

The background of the slide is a close-up photograph of a dark, textured surface, possibly metal or stone, featuring intricate, raised scrollwork patterns. The patterns consist of multiple concentric, swirling lines that create a sense of depth and movement. Small, dark, circular elements are scattered throughout the design, resembling rivets or decorative studs. The overall color palette is muted, with shades of grey, black, and dark brown.

Phonetics

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LING 101 Summer Session II

Overview

- Homeworks
- Manners of Articulation
 - Manners of Articulation Practice
- Brief Consonant Review
 - Consonant Identification Practice
- Vowels
 - Vowel Description Practice
- Segmentation and Transcription Practice

Grading

- Homeworks are going to be graded on a scale from 0 to 4:
 - 4 points : The assignment has no or few errors and demonstrates that you understand the material well.
 - 3 points: The assignment indicates a good-faith effort, but it has more than a few incorrect answers or shows an incomplete understanding of the material.
 - 2 points: The assignment is done superficially and/or is mostly incorrect.
 - 0-1 point: The assignment was not turned in, turned in late, or turned in significantly incomplete.
- The homework average of 4=A, 3=B, 2=C, etc.
 - Intermediate values correspond to +/- grades

Last Time

- Segments vs. Spelling
- Voicing
- Place of Articulation

Manner of Articulation

- A factor also used by some languages to distinguish between consonants is the **type of constriction** made in the vocal tract. This is referred to as the Manner of Articulation, and corresponds to the y-axis on the IPA chart

Manner of Articulation

- **Stops** are segments where airflow is completely cut off from escaping to the outside world.
 - Because these segments can't be audibly prolonged, you can't easily test them for voicing using the larynx-vibration test. Instead, you must simply memorize the voicing for the stops.
- [p] [b] [t] [d] [k] [g]

Manner of Articulation

- **Nasals** are segments where airflow through the oral cavity is completely cut off, but air is allowed to escape through the nasal cavity (i.e. the velum is lowered).
 - Unlike **stops**, since airflow is still allowed to escape to the outside world, these segments can be prolonged.
 - In English, all **nasals** are voiced. (This may not be the case for all languages, though)
 - You can test for nasals by touching a finger to the tip of your nose as you produce the segments.
- [m] [n] [ŋ]

Manner of Articulation

- **Fricatives** are segments where the air is forced through a very narrow constriction in the oral cavity, causing the airflow to become turbulent and creates a hissing or buzzing sound.
- Tip: to remember the name of these, it's like the airflow is undergoing friction.
- Some fricatives are noisier than others. The noisier fricatives (and affricates; discussed next) are called **stridents** or **sibilants**.
 - e.g. If you were trying to shush someone in a theatre, would it be more effective to silence them with a [ffffffff] or a [zzzzzzzz]?
- [f] [v] [θ] [ð] [s] [z] [ʃ] [ʒ] [h]

Manner of Articulation

- **Affricates** are, articulatorily speaking, a combination of an oral stop followed by a fricative.
 - They start out like stops, but they have a gradual rather than a rapid release of air, causing a fricative after.
- As we continue on, it is important to remember that affricates are individual segments, not a combination of segments.
- Their place of articulation is the same as the fricatives that they correspond to.
- [tʃ] [dʒ]

Manner of Articulation

- **Approximants** are consonants which have “relatively free flow of air with no friction” (*CL*, p. 52).
- In phonology, there are two groups of segments within Approximants that tend to pattern together:
 - **Liquids**
 - **Glides**

Manner of Articulation

- **Liquids**

- In English, both liquids are alveolar, but can be distinguished from each other based on manner of articulation.

- [l] is a lateral, meaning that the center of the oral tract is obstructed, but air flows along the sides of the tongue.
- [ɹ] is a retroflex and is articulated with the tongue tip curled behind the alveolar ridge or the back of the tongue is bunched up.

Manner of Articulation

- **Glides**

- These are produced like a rapidly articulated vowel, but they are different based on their use.
 - [j] is a **palatal** segment; it essentially acts like a very quickly articulated [i].
 - [w] is both **labial** and **velar**, so it is typically described as a **labiovelar** segment. It is similar to a quickly articulated [u].
 - You can tell what vowels these glides correspond to if you say words with them very slowly.
 - E.g. say ‘yes’ and ‘win’ very slowly

Manner of Articulation Practice

- Provide the Manner of Articulation of the following segments:
 - [ð] as in *this*
 - [l] as in *lean*
 - [k] as in *kick*
 - [f] as in *fish*
 - [w] as in *wish*
- Manners of Articulation: Stops, Nasals, Fricatives, Affricates, Approximants (liquids or glides)

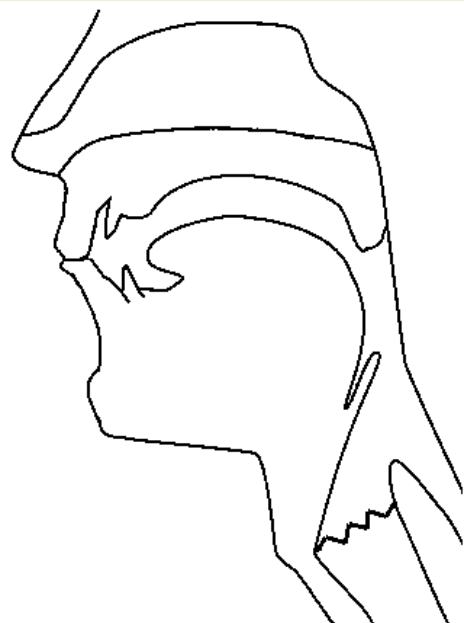
Consonants

- There are 3 things you need to know to identify for consonants:
 - Voicing
 - Place of Articulation
 - Bilabial, Labiovelar, Dental, Alveolar, Alveopalatal, Retroflex, Palatal, Velar, Uvular, Pharyngeal, Glottal
 - Manner of Articulation
 - Stops (Oral, Nasal), Fricatives, Affricates, Approximants (Liquids, Glides)
- Consonants differ from vowels both in how they are used and how they are articulated.

Consonant Identification Practice

- Based on the mid-sagittal views provided, what consonant is being shown?

1.



2.



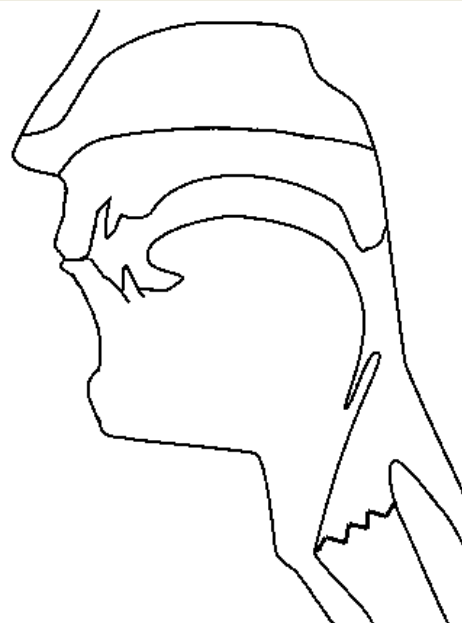
3.



Consonant Identification Practice

- Based on the mid-sagittal views provided, what consonant is being shown?

1.



Voiced Bilabial Stop

2.



Voiced Alveolar Nasal

3.



Voiceless Velar Stop

Vowels

- Vowels are sounds that are produced with a more open vocal tract, and behave differently in syllable structure (more details soon)
- There are four factors to consider for vowels:
 - Height
 - Backness
 - Rounding
 - Tense vs. Lax

Vowels

- **Height**

- Refers to the vertical position of the tongue body.
 - [bit] *beet*
 - [bɛt] *bet*
 - [bæɪt] *bat*
- These vowels show the three height positions **high, mid, low**
- Something to think about: What does your doctor tell you to say when he/she is trying to look down your throat? Why would that help?

Vowels

- **Backness**

- Indicates the horizontal position of the tongue body.

- [pæt] *pat*

- [pʌt] *putt*

- [pat] *pot*

- These vowels show the three backness positions:
front, central, back

Vowels

- **Roundness**

- This is determined based on whether the lips are rounded or not.

- [bit] *beet*

- [but] *boot*

- These vowels show the distinctions **unrounded** and **rounded**

Vowels

- **Tense vs. Lax**

- This refers both to relative tongue position and length of the vowel.

- **Tense** vowels tend to be longer and have a more exaggerated or extreme (i.e. less central) tongue position.

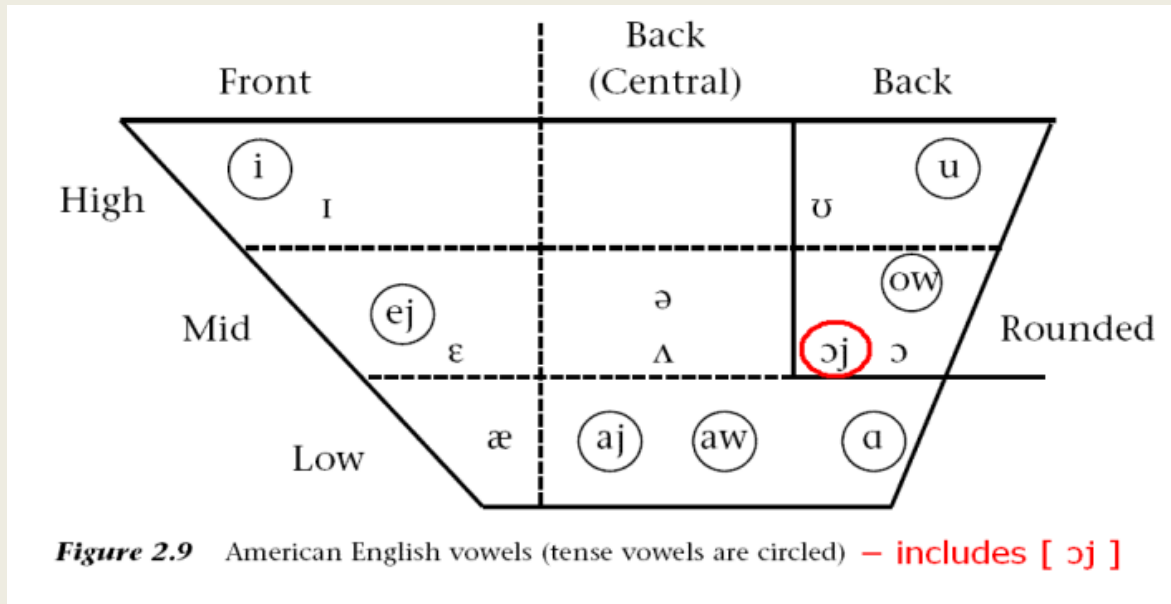
- **Lax** vowels tend to be shorter and be relatively more central in articulation.

- [bit] *beet* vs. [bɪt] *bit*

- [but] *boot* vs. [fʊt] *foot*

Vowels

- The vowel chart is set up to generally mimic the placement of the tongue in the mouth for each vowel.
- Height is along the y-axis, and backness is along the x-axis.
- Rounding is indicated in the pairs: unrounded-rounded. Tenseness is indicated in your book with circles.



- Be careful to not confuse the **mid** and **central** classifications.

Vowels

- **Diphthongs**

- Vowels that begin with the articulation for one vowel and end with another.
- We indicate this transition by adding a glide at the end of the vowel (either [j] or [w]). Just like the affricates, these are considered individual segments, not a combination of segments.
- [ej] in *bay* and [ow] in *bow* are examples of **minor diphthongs**, because their transition is minimal. (They maintain backness and are close in height)
- [aj] in *ply*, [aw] in *plow*, and [ɔj] in *ploy* are **major diphthongs**, because their transition is more extreme.
- **All diphthongs are considered tense.**
- Note that this works when the transition is into a glide, not from a glide.
 - E.g. [pju] *pew* has three segments while [pej] *pay* has only two.

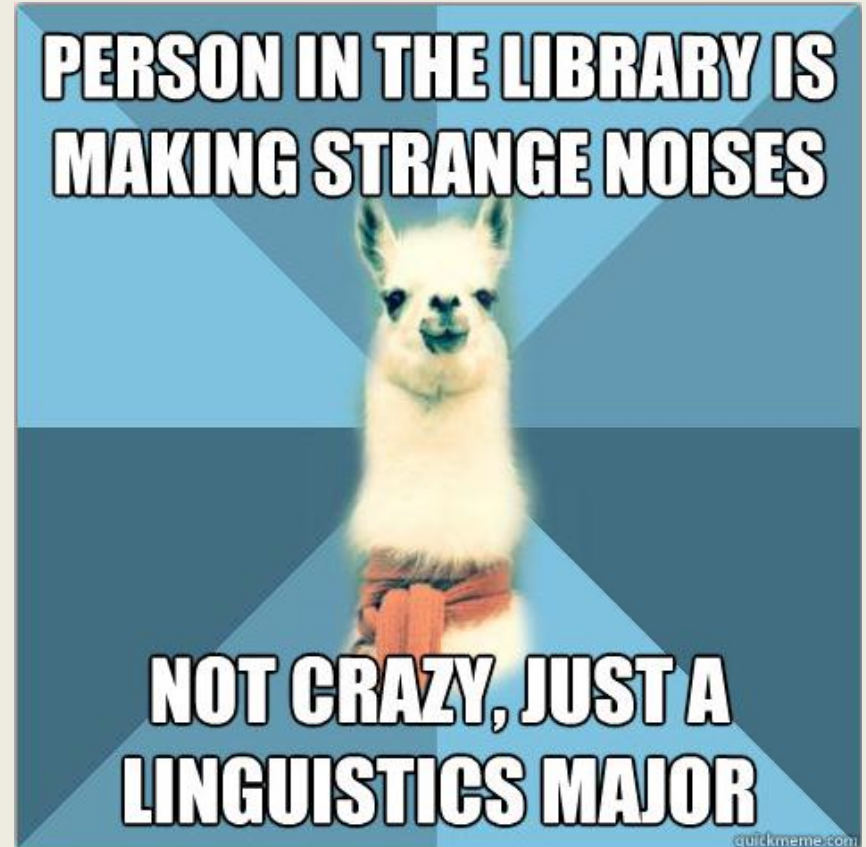
Vowels

- **Some final comments:**

- There are some dialects which have an [o] vs. [ɔ] distinction. As in *cot* vs. *caught*. Do you have this distinction?
- The main difference in English between [ʌ] and [ə] is that the former is used as a **stressed** sound (e.g. *cup*) and the other is used as an **unstressed** sound (e.g. *sofa*). You're not going to be asked to distinguish between these.

Transcribing

- Remember – spelling is not the same as segmentation
- First, figure out how many segments there are in the word.
- Then, focus on each segment and determine which IPA symbol best corresponds.



Segmentation Practice

- How many segments are in the following words?
 1. Puritan
 2. Tail
 3. Crunch
 4. Explosion

Transcription Practice

- Turn to p. 57 and work on exercise 10, (b), (d), (i), (o), and (q):
 - kid
 - despise
 - peel
 - explode
 - spell

Phonetics Resources

- [Peter Ladefoged's Interactive IPA chart](#)
- [Interactive Sagittal Section by Daniel Hall](#)
- [University of Iowa's Interactive Sagittal Section](#)

Homework

- Due Tomorrow
 - Writing Assignment 1
 - Writing Assignment 2
 - Homework Assignment:
 - p. 55, Exercise 2
 - p. 55, Exercise 3, (a) – (h)
 - p. 56, Exercise 5, (a) – (e)
 - p. 56, Exercise 6, (e) – (h)
 - p. 56, Exercise 7, (e) – (h)
 - p. 57, Exercise 10, (a), (c), (g), and (h)
- Reading for today:
 - Ch. 2, sections 5-7
- Reading for tomorrow:
 - Ch. 3, sections 1- 3 and the Appendix

Have a good day!

