# Unit 6

# Consonants (2)

English consonants from a German point of view

Slides for the session of Phonetics with Listening Practice (British) held on 4 / 6 frimaire, an CCXXVIII de la République

25 / 27 November 2019



Consonants (2)

#### Outl

Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

Some work for you!

Robert Spence LangSciTech Saarland University



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Some work for you!

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English Phonetics: Unit 6: /ˈɪŋ glɪʃ fə ˈnet ɪks ˈjuːn ɪt ˈsɪks/
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Consonants (2)

naın. 'thi:n]

[ˈkɒnsənənts ˈtuː] (broad)

 $['k^h vns \partial n \partial n \partial t^h v u]$  (narrow)

 $[\ ^{l}k^{h}\text{donsenens}\ ^{l}t^{h}\text{ou}]\ (alternative\ representation\ of\ diphthong)$ 

English consonants from a German point of view  $['ngli \int 'k^h vns \\ enann(t)s \ fram_e \ 'dz \\ a:men \ 'p(w) \\ ount_e(v) \ 'vju:]$ 

4 / 6 frimaire, an CCXXVIII de la République [katʁ]/[si fʁi.mɛ(:)ʁ | α̃ dø.sα̃.vɛ̃t.hqit də la ʁe.py.blik] 25 /27 November 2019 ['tw̞ent.i.ˌfɪfθ\_əv]/['tw̞ent.i.ˌsev.(ə)n̞θ\_əv nə(ʊ).'vem.bə 'tw̞ent.i.

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Consonants (2)

#### Outli

Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

Some work for you!

1 Initial consonants (and consonant clusters)

2 Final consonants (and consonant clusters)

 See the list in your handout, also available at: http://spence.saar.de/courses/phonetics/syllablestructure/ initials.pdf



Consonants (2)

Outline

Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

- See the list in your handout, also available at: http://spence.saar.de/courses/phonetics/syllablestructure/initials.pdf
- This is a list of consonants and consonant-clusters that can occur 'word-initially' (i.e. 'as the Onset of a syllable which is the first syllable in (the phonological realization of) a word').



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- It has been checked against all the words in a major dictionary.
- The system for the beginning of a syllable "in the middle of a word" might be slightly different.



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Final consonants (and consonant clusters)

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- Consonants (2)

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   Press, 1956.)
- It has been checked against all the words in a major dictionary.
- The system for the beginning of a syllable "in the middle of a word" might be slightly different.
- Can you pronounce all the consonants and consonant-clusters on the list?

### A tip for producing English approximants



Consonants (2)

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Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

Some work for you!

If you have problems producing the English voiced approximants
[w] ('labiovelar'), [a] ('(post-)alveolar' or '(palato-)alveolar') and
[j] ('palatal'), then start with [a], [a] and [i], and gradually
decrease the openness of your mouth.

### A tip for producing English approximants



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Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

- If you have problems producing the English voiced approximants
  [w] ('labiovelar'), [a] ('(post-)alveolar' or '(palato-)alveolar') and
  [j] ('palatal'), then start with [u], [a] and [i], and gradually
  decrease the openness of your mouth.
- Make sure the airflow is still 'laminar', not 'turbulent'.

# A tip for producing English approximants



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Initial consonants (an consonant clusters)

Final consonants (and consonant clusters)

- If you have problems producing the English voiced approximants
  [w] ('labiovelar'), [a] ('(post-)alveolar' or '(palato-)alveolar') and
  [j] ('palatal'), then start with [u], [a] and [i], and gradually
  decrease the openness of your mouth.
- Make sure the airflow is still 'laminar', not 'turbulent'.
- As an alternative for [a]: start with [3] and gradually increase the openness of your mouth.



 Note the following positional variants ("allophones") of the English phoneme /r/ that are used by many speakers: Consonants (2)

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Initial consonants (an consonant clusters)

Final consonants (and consonant clusters)

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Some work for you

 Note the following positional variants ("allophones") of the English phoneme /r/ that are used by many speakers:

①  $/r/ \rightarrow [a]$  ([a] = voiced post- or palato-alveolar approximant);

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- Consonants (2)
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Final consonants (and consonant clusters)

- Note the following positional variants ("allophones") of the English phoneme /r/ that are used by many speakers:
  - 1  $/r/ \rightarrow [a]$  ([a] = voiced post- or palato-alveolar approximant);
  - 2 /pr/, /kr/  $\rightarrow$  [p $_{\rm g}$ ], [k $_{\rm g}$ ] ([ $_{\rm g}$ ] = devoiced post- or palato-alveolar approximant);

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Initial consonants (ar consonant clusters)

Final consonants (and consonant clusters)

- Note the following positional variants ("allophones") of the English phoneme /r/ that are used by many speakers:
  - ①  $/r/ \rightarrow [a]$  ([a] = voiced post- or palato-alveolar approximant);
  - ② /pr/, /kr/  $\rightarrow$  [py], [ky] ([y] = devoiced post- or palato-alveolar approximant);
  - **3**  $/\theta r/ \rightarrow [\theta r]$  ([r] = voiced alveolar tap or flap);

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#### initial consonants (ar consonant clusters)

Final consonants (and consonant clusters)

- Note the following positional variants ("allophones") of the English phoneme /r/ that are used by many speakers:
  - ①  $/r/ \rightarrow [J]$  ([J] = voiced post- or palato-alveolar approximant);
  - /pr/, /kr/ → [p<sub>↓</sub>], [k<sub>↓</sub>] ([¼] = devoiced post- or palato-alveolar approximant);
  - 3  $/\theta r/ \rightarrow [\theta r]$  ([r] = voiced alveolar tap or flap);
  - 4  $/\text{tr}/ \rightarrow [t_{\underline{u}}]$  ( $[t_{\underline{u}}]$  = devoiced retroflex approximant); cf [ts].



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Final consonants (and

consonant clusters)

- Note the following positional variants ("allophones") of the English phoneme /r/ that are used by many speakers:
  - 1  $r/ \rightarrow [a]$  ([a] = voiced post- or palato-alveolar approximant);
  - /pr/, /kr/ → [p<sub>↓</sub>], [k<sub>↓</sub>] ([¼] = devoiced post- or palato-alveolar approximant);
  - 3  $/\theta r/ \rightarrow [\theta r]$  ([r] = voiced alveolar tap or flap);
  - 4  $/\text{tr}/\rightarrow$  [t] ([1] = devoiced retroflex approximant); cf [t]].
  - **5**  $/dr/ \rightarrow [d_{\ell}]$  ( $[d_{\ell}]$  = voiced retroflex approximant); cf  $[d_{\ell}]$ .



Consonants (2)

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consonant clusters)
Final consonants (and

consonant clusters)

- Note the following positional variants ("allophones") of the English phoneme /r/ that are used by many speakers:
  - 1  $r/ \rightarrow [a]$  ([a] = voiced post- or palato-alveolar approximant);
  - /pr/, /kr/ → [p<sub>↓</sub>], [k<sub>↓</sub>] ([¼] = devoiced post- or palato-alveolar approximant);
  - **3**  $/\theta r/ \rightarrow [\theta r]$  ([r] = voiced alveolar tap or flap);
  - 4 /tr/  $\rightarrow$  [tu] ([u] = devoiced retroflex approximant); cf [ts].
  - **⑤**  $/dr/ \rightarrow [d_{4}]([d_{1}] = voiced retroflex approximant); cf [d_{3}].$
- Note that the IPA symbol [a] can stand for a dental, alveolar, or palatoalveolar voiced approximant, corresponding to the voiced fricatives [ð], [z], or [ʒ].



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Final consonants (and consonant clusters)

- Note the following positional variants ("allophones") of the English phoneme /r/ that are used by many speakers:
  - 1  $/r/ \rightarrow [a]$  ([a] = voiced post- or palato-alveolar approximant);
  - /pr/, /kr/ → [p<sub>↓</sub>], [k<sub>↓</sub>] ([¼] = devoiced post- or palato-alveolar approximant);
  - **3**  $/\theta r/ \rightarrow [\theta r]$  ([r] = voiced alveolar tap or flap);
  - 4 /tr/  $\rightarrow$  [ti] ([i] = devoiced retroflex approximant); cf [ti].
  - **⑤**  $/dr/ \rightarrow [d_{\ell}]$  ( $[d_{\ell}]$  = voiced retroflex approximant); cf  $[d_{\ell}]$ .
- Note that the IPA symbol [a] can stand for a dental, alveolar, or palatoalveolar voiced approximant, corresponding to the voiced fricatives [ð], [z], or [ʒ].
- If you really want to go into detail, you can indicate that /r/ is normally produced by many native speakers as  $[\, \underline{\jmath}^w\,]$ , i.e. retracted (not (laminal-) alveolar but (laminal-) palatoalveolar) and labialized (lips rounded), as in  $\langle \text{red} \rangle / \text{red} / \rightarrow [\, \underline{\jmath}^w \underline{e} d\,]$  or  $[\, \underline{\jmath}^w \underline{e} d\,]$ .

# One more reason why English /r/ $[\ ]$ is *post-* or *palato-*alveolar



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Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

(in Onset position in native English words:)		/m/	/n/	/w/	/l/	/r/	/j/
alveolar fricative	/s/	/sm/	/sn/	/sw/	/sl/	_	/sj/
palatoalveolar fricative	/ʃ/	_	_	_	_	/ʃr/	_



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Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

Some work for you!

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# Note that people start preparing for a sound before they get to it:



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Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

- Note that people start preparing for a sound before they get to it:
  - $/\text{ert}\theta/ \rightarrow [\text{egt}\theta]$



Consonants (2)

Outline

Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

- Note that people start preparing for a sound before they get to it:
  - /eɪt $\theta$ /  $\rightarrow$  [eɪt $\theta$ ]
  - (dental t instead of alveolar t, because of the following dental fricative) ...



Consonants (2)

Outline

Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

- Note that people start preparing for a sound before they get to it:
  - $/\text{ert}\theta/\rightarrow [\text{ert}\theta]$
  - (dental t instead of alveolar t, because of the following dental fricative) ...
- ... and are still recovering from the preceding sound when the next one starts:



Consonants (2)

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consonant clusters)

Final consonants (and consonant clusters)

- Note that people start preparing for a sound before they get to it:
  - $/eit\theta/ \rightarrow [eit\theta]$
  - (dental t instead of alveolar t, because of the following dental fricative) ...
- ... and are still recovering from the preceding sound when the next one starts:
  - /ˈpɒpgʌn/  $\rightarrow$  [ˈpʰขp៉-gʌn]



Consonants (2)

Outline

Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

- Note that people start preparing for a sound before they get to it:
  - $/\text{ert}\theta/\rightarrow [\text{ert}\theta]$
  - (dental t instead of alveolar t, because of the following dental fricative) ...
- ... and are still recovering from the preceding sound when the next one starts:
  - /'pɒpgʌn/  $\rightarrow$  ['pʰɒpˀˌgʌn]
  - (devoicing of the lenis velar plosive);



Consonants (2)

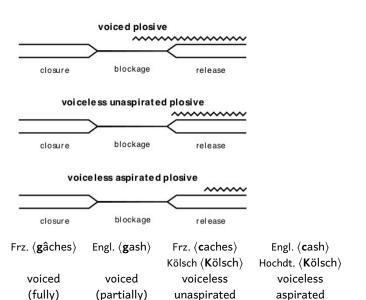
Outline

Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

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  - $/eit\theta/ \rightarrow [eit\theta]$
  - (dental t instead of alveolar t, because of the following dental fricative) ...
- ... and are still recovering from the preceding sound when the next one starts:
  - /'pɒpgʌn/  $\rightarrow$  ['pʰɒpˀˌgʌn]
  - (devoicing of the lenis velar plosive);
  - but note that this is still different from the voiceless fortis velar plosive in  $['p^hvp^i_jk^h z_in]$

#### Voice Onset Time (see Wikipedia article)





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Final consonants (and consonant clusters)



Consonants (2)

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Initial consonants (and consonant clusters)

consonant clusters)

Some work for you!

 See the list of 'finals' in your handout, also available here: http://spence.saar.de/courses/phonetics/syllablestructure/ finals.pdf



Consonants (2)

Outline

Initial consonants (and consonant clusters)

consonant clusters)

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- Many of the combinations only occur due to the inflexional and derivational morphology of English words: (-(e)s), (-ed), (-th), etc.



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- Many of the combinations only occur due to the inflexional and derivational morphology of English words: (-(e)s), (-ed), (-th), etc.
- The system would be even more complicated if we included the possible ways a syllable can end in the middle of an English word.

• The most important thing to practise is:



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Initial consonants (and consonant clusters)

Final consonants (ar consonant clusters)

- The most important thing to practise is:
  - producing a voiced final consonant.



Consonants (2)

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Initial consonants (and consonant clusters)

consonant clusters)

- The most important thing to practise is:
  - producing a voiced final consonant.
- The secret is to remember



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Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

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- The most important thing to practise is:
  - producing a voiced final consonant.
- The secret is to remember
  - that such a consonant has to be lenis (weak, relaxed) in English, not fortis (strong, tense) as in German,

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Initial consonants (and consonant clusters)

consonant clusters

- The most important thing to practise is:
  - producing a voiced final consonant.
- The secret is to remember
  - that such a consonant has to be lenis (weak, relaxed) in English, not fortis (strong, tense) as in German,
  - and that the relaxedness applies to the whole of the Rhyme (including the Nucleus). Don't rush! Don't "clip" the vowel! Take your time!

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Initial consonants (and consonant clusters)

consonant clusters)

- The most important thing to practise is:
  - producing a voiced final consonant.
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- Try practising this now:



Consonants (2)

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Some work for you!

- The most important thing to practise is:
  - producing a voiced final consonant.
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- Try practising this now:

•

⟨bit⟩ [bɪt]	(bid) [bɪ·d]	⟨bead⟩ [bi:d]	⟨beat⟩ [bi <sup>,</sup> t]	
('bisschen')	('bisschen') ('bieten')		('schlagen')	



- The most important thing to practise is:
  - producing a voiced final consonant.
- The secret is to remember
  - that such a consonant has to be lenis (weak, relaxed) in English, not fortis (strong, tense) as in German,
  - and that the relaxedness applies to the whole of the Rhyme (including the Nucleus). Don't rush! Don't "clip" the vowel! Take your time!
- Try practising this now:

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(bit) [bɪt]	(bid) [bɪ·d]	⟨bead⟩ [bi:d]	⟨beat⟩ [bi <sup>,</sup> t]	
('bisschen')	('bieten')	('Perle')	('schlagen')	

 When practising, turn the voice off right at the beginning of a voiceless final consonant, but let it go right through and beyond a voiced one, producing a slight schwa at the end. Consonants (2)

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Initial consonants (and consonant clusters)

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Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

Some work for you!

 How do you pronounce <clothes> ('Kleider') – as opposed to <cloths> ('Tücher'), the plural of <cloth> ('Tuch')?

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- How do you pronounce <clothes> ('Kleider') as opposed to <cloths> ('Tücher'), the plural of <cloth> ('Tuch')?
- Officially:  $/kl\partial \vartheta dz/$ , so therefore  $[kl\partial \vartheta dz]$



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Initial consonants (and consonant clusters)

Final consonants (an consonant clusters)

- How do you pronounce <clothes> ('Kleider') as opposed to <cloths> ('Tücher'), the plural of <cloth> ('Tuch')?
- Officially: /kləʊðz/, so therefore [kləʊðz]
- But if you're lazy, try [kləʊʊz] or [kləʊzː]

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- How do you pronounce <clothes> ('Kleider') as opposed to <cloths> ('Tücher'), the plural of <cloth> ('Tuch')?
- Officially: /kləυðz/, so therefore [kləyðz]
- But if you're lazy, try [kləʊvz] or [kləʊzː]
- Why?



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Initial consonants (and

- How do you pronounce <clothes> ('Kleider') as opposed to <cloths> ('Tücher'), the plural of <cloth> ('Tuch')?
- Officially: /kləvðz/, so therefore [kləvðz]
- But if you're lazy, try [kləğvz] or [kləğz:]
- Why?
- You're in the neutral position (schwa), then you start closing your lips slightly, as if for w; then you have to get from there to z, but the tip of your tongue gets horribly in the way. So just "smooth things out a bit".

#### Homework



Consonants (2)

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Initial consonants (and consonant clusters)

Final consonants (and consonant clusters)

Some work for you!

Read the chapter on sound-spelling correspondences (see email).