## Basic phonetics review

For the phonetics quiz, you are responsible for the consonant symbols, vowel symbols, and phonetics terms in the charts in (1) and (2). If you would like extra review, the Hayes (2009: Ch 1) reading, especially $\S 1.3-\S 1.5$, will help you. (You are not responsible for specific terminology in the Hayes reading unless it also appears on this handout.)

There will be time for questions and discussion in class before the day of the quiz-please prepare by bringing any questions you would like to ask.
(1) For any consonant on the chart below, be able to describe it in terms of these properties:

- voicing:
- place of articulation:
- nasality:
- for liquids only:
- constriction type:


## voiced or voiceless

see chart below (watch out for [w])
oral or nasal (don't forget this one!)
lateral or retroflex/central
stop, fricative, affricate, liquid, or glide

Table 2.12 English consonants: places and manners of articulation

| Place of articulation |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Manner of articulation |  | Bilabial Labiodental Interdental Alveolar |  |  |  | Alveopalatal Palatal |  | Velar Glottal |  |
| Stop | voiceless | p |  |  | t |  |  | k | $?$ |
|  | voiced | b |  |  | d |  |  | g |  |
| Fricative | voiceless |  | f | $\theta$ | s | ¢ |  |  | h |
|  | voiced |  | v | б | z | 3 |  |  |  |
| Affricate | voiceless |  |  |  |  | t $\int$ |  |  |  |
|  | voiced |  |  |  |  | d3 |  |  |  |
| Nasal | voiced | m |  |  | n |  |  | 1 |  |
| Liquid | voiced lateral |  |  |  | 1 |  |  |  |  |
|  | voiced retroflex |  |  |  | 1 |  |  |  |  |
| Glide | voiced | (w) |  |  |  |  | j | (w) |  |

From O'Grady et al. (2005), Contemporary Linguistics. Further modified for Ling 200.

## Notes:

(a) Remember that a "nasal" ( $[\mathrm{m}, \mathrm{n}, \mathrm{n}]$ ) is technically a nasal stop.
(b) The Hayes reading uses the term palato-alveolar in place of alveopalatal. Either term (or post-alveolar) is fine for you to use.
(c) [a] may be classified as retroflex (as in the chart) or central (as in the Hayes reading).
(2) For any vowel on the chart below, be able to describe it in terms of these properties:

- height:
- backness:
- rounding:
- only where necessary:
or lax
- the term that corresponds to constriction type for vowels is just vowel

Table 2.28 Modified IPA chart for vowels. $\bigcirc$ = tense; $\square$ lax.


From O'Grady et al. (2005), Contemporary Linguistics. Further modified for Ling 200.

## Notes:

(a) This chart is not specific to English; these are common vowels in many languages.
(b) The Hayes reading does not address the terms tense/lax.

- For now, use these terms only to distinguish pairs that are otherwise identical.
- One way of defining these terms is to say that tense vowels are more peripheral in the vowel space than their lax counterparts, which are more central.
(c) The vowels [ə] and [ $\Lambda$ ] will both end up classified as mid central unrounded vowels (note that they do not participate in a tense/lax contrast on this chart). Don't worry about this for now. A common transcription system uses [ə] for an unstressed vowel and $[\Lambda]$ for a stressed one, but this distinction is not assigned for our quiz.
(d) Technically, [a] is a symbol for a back vowel and [a] is a symbol for a central one. But many books use [a] to transcribe a low back vowel, so for the quiz you may classify [a] as either central or back. (Confusingly, the British phonetics tradition also uses the symbol [a] for a low front vowel. You can see this on the official IPA chart. However, in this class, the symbol [a] will NEVER be used for a front vowel in handouts or data sets.)
(3) On the phonetics quiz, using the information from (1) and (2) above, be able to:
(a) Convert between a phonetic symbol and the associated phonetic properties.
(b) Relate a speech sound to a vocal-tract diagram. (Vowels, glides = multiple-choice.)
- See Figure 1.4 in the Hayes reading and the "Phonetics review links" web page for extra practice with vocal-tract diagrams.
(c) State similarities and differences between speech sounds.

