

## Assignment

### 2–3 Phonetics of vowels and consonants

- 1 Answer the following questions referring to the words given below.

*pit* [ɪ]      *pet* [ɛ]      *pat* [æ]      *pot* [ɔ]      *porter* [o:], [ə]      *part* [ɑ:]

- Which word(s) contain(s) a front vowel?
  - Which word(s) contain(s) a central vowel?
  - Which word(s) contain(s) a back vowel?
  - Which word(s) contain(s) a low back vowel?
- 2
- We often use the term *umlaut* to refer to a kind of diacritic (two dots over a letter) in languages such as German, e.g. in the case of the plural forms of words like *Fuß* [fu:s] ‘foot’ and *Sohn* [zo:n] ‘son.’ *Füße* [fy:sə] ‘feet’ and *Söhne* [zø:nə] ‘sons.’ In a linguistic sense, it means a sound change in which a vowel becomes more similar to the vowel following it, i.e. it is a type of assimilation. In Old German, for instance, [u] and [o] turned into [y] and [ø] in words like *Fuß* and *Sohn* due to a following [i] (which has since disappeared/been modified). Which feature of the vowels [u] and [o] changed?
  - Similarly, in Old English, the plural of the word [mu:s] ‘mouse’ was [my:s] ‘mice.’ However, in Middle English [my:s] became [mi:s]. What happened to the Old English vowel [y], which of its features changed?
- 3 At the following link you can find a YouTube playlist with MRI recordings of a person pronouncing consonants:  
<https://www.youtube.com/playlist?list=PLKGCiuMS-nxoyh3I9dFG3kJyP4E9zAyXB>  
Watch and listen to videos 1, 3, 7, 8, 9, 11, 15, 16, 17, 18, 19, 21, 22 and 32, which contain sounds found in English too. Then copy the descriptions of the consonants from the titles of the videos on your assignment sheet and write the IPA symbols of the sounds next to them (e.g. video 7 – voiceless glottal fricative: [h]). (The sound in video 21 can also be postalveolar.) (Go to <http://ipa.typeit.org/full/> to type IPA symbols.)
- 4 Solve the following equation: find x.  
(/p, t, s, k, g, ʤ/ + nasals) – velars – voiced consonants – alveolars = x
- 5 Find the odd one out. Explain your choice as there might be more than one solution.
- |            |              |          |             |
|------------|--------------|----------|-------------|
| a. p       | b. f         | c. k     | d. t        |
| a. t       | b. s         | c. f     | d. l        |
| a. p       | b. j         | c. w     | d. r        |
| a. g       | b. z         | c. v     | b. k        |
| a. plosive | b. nasal     | c. velar | d. alveolar |
| a. glide   | b. fricative | c. nasal | d. alveolar |
- 6 Go to <https://www.youtube.com/watch?v=kzo45hWXRWU> and watch the video from the beginning to 0:57, in which part you can learn about the McGurk effect. What are the phonetic differences between the two sounds articulated in the video?