Describing Language 2A

1. Speech sounds
   1. Acoustics – study of the physical properties of sounds
   2. Sound spectrogram – amount of energy present in a sound when frequency is plotted against time
      1. Formants – peak energies in a spectrogram
      2. Especially helps use understand vowels
   3. Phonetics – acoustic detail of speech sounds and how they are spoken
   4. Phonology – sound categories each language uses
      1. Aspirated – sound that is made with an audible breath (pin – think about pursing your lips)
      2. Unaspirated – sound that is made without an audible breath (spin)
   5. Phoneme – basic unit of sound
      1. Sounds are considered the same phoneme if changing them does not change the meaning of the word (ka-nife)
      2. Allophones – phonetic variants of phonemes, different ways to say the same phoneme that does not change the meaning.
         1. For example, the L-R problem (fa-ra-ra-ra-ra)
      3. Ways to study phonemes – articulatory, auditory, acoustic
   6. Minimal pairs – two words in a language that differ by one sound (cave, wave)
   7. International Phonetic Alphabet – standard way of representing phonemes (make copy for students – maybe make them write out something in phonemes?)
      1. We have this because there is not a one-to-one correspondence with symbols and sounds
      2. This is called the “many to many problem” when learning to read
   8. American English versus British English – give the Eddie Izzard clip
      1. Received Pronunciation – or the queen’s English
      2. Dialects
         1. Describe all the accents you can think of in English
         2. What causes them?
         3. General American – accentless speech where you can’t tell were a person is from
         4. Used by SWBell when recording the phone sayings
         5. Where is that though? (Midwest) (Illinois, Nebraska, Iowa)
            1. political comedian [Stephen Colbert](http://en.wikipedia.org/wiki/Stephen_Colbert) worked hard as a child to reduce his [South Carolina](http://en.wikipedia.org/wiki/South_Carolina) accent because of the common portrayal of Southerners as stupid on American television.
   9. Larynx – voice box! (show picture)
   10. Vowels – a e I o u – are made by modifying the vocal tract – mostly your mouth is open
       1. (try to pronounce b with your mouth open)
       2. The differences in vowels is determined by the shape of the tongue (meat has a high front tongue)
       3. Diphthong – a type of vowel that combines two vowel sounds (oy! Ay!)
   11. Consonants – made by closing or restricting some part of the vocal tract (p b t d k g), usually have to make with a vowel sound (bee)
       1. Classifying consonants – voiced or not, way articulated
          1. Place of articulation – place in the vocal tract that that is closed to articulate the word (p and b with the mouth, t and d with the tongue to the teeth)
             1. Voicing – consonants produced with vibration of the vocal cords (understanding the difference between p and b)
             2. Types of places:

Bilabial – lips

Alveolars – behind and above your teeth (tea)

Dentals – tongue on the back of your teeth (the)

Labiodentals – putting your lower lip to the top teeth (ffff)

Postalveolar – tongue on the roof of your mouth behind the ridge on the palate – she vision

Palatal – tongue to the middle of the palate – you

Velars – putting your tongue to the soft palate (very back of your mouth), get

* + - * 1. Sounds with out the tongue:

Voiceless glottal fricative – h sounds hit him

Glottal stop – sound produced by closing and opening the glottis bottle (tends to be a hard sound)

* + - 1. Manner of articulation – the way in which the airstream is constricted in speaking – i.e. stop
         1. Stops are complete interruptions in airflow (t)
         2. Fricatives – formed so that air rushes through with a hissing sound (f)
         3. Affricatives – combination of brief stop followed by a constriction (cheese)
         4. Liquids – air flow around the tongue (l and r)
         5. Nasal – flows through nose cavity
         6. Glides or semi-vowels – transitions as we move from one vowel to another (way)
  1. Higher level sound structures
     1. Syllables – rhythmic unit of speech
     2. Monosyllabic – words with only one syllable
        1. Syllable onset – initial consonant or cluster
        2. Rime – end part of a word that produces the rhyme (tends to be vc or vcc), rant = r – ant
           1. Nucleus – central vowel
           2. Coda – final consonant
     3. Syllables are stressed differently, but in English they all have the same time, so we are a stressed time language
        1. Em-pha-sis on the wrong sy-lab-ble

1. Linguistic approaches to syntax
   1. Chomsky – language is innate, species-specific, and biologically pre-programmed
      1. Grammar – set of syntactic rules of language
      2. His idea was that the point of studying syntax was to understand/describe grammar
      3. Competence – our knowledge of our language
      4. Performance – our actual language ability, limited by our cognitive capacity
   2. Grammar - Minimalism
      1. Generative grammar – a finite set of rules that will produce or generate all the sentences of a language, does not generate non-sentences
      2. Also needs to explain how we know that sentences are related (I went to the store and bought an apple, this apple was bought yesterday by me at the store)
      3. And how children acquire the rules
   3. Syntax and phrase structure
      1. Phrase – structure rules – describe how words can be combined, sentences are created in a hierarchical fashion with **rewrite rules**
         1. Terminal elements – consisting of words
         2. Nonterminal elements – everything else
      2. Classes of words – major grammatical category in which a word belongs
         1. Nouns – can act as names, and can be subjects or objects of a clause, all things are nouns
         2. Adjectives – describing words
         3. Verbs – words that express actions, events and states, which have tenses
         4. Adverbs – word that modifies a verb
         5. Determiners word that determines the number of a noun (the a some)
         6. Propositions – word expressing a relation (to with from)
         7. Conjunctions – connects words within a sentence (and because)
         8. Pronouns – words that can stand for nouns of noun phrases (she he it)
      3. Content words – words that convey most of the meaning in a sentence (basically the words you need to understand the sentence)
      4. Function words – words that do the grammatical work of the language
   4. Sentence structure
      1. Phrases – group of words forming a grammatical unit beneath the level of a clause
         1. Noun phrase – grammatical phrase based on a noun
         2. Verb phrase – grammatical phrase based on a verb (usually broken down until V + NP)
      2. Clauses – group of related words containing a subject and a verb
         1. Subject – the word or phrase that the sentence is about
         2. Predicate – the part of the clause that gives information about the subject
      3. Constituents – a linguistic unit that is part of a larger linguistic unit
      4. Objects – a person thing or idea that is acted on by a the verb
      5. Transitive verbs – a verb that takes an object
      6. Intransitive verbs – a verb that does not take an object
      7. Ditransitive verbs – a verb that requires an direct and indirect object
      8. Modifiers – a part of speech that is dependent on another, modifies or qualifies in some way (the vampire with a lisp)
   5. Active versus passive
      1. Active – the subject of the sentence is doing the action of the verb
      2. Passive – the subject of the sentence is not doing the action of the verb
   6. Tree diagrams – can create a diagram of the sentence structure to understand the relationship between items in a sentence (underlying grammar)
   7. Recursion – our ability to create sentences is infinite, but the number of rules in a grammar is limited…
      1. Rule that uses a version of itself in its definition
      2. I know that he knows that I know.
   8. Iteration – grammar allows us to carry on repeating rules to create sentences
      1. I had ice cream and I ate ice cream and I love ice cream.
   9. Transformations -
      1. Phrase structure grammar cannot explain the relationship between sentences, although it does explain sentence creation.
      2. Transformations – a grammatical rule for transforming one syntactic structure into another (i.e. going from active to passive, or changing into a question)
      3. Transformational grammar – a system of grammar based on transformations
   10. Standard theory
       1. Three parts
          1. Semantic system – assigns meanings to the syntactic strings
          2. Phonological – how we pronounce things
          3. Syntax – rules (phrase – structure rules), and transformations
       2. Deep and surface structure
          1. Deep structure – the meaning of a sentence – part of semantic system and syntax
          2. Surface structure – the actual words, part of the transformation rules and phonological rules
          3. Using this distinction can help explain ambiguous sentences
   11. Other theories
       1. Optimality theory – surface forms of an expression results from the resolution of conflicts between underlying representations.
       2. Cognitive linguistics – language is part of general cognition