



Unit 8

Vowels (3)

Some differences between English and German vowels and diphthongs

Print version of the
Phonetics with Listening Practice (British)
presentation given on
Tuesday 04 June 2024

Robert Spence, English Department, Saarland University

English Phonetics: Unit 8:
/ˈɪŋ ɡlɪf ə ˈnet ɪks ˈjuːn ɪt ˈeɪt/

8.1

Vowels (3)
[ˈvaʊətz ˈθɪː]

Some differences between English and German vowels and diphthongs
[ˈsʌm ˈdɪf.jənsəz bə ˈtwiːn ˈɪŋɡlɪf ən ˈdʒɜːmən ˈvaʊətz ən ˈdɪfθɒŋz]
[ˈsʌm ˈdɪf.jənsɪz bɪ ˈtwiːn ˈɪŋɡlɪf ən ˈdʒɜːmən ˈvaʊətz ən ˈdɪfθɒŋz]

8.2

1 Goals

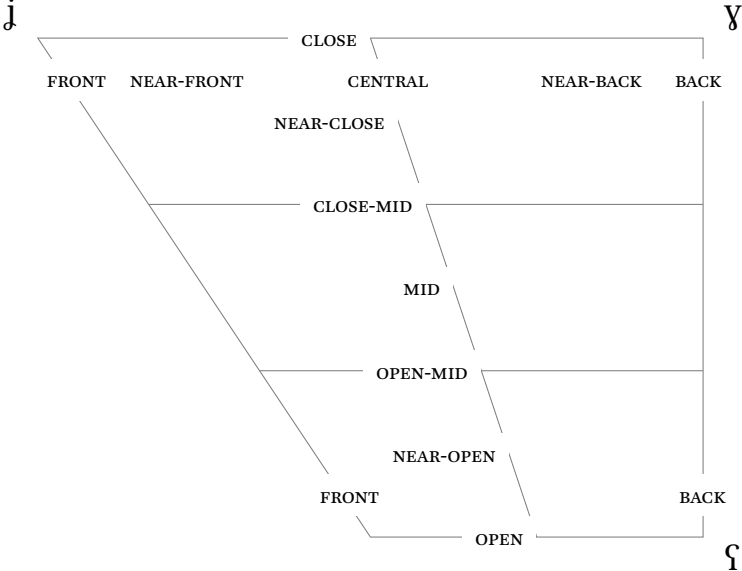
The goals of today's session are:

1. To compare and contrast the typical phonetic realizations of the vowel and diphthong phonemes of English and German
2. To practise some of the English vowels and diphthongs that can be problematic to speakers of various other languages.
3. To begin comparing and contrasting the vowels and diphthongs of some of the main dialects of English (such as RP, General American, Australian English, New Zealand English).
4. To encourage students to explore the remaining materials in the folder www.spence.saar.de/courses/phoneticswithlistening/unit08_20241/

8.3

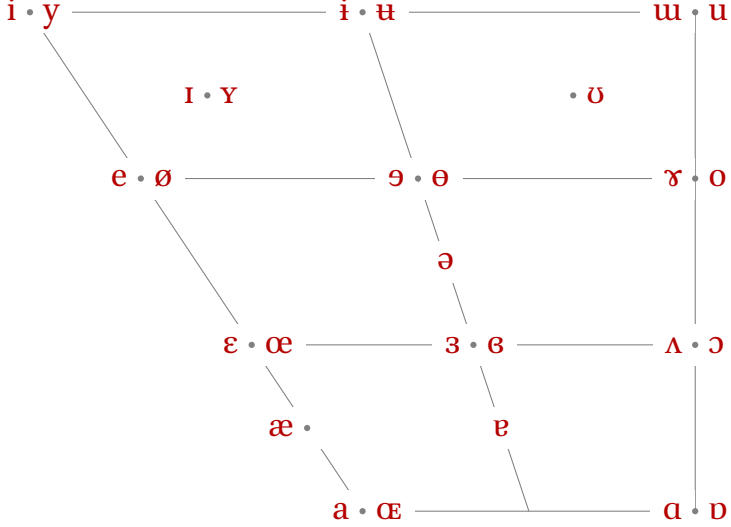
2 Experiment

Vowel Quadrilateral



8.4

Cardinal Vowels



8.5

Slides from previous iterations of this course

The remaining slides are from previous iterations of this course.

8.6

3 English vowels and diphthongs (schematic)

English vowels and diphthongs (schematic)

- The following slides constitute a tabular list of all English vowels and diphthongs (dialect: Southern British).
- The representation is highly schematic, based on a stylized vowel “square”. But even the standard “vowel quadrilateral” is already quite stylized anyway.
- We’ll do a quick overview, concentrating on noticeable differences between some of the main varieties of English (e.g., “RP”, Southern British, Northern British, General American, Australian), then zero in on key differences between German and English vowels and diphthongs.
- We’ll keep the IPA character picker a mouseclick away:
- <http://westonruter.github.io/ipa-chart/keyboard/>

8.7

Some terms and definitions (1): ‘stressed’

- A syllable can be either ‘stressed’ or ‘unstressed’, depending on where it occurs within the foot.
- Assuming there is no ‘silent beat’, the *first* syllable in the foot (the Ictus) is ‘stressed’, all other syllables within that foot (the Remiss) are ‘unstressed’.
- Example: / **Ar**th-ur and / **Ma**y have / **left** for / **It**-a-ly — the beginning of each new foot is shown by a slash; the stressed syllables are printed in boldface type; all other syllables are unstressed.

8.8

Some terms and definitions (2): ‘checked’ vs. ‘unchecked’ vowels/Nuclei, ‘open’ vs. ‘closed’ syllables

- A syllable consists of an Onset followed by a Rhyme; the Rhyme consists of a Nucleus followed by a Coda.
- The Nucleus may be ‘checked’ (i.e. its vowel may be cut off abruptly) or ‘unchecked’ (i.e. its vowel may be allowed to unfold fully).
- In addition, the syllable may be ‘open’ or ‘closed’, depending on whether or not the Coda element is realized by a consonant.
- Example: / **Ar**th-ur and / **Ma**y have / **left** for / **It**-a-ly — the Nucleus is ‘checked’ in **left** and **It**, ‘unchecked’ in **Ar**th and **Ma**y (note that the Onset is empty in **It** and **Ar**th); —the syllable is ‘open’ in **Ma**y, ‘closed’ in **Ar**th, **left** and **It**.
- These factors play a significant role in determining what vowels or diphthongs can occur in a syllable...

8.9

Some terms and definitions (3): ‘reduced’

- If a syllable is ‘unstressed’ in English, it can (and typically does) contain a ‘reduced’ vowel — perhaps shortened in quantity, or simplified in quality, or both.
- shortened in quantity: <u> [u] (not [u:]) in <rubella> [ru'belə] (not [ru:'belə]) (N.B.: This occurs in German, too; but the next one does not:)
- simplified in quality: the vowel (or diphthong) tends to become more like the vowel [ə] — a mid central vowel with almost no features.
- e.g.
[fəʊ'netɪks fə:'ɪvə] →
[fə'netɪks fə'ɪvə]

8.10

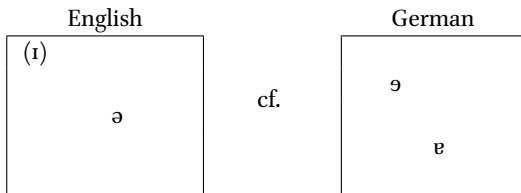
Short vowels in stressed or unstressed closed syllables

English		German															
<table style="border-collapse: collapse; width: 100%; text-align: center;"> <tr><td style="padding: 2px 10px;">ɪ</td><td style="padding: 2px 10px;">ʊ</td></tr> <tr><td style="padding: 2px 10px;">e</td><td style="padding: 2px 10px;">ʌ</td></tr> <tr><td style="padding: 2px 10px;">æ</td><td style="padding: 2px 10px;">ɒ</td></tr> </table>	ɪ	ʊ	e	ʌ	æ	ɒ	cf.	<table style="border-collapse: collapse; width: 100%; text-align: center;"> <tr><td style="padding: 2px 10px;">ɪ</td><td style="padding: 2px 10px;">ʏ</td><td style="padding: 2px 10px;">ʊ</td></tr> <tr><td style="padding: 2px 10px;">ɛ</td><td style="padding: 2px 10px;">œ</td><td style="padding: 2px 10px;">ɔ</td></tr> <tr><td colspan="3" style="padding: 2px 10px;">a</td></tr> </table>	ɪ	ʏ	ʊ	ɛ	œ	ɔ	a		
ɪ	ʊ																
e	ʌ																
æ	ɒ																
ɪ	ʏ	ʊ															
ɛ	œ	ɔ															
a																	

- All six English sounds are distinctively different, i.e. they are phonemes
- /sɪks/, /seks/, /sæks/, /sɒks/, /sʌks/, /sɒks/ are the six different words <six>, <sex>, <sax>, <socks>, <sucks>, <sooks>.
- We'll draw the exact locations of the phonetic realizations of these phonemes on the proper 'vowel quadrilateral' on the whiteboard; and see your handouts from Eckert and Barry (Unit 4) and the Longman Pronunciation Dictionary (Unit 5a / 5b).
- The phoneme /ʌ/ varies considerably in its phonetic realization from dialect to dialect. (Why?)
- Which vowel letters can be used to write the phoneme /ʌ/ in English?

8.11

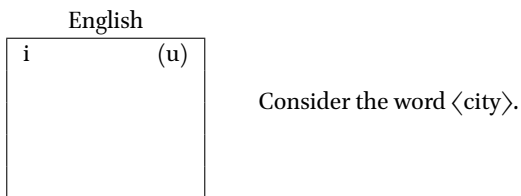
Reduced short vowel(s) in unstressed open or closed syllables



- Australians and Americans tend to use only the "schwa": <The wicked witch> ('die böse Hexe') [ðə 'wɪkəd 'wɪtʃ]
- Speakers of Southern British English would say: [ðə 'wɪkɪd 'wɪtʃ]
- Note that the German "schwa" is different from the English one.
- Compare English <bitter> ['bɪtə], German <bitte> ['bɪtə], German <bitter> ['bɪtɐ].

8.12

Unchecked vowel(s) in unstressed open syllables (1)



- Some dictionaries give the pronunciation as /'sɪtɪ/
 - This breaks the rule that /ɪ/ (like all other short vowels) can only occur in closed syllables.
 - But it does in fact correspond to the pronunciation used by many upperclass speakers of Southern British English.
- Some highschool English textbooks give the pronunciation as /'sɪtɪ:/
 - This tends to encourage an awkward rhythm in German English-learners.
 - But it does in fact correspond to the pronunciation used in some parts of Britain.

8.13

Unchecked vowel in unstressed open syllables (2)

- The modern trend seems to be: to give the pronunciation as /'sɪtɪ/
 - This final vowel is unchecked, and potentially tense, but nevertheless short
 - Eckert & Barry give an elegant solution by saying that the English phoneme /ɪ:/ has two allophones, [i:] as in <beat> and [ɪ] as in <happy>

8.14

Long vowels

<p>English</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">i:</td> <td style="padding: 5px;">u:</td> </tr> <tr> <td style="padding: 5px;">ɜ:</td> <td style="padding: 5px;">ɔ:</td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;">ɑ:</td> </tr> </table>	i:	u:	ɜ:	ɔ:		ɑ:	cf.	<p>German</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">i:</td> <td style="padding: 5px;">y:</td> <td style="padding: 5px;">u:</td> </tr> <tr> <td style="padding: 5px;">e:</td> <td style="padding: 5px;">ø:</td> <td style="padding: 5px;">o:</td> </tr> <tr> <td style="padding: 5px;">ɛ:</td> <td style="padding: 5px;"></td> <td style="padding: 5px;">a:</td> </tr> </table>	i:	y:	u:	e:	ø:	o:	ɛ:		a:
i:	u:																
ɜ:	ɔ:																
	ɑ:																
i:	y:	u:															
e:	ø:	o:															
ɛ:		a:															

- There are no front rounded vowels in English.
- The long close vowels in English tend to be slightly diphthongized (closing diphthongs):
- The other long vowels in English tend to alternate with centering diphthongs.

8.15

Closing (=‘verengende’) diphthongs

<p>English</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">eɪ</td> <td style="padding: 5px;">ɔɪ</td> </tr> <tr> <td style="padding: 5px;">aɪ</td> <td style="padding: 5px;">[aɪ]</td> </tr> </table>	eɪ	ɔɪ	aɪ	[aɪ]	<p>English</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">əʊ</td> </tr> <tr> <td style="padding: 5px;">[əʊ] aʊ</td> </tr> </table>	əʊ	[əʊ] aʊ	<p>German</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">ɔʏ</td> </tr> <tr> <td style="padding: 5px;">[aɪ] aɪ aʊ [aʊ]</td> </tr> </table>	ɔʏ	[aɪ] aɪ aʊ [aʊ]
eɪ	ɔɪ									
aɪ	[aɪ]									
əʊ										
[əʊ] aʊ										
ɔʏ										
[aɪ] aɪ aʊ [aʊ]										

- IPA symbols are placed roughly at the starting position of the diphthong, i.e. the position from which the gliding movement begins.
- /əʊ/ was originally /oʊ/
- its original partner /eʊ/ has turned into /ju:/
- with the partner absent, there’s no ‘pressure’ on /oʊ/, so it can ‘take up all the space’ — becoming /əʊ/ (or even /eʊ/!)
- Fun fact: <mew>, which for Shakespeare was the noise made by a cat (/mɛʊ/), is now the noise made by a kitten (/mju:/)
- https://en.wikipedia.org/wiki/Great_Vowel_Shift

8.16

Centering diphthongs

ɪə	ʊə
eə	(ɔə)

- In most varieties of English there is no difference between /ʊə/, /ɔə/ and /ɪə/.
- Some books write /eə/, others /eə/.

8.17

Triphthongs?

eɪə	əʊə	ɔɪə
aɪə	aʊə	

- These tend to lose the middle element: /eɪə/ becomes [e(:)ə], etc.
- /aɪə/ and /aʊə/ go one step further, turning into the monophthongs [a:] and [ɑ:]: <tire> /taɪə/ [tʰa:], <tower> /taʊə/ [tʰɑ:]
- Not everyone recognizes the existence of triphthongs; a triphthong may simply be a diphthong followed (in the next syllable) by a schwa.
- But note the difference between disyllabic <prayer> (‘Betender’) /ˈpreɪ.ə/ and monosyllabic <prayer> (‘Gebet’) /preə/

8.18

4 Differences German/English

Differences German/English

- Now let's look in more detail at the differences between the vowels and diphthongs of English and those of German
- Examine the figures on pages 111 and 149 of Eckert and Barry: http://www.spence.saar.de/courses/phoneticswithlistening/unit08_20241/B__EN-DE_Comparison/EN-DE_1_Vowels_Eckert_and_Barry.pdf
http://www.spence.saar.de/courses/phoneticswithlistening/unit08_20241/B__EN-DE_Comparison/EN-DE_2_Diphthongs_Eckert_and_Barry.pdf
- Draw several empty vowel quadrilaterals.
- Consult the list of differences on your handout: http://www.spence.saar.de/courses/phoneticswithlistening/unit05_20211/differences/differences.pdf
- Don't be afraid of using diacritic symbols such as [ɔ̃] [ɛ̃] [ĩ], [ï], ...consult your printout of the IPA!
- You might also like to look at the diagrams from the Longman Pronunciation Dictionary: http://www.spence.saar.de/courses/phoneticswithlistening/unit05_20211/LPD/