ]		[eː]	vs.	[ɛ]	
Höhle	vs.	Hölle		Schote	vs.	Schotte	
[øː]	vs.	[œ]		[oː]	vs.	[ɔ]	

And in English?

- If you look for English words, you immediately see that vowels behave differently.
  But the dimensions for describing and categorizing them are basically the same!
- *Tongue position*:
  "beat" vs. "boot" is front vs. back
  (but it is also unrounded vs. rounded, as
  Lip shape co-varies with tongue position.
- The exception is /ɑː/ (e.g. in "father", "palm", etc.), which is back and unrounded.
  However, the /æ/ vs. /ɑː/ opposition ("Pam" vs. "palm") is also short vs. long. So tongue position alone never distinguishes a word pair in English.

In the script there was the "stress" problem

- What does English do, in contrast to German, to destress syllables? Give examples.
- This appeared to be clear (in theory ☺) to most of you.
- Apart from *shortening* the syllable and *reducing the effort* invested in producing it (which English and German have in common)...

  English tends to *reduce* the vowel quality to schwa ([ə]): e.g. *content* (n.) ['kɑntent] vs. *content* (adj.) [kən'tent]

So what about “stress” in compound words?

- What are the problems with English compounds for German learners of English?
- Many compounds in English follow the same pattern as German compounds (i.e. a strong + weak pattern): 'green¸house, the 'White ¸House, 'summer¸house, 'summer¸time, 'hay¸field, 'hay¸making etc.
- But there are certain word classes (e.g., place names) that have a weak + strong pattern: ¸Piccadilly 'Circus, ¸Buckingham 'Palace).

And finally, what about intonation?

- Identify two problems with English intonation for German learners of English.
  a) In German a rising tone on accented words is default, while this signals insistance or impatience in English.
  b) A falling rising tonal accent can be used in English without continuing, whereas this is not (or very rarely) possible in German; a continuation of the sentence is necessary.

Today's programme: *More about Consonants*

- We already know – we can feel the difference:
  - the place of articulation
  - the manner of articulation
  - whether it is voiced or unvoiced
- Next step: *identify* our consonant systems
  = systematic inventory of English & German
- But we must also think all the time about what our articulators are doing!

Homework

Read pp. 36-39 and pp. 40-48

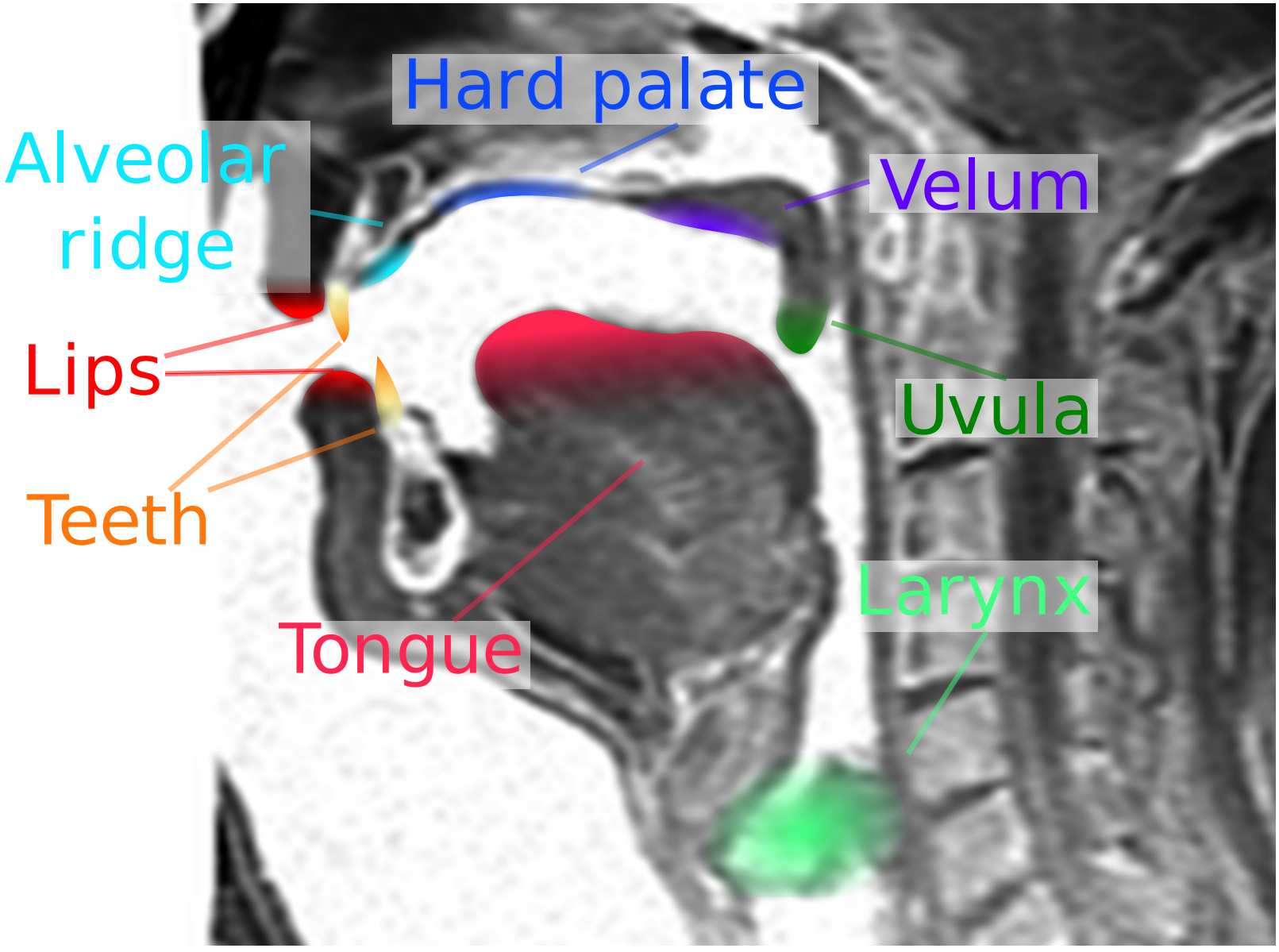
How can we know what's different about consonants?

- We'll work through the *places* of articulation,
  asking what *manner* of articulation exists,
  and whether there is *voicing*. . .

  . . . in German and English
- That will give us the *basic information* to put into the two consonant systems:
  We can see which sounds occur in one language but not the other.
- Then we'll ask: "Is that is the whole picture?"

  Of course it isn't:
  There are consonants that *occur* in both languages but *behave* differently

Places of Articulation



Place: *Lips* (labial sounds)

Manner	**Sound**	**Example (G.)**	**Example (E.)**
Plosives	/p/	Panne	pan
	/b/	Bann	ban
Nasals	/m/	Mann	man
Affricates	/pf/	Pfanne	
Fricatives	/f/	fein	fine
	/v/	Wein	vine
Approximants	/w/		wine
	/ʍ/		whine

Place: *Teeth* (dental sounds)

Manner	**Sound**	**Example (G.)**	**Example (E.)**
Plosives			
Nasals			
Affricates			
Fricatives	/θ/		thank
	/ð/		than
Approximants			

Place: *Teeth ridge* (alveolar sounds)

Manner	**Sound**	**Example (G.)**	**Example (E.)**
Plosives	/t/	tut	toot
	/d/	Daun	down
Nasals	/n/	nun	noon
Affricates	/ts/	Zahn	
Fricatives	/s/	Bus	bus
	/z/	lesen	lazy
Approximants	/l/	laut	lout

Post-alveolar sounds

Manner	**Sound**	**Example (G.)**	**Example (E.)**
Plosives			
Nasals			
Affricates	/ʧ/	Matsch	much
	/ʤ/	Dschungel	jungle
Fricatives	/ʃ/	Schein	shine
	/ʒ/	legere	leisure
Approximants	/ɹ/		hurry

Place: *hard palate* (palatal sounds)

Manner	**Sound**	**Example (G.)**	**Example (E.)**
Plosives			
Nasals			
Affricates			
Fricatives	/ç/	mich	huge
Approximants	/j/	jung	young

Place: *soft palate* (velar sounds)

Manner	**Sound**	**Example (G.)**	**Example (E.)**
Plosives	/k/	Katze	cat
	/g/	Garten	garden
Nasals	/ŋ/	Sänger	singer
Affricates			
Fricatives	/x/	Loch	loch
Approximants			

Place: *uvula* (uvular sounds)

Manner	**Sound**	**Example (G.)**	**Example (E.)**
Plosives			
Nasals			
Trill	[ʀ]	rein	
Fricatives	[χ]	hart	
	[ʁ]	Ware	
Approximants	[ʁ̞]	Ware	

Place: *vocal folds* (glottal sounds)

Manner	**Sound**	**Example (G.)**	**Example (E.)**
Plosives	[ʔ]	ʔimmer	
Nasals			
Trill		= *voicing*	
Fricatives	/h/	hart	hard
	[ɦ]	behend	behind
Approximants			

English/German consonants

	lab.	lab-dent.	dent.	alv.	post-alv.	pal.	vel.	uvul.	glot.
plos.	p b			t d			k g		ʔ
nasal	m			n			ŋ		
affric.		pf		ʦ	ʧ ʤ				
fric.		f v	θ ð	s z	ʃ ʒ	ç	x	χ ʁ	h
trill				r				ʀ	
approx.	ʍ w			l	ɹ	j			

Consonants in syllables (1)

- Four problem sounds [θ ð w ɹ] are very few!
- But sounds you know can occur in strange places, and then. . .
  . . . they can be even more problematical than the new sounds.
- This is the case with *voiced obstruents* (plosives and fricatives) . . . they don't occur at the end of a word or syllable in German, but they *do* in English:

Räder ['ʁɛːdɐ]	Rad [ʁaːt] vs.	rider ['ɹaɪdə]	ride [ɹaɪd]
lesen ['leːzən]	lies [liːs]	vs. losing ['luːzɪŋ]	lose [luːz]

- So *final voiced consonants* (plosives and fricatives) are a problem for German learners of English

Final voiced consonants (FVC)

This problem occurs with *all voiced obstruents*

/b/	robe	vs.	rope
/d/	node	vs.	note
/g/	league	vs.	leak
/v/	leave	vs.	leaf
/ð/	bathe	vs.	bath
/z/	rise	vs.	rice
/ʒ/	liege	vs.	leash
/ʤ/	ridge	vs.	rich

But how do we produce the difference?

We shall deal with it again in more detail later, but listen to the following pairs:

- card/cart
- bend/bent
- pined/pint

Read IV.1, pp. 40-48 with great diligence!

Consonants in syllables (2)

- American /t/ and /d/ between vowels!
  /t/: writer, liter, putting, seating
  /d/: rider, leader, pudding, seeding
- The sound is not a real "stop" or "plosive" consonant phonetically! (It is mostly a "tap" or "flap", and it is the same for /t/ and for /d/)
- So, are the words in the pairs identical?
  No! The *preceding vowel* is different! (longer before /d/)
- NB. It is also found in German regional accents – for those who like accents: Schl.-Holst.: "Meine Mutter mag Butter"
- The "official" IPA symbol for the apical tap is [ɾ].

Consonants in syllables (3)

- English /l/ can be tricky! There are two *qualities*:
  "Clear" [l]: light, play, blue, silly, telly
  "Dark" [ɬ]: tile, seal, tell, call, pull, fold, milk
- We shall go into the details of the articulatory differences between them later, but listen to these examples:
  "Please light the fire, I don't feel too well; I'm feeling a little cold."
  🔊 English 🔊 feel 🔊 well 🔊 cold
  🔊 German 🔊 feel 🔊 well 🔊 cold

  Read III.1, pp. 10-18 for more information about /l/

What *is* a dark /l/?

- Articulatory definition of any English (or German) "L": *Alveolar lateral approximant*
- I.e. the tip of the tongue touches the alveolar ridge, and the sides of the tongue are drawn in, so that the air can escape at the sides (laterally)
- The difference between clear and dark is the *tongue body* position:

  Front part high for "clear" (like /l/ together with [e]): [l]
  Back part high for "dark" (like /l/ together with [ʊ]): [ɫ]

- In American (and Australian) English, the /l/ is "dark" even in the British English "clear" position.

  If you want to sound like a New York gangster, the /l/ is pronounced "dark" all the time: ['ɫiːv ɪm ə'ɫoʊn]

Problem consonants: ⟨th⟩ /θ ð/

- Description: *Inter-dental or post-dental fricatives* (create friction with your tongue on your top front teeth!)
- Theoretically – and even practically – no problem. . . to start with! (Read pp. 87-95)
- Just give yourself a few everyday expressions to practise:

  "That's a bit thick" vs. "Zat's a bit sick"

  "Thank you, you're very thoughtful" vs. "Sank you, you're very soughtful"

  "A penny for your thoughts" vs. "A penny for your soughts"

The effect of ⟨th⟩ on other consonants

- **Fact:** Both *dental* and *alveolar* sounds use the *tongue tip*
- **Fact:** We economise on our articulatory effort wherever possible
- **Fact:** Most alveolar consonants (/t d n l/) don't sound very different if you make them dental. (But /s z/ *do*!)
- So, make your alveolars *dental* before /θ ð/! (then you don't have to move your tongue)

In words:	month	health	width
	[mʌn̪θ]	[hel̪θ]	[wɪt̪θ]

Across word boundaries:	in this	on that	all the rest
	[ɪn̪ ðɪs]	[ɒn̪ ðæt]	[ɔːl̪ ðə rest]

What about ⟨th⟩ after /s/ and /z/?

- Unlike plosives and nasals, /s/ and /z/ *cannot become dental* before the dental fricatives ("place" is distinctive)
- So what happens in fluent speech? (there's not much time to adjust!)
- Most /ð/ words are function words and unstressed...

  the, them, their, though, etc.

  ...so they are shorter and weaker than stressed words, and they are very often *produced as [z]*.
- Redundancy makes it unimportant:

  "What's the matter?" ['wɒts‿zə 'mætə]

  "Pass the salt please." ['pɑːs‿zə 'sɔːɬt ˌpliːz]
- But /θ/ words after /s/ and /z/ are less easy, because /θ/ words are semantically more important and often accentuated...

  thick, thin, thought, thanks, etc.

  ...so /s/ and /z/ are often *tongue-blade fricatives* (leaving the tip free for /θ/)

Summary

- We learned about consonants wrt. their places of articulation...
- ...and identified *problematic* consonants (i.e. those that exist in English but not in German)
- But other sounds (that occur in both languages) are also problematic, because they behave differently in different contexts (e.g. FVC, light vs. dark "L")
- In the next session, we will continue to inspect some problematic consonants of English.

There will be no lecture next Monday (17/11)!