

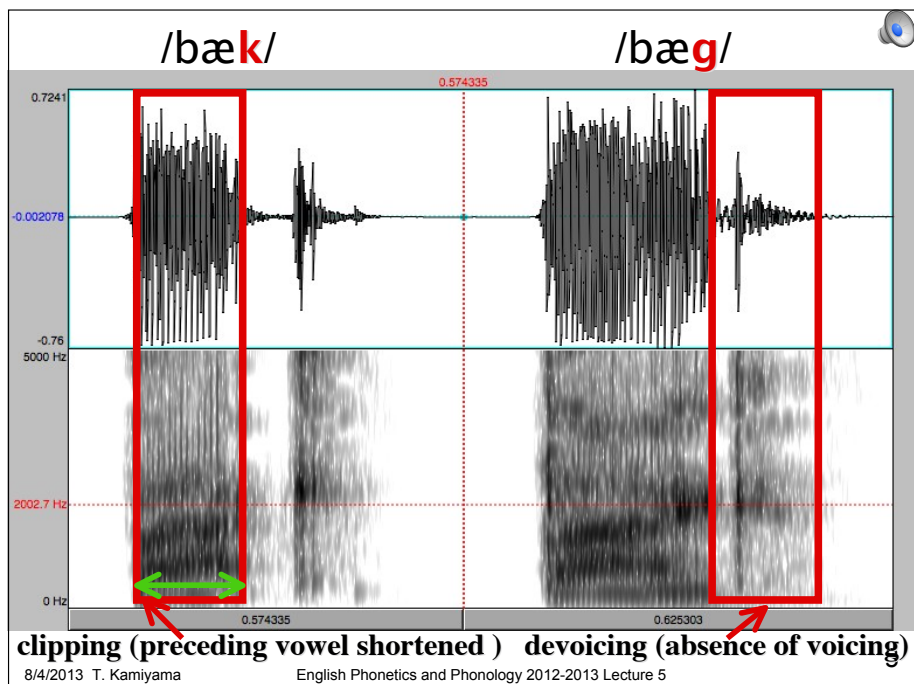
English Phonetics and Phonology

Lecture 5-2: English consonants in detail 2

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Voiced and voiceless plosives: Word-final position

- Observe the consonant at the **end** of the following words:
- /bæk/
- /bæg/
- Then compare them with the consonant at the beginning of the following words in French:
- /bak/ (« bac »)
- /bag/ (« bague »)



Voiced and voiceless plosives: Word-final position

Clipping: shortening of the preceding vowel

- /bæk/
- [bæ̥k]

Devoicing (no clipping)

- /bæg/
- [bæɡ (or ɡ̊)]

Voiced and voiceless plosives: Word-final position

- In English, a vowel is **clipped** (shortened) when followed by a **voiceless** plosive (/p t k/) in the same syllable: /bæk/ [bæ̥k].

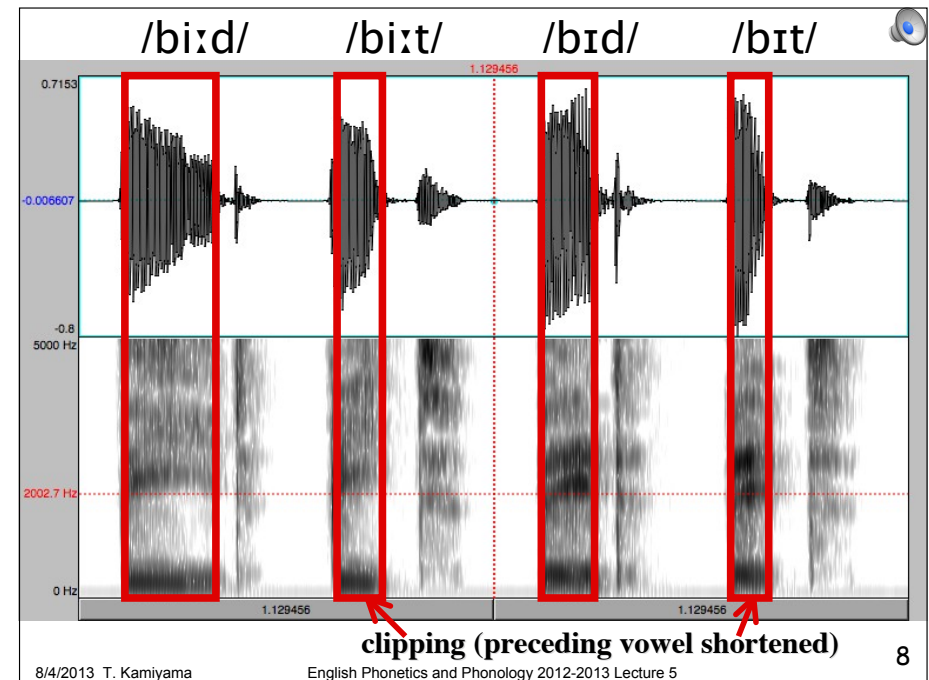
Voiced and voiceless plosives: Word-final position

- In English, **voiced** plosives /b d g/ are **devoiced** totally or partially in word-final position (especially in utterance-final position) [b̥ d̥ g̥ (or ɡ̊)], as in /bæg/ [bæ̥ɡ̊ (or ɡ̊)].
- But the explosion noise tends to be smaller than that of voiceless ones (/p t k/) in the same position.
- The preceding vowel is **not clipped**.

N.B. Clipping and long/short vowels

What happens to the following words?

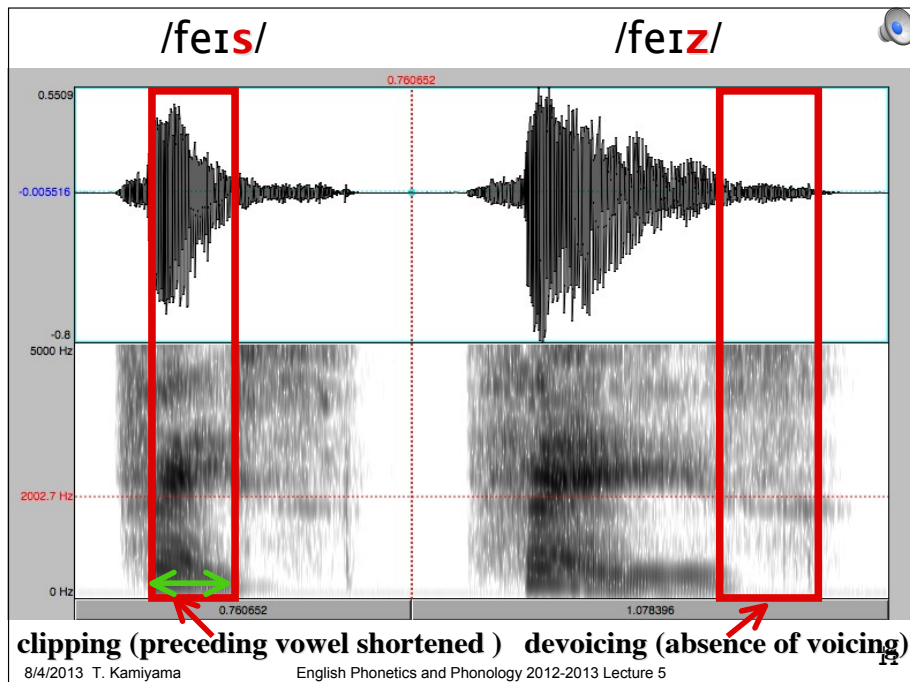
- /bi:d/
- /bi:t/
- /bɪd/
- /bɪt/



2. Voiced and voiceless fricatives

Voiced and voiceless fricatives: Word-final position

- Observe the consonant at the **end** of the following words:
- /feɪs/
- /feɪz/
- Then compare them with the consonant at the beginning of the following words in French:
- /faʃ/ (« face »)
- /faz/ (« phase »)



Voiced and voiceless fricatives: Word-final position

Clipping: shortening of the preceding vowel

- /feɪs/
- [fɛɪs]

Devoicing (no clipping)

- /feɪz/
- [fɛɪz̥]

Voiced and voiceless fricatives: Word-final position

- In English, a vowel is **clipped** (shortened) when followed by a **voiceless** fricative (**/f θ s ʃ/**) in the same syllable: /feɪs/ [feɪ̯s].

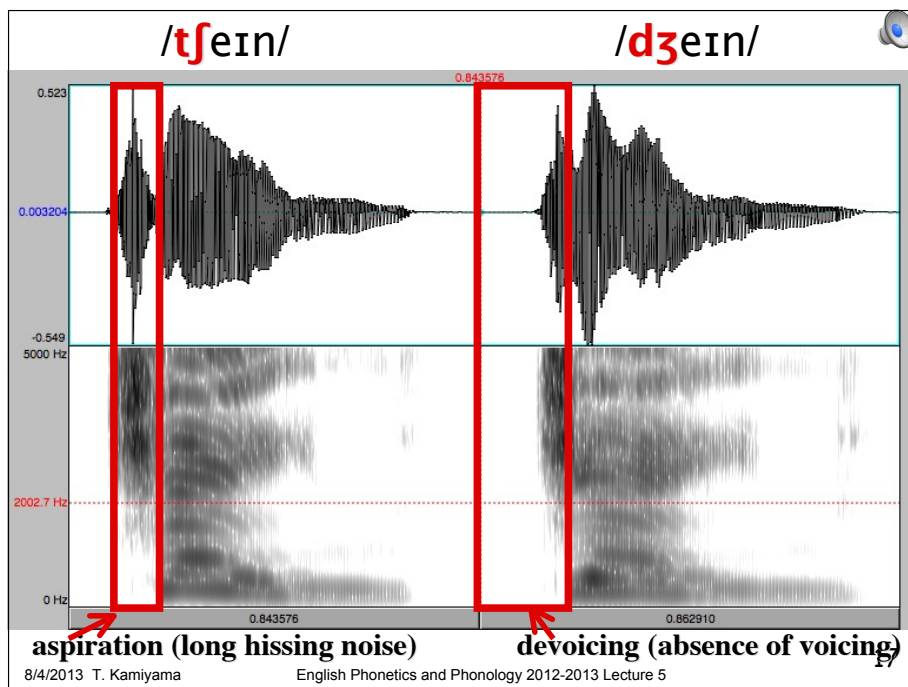
Voiced and voiceless fricatives: Word-final position

- In English, **voiced** plosives **/v ð z ʒ/** are **devoiced** totally or partially in word-final position (especially in utterance-final position) [v̥ ð̥ z̥ ʒ̥ (or ʒ̥̥)], as in /feɪz/ [feɪ̯z̥].
- But they tend to be shorter, and the friction noise tends to be smaller than that of voiceless counterparts (**/f θ s ʃ/**) in the same position.
- The preceding vowel is not clipped.

3. Voiced and voiceless affricates

Voiced and voiceless affricates: Word-initial position

- Observe the consonant at the **beginning** of the following words:
- **/tʃeɪn/**
- **/dʒeɪn/**



Voiced and voiceless affricates: Word-initial position

Aspiration

- /tʃeɪn/
- [tʃ^heɪn]

Devoicing: (partial) absence of voicing

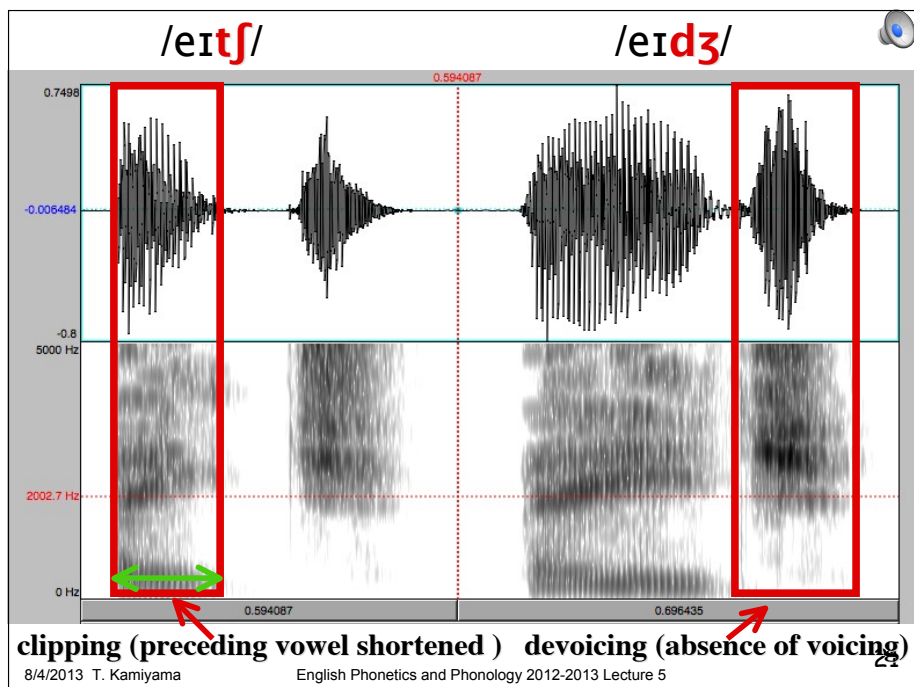
- /dʒeɪn/
- [dʒ̥eɪn]

Voiced and voiceless affricates: Word-initial/medial position

- As in plosives, the **voiceless** affricate /tʃ/ is **aspirated** [tʃ^h], (/tʃeɪn/ [tʃ^heɪn]).
- The **voiced** affricate /dʒ/ is totally or partially **devoiced** [dʒ̥] in word-initial position.

Voiced and voiceless affricates: Word-final position

- Observe the consonant at the **end** of the following words:
- /eɪtʃ/
- /eɪdʒ/



Voiced and voiceless affricates: Word-final position

Clipping: shortening of the preceding vowel

- /eɪtʃ/
- [eɪ̯tʃ]

Devoicing (no clipping)

- /eɪdʒ/
- [eɪ̯dʒ̚]

Voiced and voiceless affricates: Word-final position

- As in plosives and fricatives, a vowel is **clipped** (shortened) when followed by a **voiceless** affricate /tʃ/ in the same syllable: /eɪtʃ/ [eɪ̯tʃ].

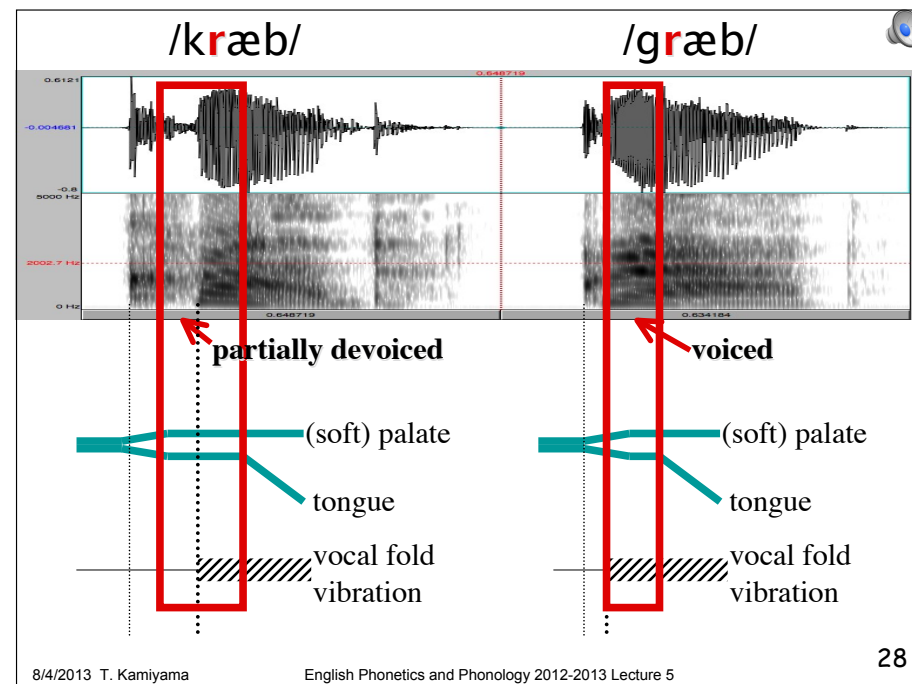
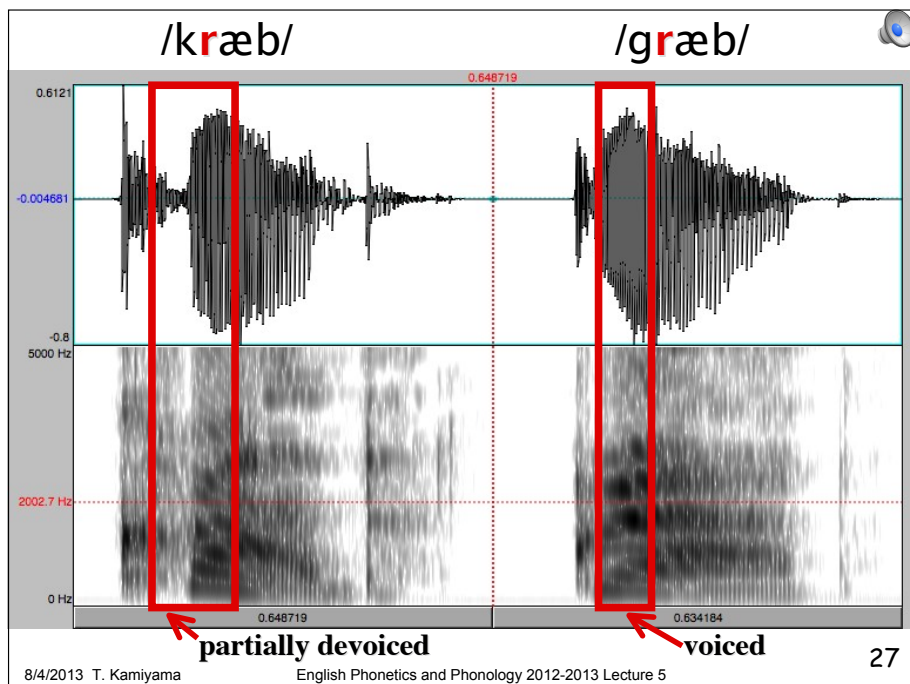
Voiced and voiceless fricatives: Word-final position

- As in plosives and fricatives, the **voiced** affricate /dʒ/ is **devoiced** totally or partially in word-final position (especially in utterance-final position) [dʒ̚], as in /eɪdʒ/ [eɪ̯dʒ̚].
- But the friction noise tends to be smaller than that of the voiceless counterpart /tʃ/ in the same position.
- The preceding vowel is not clipped.

4. Approximants

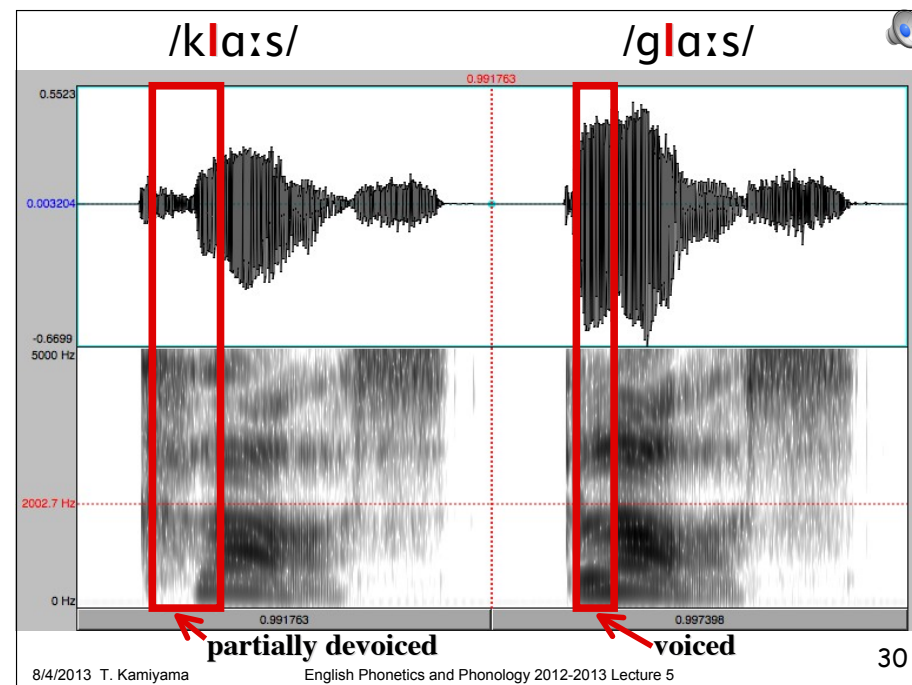
Approximants: After a word-initial plosive

- Observe the palato-alveolar (post-alveolar) approximant in the following words:
- /k^ræb/
- /g^ræb/
- Then compare them with the consonants at the beginning of the following words in French:
- /k^rab/ (« crabe »)
- /g^ra/ (« gras »)



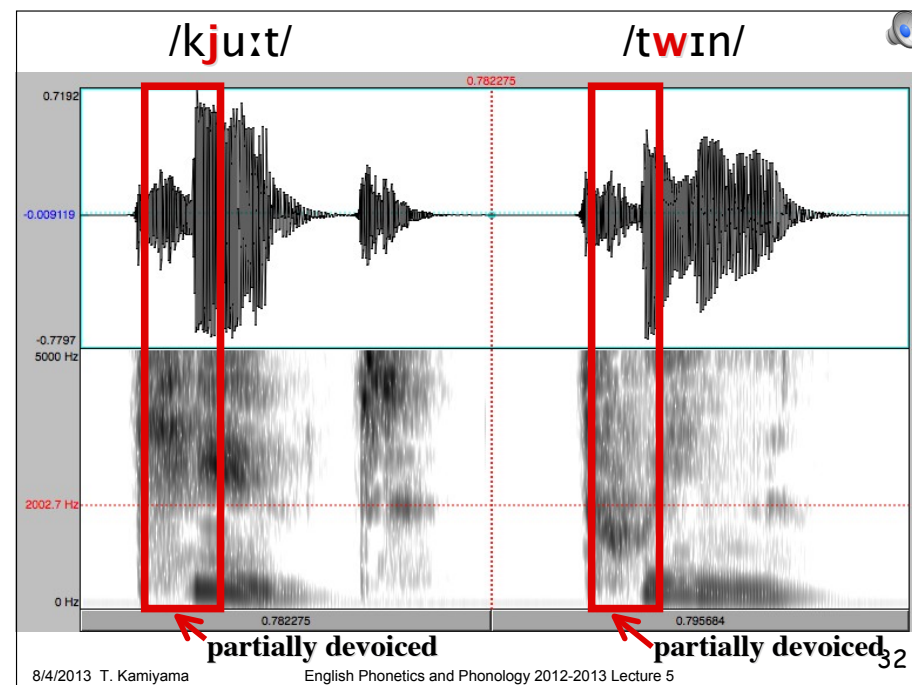
Approximants: After a word-initial plosive

- Observe the lateral approximant in the following words:
- /k^laɪs/
- /g^laɪs/
- Then compare them with the consonants at the beginning of the following words in French:
- /k^las/ (« classe »)
- /g^las/ (« glace »)



Approximants: After a word-initial plosive

- Observe the approximants in the following words:
- /k^juɪt/
- /t^wɪn/



Approximants: After a voiceless plosive

- In English, **approximants** /l r j w/ are often partially **devoiced** after a voiceless plosive, especially in a word-initial stressed syllable: [l̥ r̥ j̥ w̥], as in /klaɪs/ [kl̥ aɪs], /kræb/ [kr̥ æb], /kjʊt/ [k̥ j̥ uɪt], /twin/ [tw̥ ɪn].

Summary

	before /s/, after a plosive	after /s/	word- initial stressed	others	word- final
/p t k tʃ/ voiceless plosives and affricate	no aspiration		strongly aspirated	aspirated	(prec. V) clipping
/b d g dʒ/ voiced plosives and affricate			devoiced	can be devoiced	devoicing no clipping
/f θ s ʃ/ voiceless fricatives			voiceless		(prec. V) clipping
/v ð z ʒ/ voiced fricatives			voiced		devoicing no clipping
/l r j w/ approximants preceded by a plosive			partially devoiced		