The Phonetics of English Pronunciation Session 03

Ingmar Steiner¹
Institute of Phonetics
Saarland University

10.11.2008



¹using material by William Barry

 I suggested that we need to be able to describe sounds if we are going to be able to deal with differences!

- 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 according to their place & manner of articulation and their voicing.

- 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 according to their place & manner of articulation and their voicing.
- And the homework question was:
 What are the dimensions used for classifying consonants?

- 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 according 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!)

- 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 according 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.

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

```
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]
```

```
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?)
```

```
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]
```

```
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?)
```

• *Vowels*, which are classified according to their tongue *height*, tongue *position* and *lip shape*. . .

- *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?

- *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!

- 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.

Tongue position: Buße vs. büße löse vs. lose [uː] vs. [yː] [øː] vs. [oː]

```
Tongue position: Buße vs. büße löse vs. lose [uː] vs. [yː] [øː] vs. [oː] (Why isn't "trage" vs. "träge" a good example?)
```

```
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. [ε] [yː] vs. [øː]
```

```
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
[i] vs. [ε] [yː] vs. [øː]

(Why isn't "Dach" vs. "Dich" 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]
```

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?)
```

Example word-pairs (cont'd)

```
There is a fourth dimension, Length: Aale vs. alle Aas vs. As [a:] vs. [a] [a:] 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 [i:] vs. [i] [e:] vs. [\epsilon] Höhle vs. Hölle Schote vs. Schotte [ø:] vs. [\epsilon] [o:] vs. [\epsilon]
```

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!

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.

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 /aː/ (e.g. in "father", "palm", etc.), which is back and unrounded.
 However, the /æ/ vs. /aː/ opposition ("Pam" vs. "palm") is also short vs. long. So tongue position alone never distinguishes a word pair in English.

• What does English do, in contrast to German, to destress syllables? Give examples.

- What does English do, in contrast to German, to destress syllables? Give examples.
- This appeared to be clear (in theory ○) to most of you.

- 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)...

- 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.) ['kantent] vs. *content* (adj.) [kən'tent]

So what about "stress" in compound words?

 What are the problems with English compounds for German learners of English?

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.

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.

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.

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.

• We already know – we can feel the difference:

- We already know we can feel the difference:
 - the place of articulation

- We already know we can feel the difference:
 - the place of articulation
 - the manner of articulation

- We already know we can feel the difference:
 - the place of articulation
 - the manner of articulation
 - · whether it is voiced or unvoiced

- 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

- 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!

- 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

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

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

...in German and English

- 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.

- 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?"

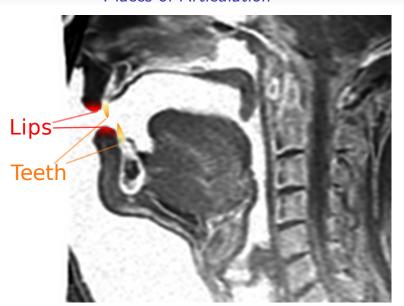
- We'll work through the places of articulation, asking what manner of articulation exists, and whether there is voicing. . .
 - ...in German and English

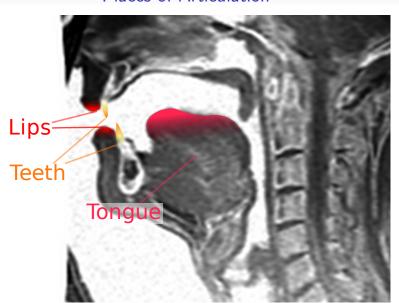
other.

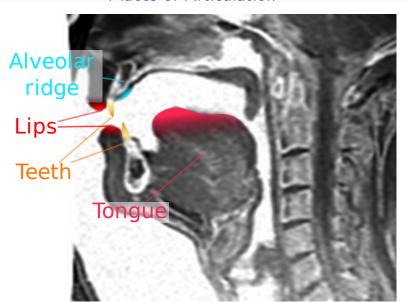
- That will give us the basic information to put into the two consonant systems:
 We can see which sounds occur in one language but not the
- Then we'll ask: "Is that is the whole picture?"
 Of course it isn't:
 There are consonants that occur in both languages but behave differently

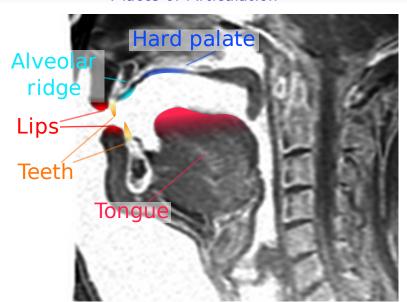


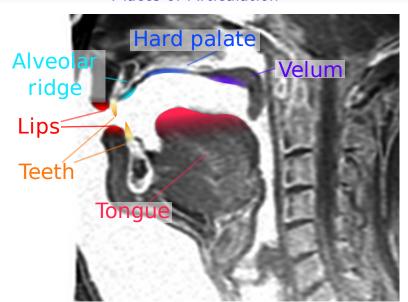


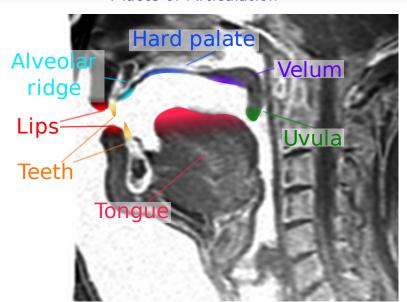


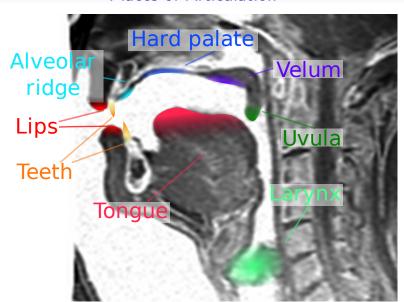












Place: Lips (labial sounds)

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
	/ m /		whine

Place: *Teeth* (dental sounds)

Manner	Sound	Example (G.)	Example (E.)
Plosives			
Nasals			
Affricates			
Fricatives	$/\theta/$		<mark>th</mark> ank
	/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	la z y
Approximants	/1/	laut	lout

Post-alveolar sounds

Manner	Sound	Example (G.)	Example (E.)		
Plosives					
Nasals					
Affricates	/ʧ/	Matsch	mu <mark>ch</mark>		
	/ʤ/	Dschungel	<mark>j</mark> ungle		
Fricatives	/ʃ/	Schein	shine		
	/3/	legere	leisure		
Approximants	/k/		hurry		

Place: hard palate (palatal sounds)

Manner	Sound	Example (G.)	Example (E.)
Plosives			
Nasals			
Affricates			
Fricatives	/ç/	mi <mark>ch</mark>	huge
Approximants	/j/	j ung	y oung

Place: soft palate (velar sounds)

Manner	Sound	Example (G.)	Example (E.)
Plosives	/k/	Katze	cat
	/g/	Garten	garden
Nasals	$/\mathfrak{g}/$	Sä <mark>ng</mark> er	singer
Affricates			
Fricatives	/x/	Loch	loch
Approximants			

Place: uvula (uvular sounds)

Manner	Sound	Example (G.)	Example (E.)
Plosives			
Nasals			
Trill	[R]	rein	
Fricatives	[x]	hart	
	[R]	Ware	
Approximants	[Ř]	Ware	

Place: vocal folds (glottal sounds)

Manner	Sound	Example (G.)	Example (E.)
Plosives	[?]	? immer	
Nasals			
Trill		= vc	oicing
Fricatives	/h/	hart	hard
	[6]	be <mark>h</mark> end	be <mark>h</mark> ind
Approximants			

English/German consonants

	lab.	lab- dent.	dent.	alv.	post- alv.	pal.	vel.	uvul.	glot.
plos.	рb	dent.		t d	aiv.		kg		7
nasal	m			n			ŋ		
affric.		pf		ts	ff of				
fric.		fv	θð	s z	∫3	Ç	X	χк	h
trill				r				R	
approx.	w w				,	j			

• Four problem sounds $[\theta \ \delta \ w \ a]$ are very few!

- 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.

- 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:

- 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]
```

- 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
      robe vs. rope
 /b/
       node vs. note
 /d/
 /q/ league vs. leak
 /v/ leave vs. leaf
 /ð/
      ba<mark>th</mark>e vs. bath
 /z/
       rise vs. rice
 /3/
       liege vs. leash
 /ʤ/
        ridge vs. rich
```

Final voiced consonants (FVC)

```
This problem occurs with
all voiced obstruents
       robe vs. rope
 /b/
 /d/
       node vs. note
 /g/ league vs. leak
 /v/ leave vs. leaf
 /ð/
      bathe vs. bath
 /z/
       rise vs. rice
       liege vs. leash
 /3/
       ridge vs. rich
 /ʤ/
```

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

Final voiced consonants (FVC)

```
This problem occurs with
all voiced obstruents
                               But how do we produce the
        robe vs. rope
 /b/
                               difference?
       node vs. note
 /d/
                               We shall deal with it again in more
 /g/ league vs. leak
                               detail later, but listen to the following
 /v/ leave vs. leaf
                               pairs:
 /ð/
       bathe vs. bath

◆
        ) card/cart
        ...

 /z/
        rise vs. rice
                               bend/bent
        liege vs. leash
 /3/
                               pined/pint
 /ʤ/
        ridge vs. rich
```

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

 American /t/ and /d/ between vowels! /t/: writer, liter, putting, seating /d/: rider, leader, pudding, seeding

- 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/)

- 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/)

- 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"

- 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 [r].

English /I/ can be tricky! There are two qualities:
 "Clear" [I]: light, play, blue, silly, telly
 "Dark" [†]: tile, seal, tell, call, pull, fold, milk

- English /I/ can be tricky! There are two qualities:
 "Clear" [I]: light, play, blue, silly, telly
 "Dark" [†]: 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

- English /I/ can be tricky! There are two qualities:
 "Clear" [I]: light, play, blue, silly, telly
 "Dark" [†]: 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 /I/

 Articulatory definition of any English (or German) "L": Alveolar lateral approximant

- 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)

- 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:

- 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]

- 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 /I/ together with [e]): [I] Back part high for "dark" (like /I/ together with [v]): [t]
```

- 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 /I/ together with [e]): [I] Back part high for "dark" (like /I/ together with [v]): [t]
```

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

- 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 /I/ together with [e]): [I] Back part high for "dark" (like /I/ together with [v]): [t]
```

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

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

Problem consonants: $\langle \mathsf{th} \rangle / \theta \, \delta /$

• Description: *Inter-dental or post-dental fricatives* (create friction with your tongue on your top front teeth!)

Problem consonants: $\langle \mathsf{th} \rangle / \theta \, \eth /$

- 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)

Problem consonants: $\langle \mathsf{th} \rangle / \theta \, \delta /$

- 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:

Problem consonants: $\langle \mathsf{th} \rangle / \theta \, \eth /$

- 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"

Problem consonants: $\langle \mathsf{th} \rangle / \theta \, \delta /$

- 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"
```

Problem consonants: $\langle \mathsf{th} \rangle / \theta \, \delta /$

- 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"

• Fact: Both dental and alveolar sounds use the tongue tip

- Fact: Both dental and alveolar sounds use the tongue tip
- Fact: We economise on our articulatory effort wherever possible

- 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!)

- 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 $/\theta$ $\eth/!$ (then you don't have to move your tongue)

- 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 $/\theta$ $\eth/!$ (then you don't have to move your tongue)

```
In words: month health width [m \wedge n\theta] [hell \theta] [with \theta]
```

- 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 $/\theta$ $\eth/!$ (then you don't have to move your tongue)

In words: month health width

 Unlike plosives and nasals, /s/ and /z/ cannot become dental before the dental fricatives ("place" is distinctive)

- 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!)

- 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...

- 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.

- 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.
 - \dots so they are shorter and weaker than stressed words, and they are very often *produced as* [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 $/\delta/$ words are function words and unstressed. . . the, them, their, though, etc.
 - \dots 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?" "Pass the

```
"What's the matter?" "Pass the salt please."
```

- 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 $/\delta/$ words are function words and unstressed. . . the, them, their, though, etc.
 - \dots 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?" "Pass the salt please."
 ['wpts_zə 'mætə] ['paːs_zə 'sɔːłt ˌpliːz]
- But $/\theta/$ words after /s/ and /z/ are less easy, because $/\theta/$ words are semantically more important and often accentuated...

- 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.
 - \dots 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?" "Pass the salt please."
 ['wpts_zə 'mætə] ['pa:s_zə 'sɔ:łt ˌpli:z]
- But $/\theta/$ words after /s/ and /z/ are less easy, because $/\theta/$ words are semantically more important and often accentuated...
 - thick, thin, thought, thanks, etc.

- 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 $/\delta/$ words are function words and unstressed. . . the, them, their, though, etc.
 - \dots 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?" "Pass the salt please."
 ['wpts zə 'mætə] ['paːs zə 'sɔːft ˌpliːz]
- But $/\theta/$ words after /s/ and /z/ are less easy, because $/\theta/$ 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 $/\theta$ /)



 We learned about consonants wrt. their places of articulation. . .

- We learned about consonants wrt. their places of articulation...
- ...and identified *problematic* consonants (i.e. those that exist in English but not in German)

- 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")

- 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.

- 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)!

