### I. Linguistics & Others

While there is a theoretical foundation (which is mostly what we're going to explore in this class), linguistics has ties to a lot of other disciplines. Examples:

Neuroscience: brain imaging studies of how language is processed and generally dealt with in the brain

Computer Science: automatic text translation, information retrieval (google.com)

Psychology: language processing studies, how language is learned

**Education**: second language learning, fixing language learning problems

**History**: how languages change over time

**Philosophy**: the meanings of words, unconscious logic of natural language

**Mathematics**: mathematical modeling of language processes (such as language learning & change)

Moral of the story: The study of language touches on many different areas because language has many different aspects to it.

### II. Theoretical Linguistics & Some Interesting Things Having To Do With It

#### A. Phonetics

- 1. articulation and perception of speech sounds
- 2. one interesting thing: why people have accents when they learn a foreign language

#### B. Phonology

- 1. patterning of speech sounds
- 2. one interesting thing: English plurals (unconscious generalizations)
  - i. dogs = dog + 's' = dog + /z/
  - ii. cats = cat + 's' = cat + /s/
  - iii. nonsense word: bofe, plural = bofes (sounds like bofe + /s/, not bofe + /z/)

# C. Morphology

- 1. word formation
- 2. one interesting thing: Why is a wetsuit different from a wet suit?

### D. Syntax

- 1. sentence formation
- 2. one interesting thing: Why is it that we vaguely know what's going on in *The slithy toves did gyre and gimble in the wabe*?

#### E. Semantics

- 1. interpretation of words and sentences
- 2. one interesting thing: Why can we say *The enchanted forest is a good place to hide* but it sounds odd to say *The rock is a good place to hide*?

# III. So Let's Talk About Language Already

### A. Language Specialization

- 1. humans seem to be evolutionarily adapted for language lungs supply air for speech, vocal cords produce vibrations for sounds, lips articulate vowels and consonants
- 2. newborns respond differently to human voices than to other kinds of sounds
- 3. humans seems to have an inborn neurological ability to deal with cognitive aspects of language word formation, structure, meaning interpretation.

## B. Language System Qualities

- 1. Creativity...within bounds
  - a. We say new things all the time to express our thoughts, feelings, etc. (creativity in sentence structure)

Ex: The brilliant purple hedgehog jumped neatly over the croquet ball. Bounds: \*Purple brilliant the jumped hedgehog ball the over croquet neatly.

b. We create new expressions.

Ex: Send an IM to Buffy  $\rightarrow$  IM Buffy

Bounds: Put Spike in the dungeon \*→ Dungeon Spike.

- 2. Linguistic Competence and Performance
  - a. **competence**: the ability to understand (novel) sentences & recognize was cannot possibly be a legitimate sentence
  - b. **performance**: the ability to produce (novel) sentences

#### 3. Grammar

- a. the mental system in every human being which allows humans to understand & produce sentences, as well as recognize what sentences aren't possible in a language
- b. parts of grammar (nearly unconscious knowledge) phonetics, phonology, morphology, syntax, semantics
- 4. "Generality"
  - a. all languages have a grammar
  - b. no two languages have exactly the same grammar
- 5. "Parity"
  - a. all grammars are equal (they get the job done communication)
  - b. because all grammars are equal, translation from one language to another is possible
  - c. no such thing as "bad" grammar in this sense that particular distinction comes from some grammars being more socially preferable than others
  - d. **descriptive grammar**: what linguists care about, what people actually use to communicate
  - e. **prescriptive grammar**: what your English teacher cares about, ex: "Never strand a preposition at the end of the sentence.", "Don't split infinitives."
- 6. "Universality"
  - a. all grammars are alike in basic ways
    - 1. ex: all languages have contrastive sounds which distinguish words from each other
    - 2. ex: all languages have some universal constraints → "He fooled Jack" can never mean "Jack fooled Jack" in any language
  - b. even when languages differ, they seem to differ only in specific ways
    - 1. ex: "What do you see?" (English) → "You see what?" (Chinese)
    - 2. for syntax, we like to call the specific ways languages differ *parameters*. So English and Chinese differ along one parameter (the wh-word placement for questions).
  - c. Variation is often constrained by strong tendencies rather than absolute prohibitions
    - 1. ex: word order  $\rightarrow$  95% of the world's languages are SVO, SOV or VSO. (But there are still 3 other possible orders: VOS, OSV, OVS)

- 7. "Mutability"
  - a. grammars can change over time the words, the structure, etc.
  - b. occasionally people lament the "downfall" of a language...but if language didn't "degenerate", we'd all still be speaking Old English
- 8. "Inaccessibility"
  - a. grammatical knowledge is subconscious
  - b. ex: knowledge of English plural
  - c. ex: Sarah went to school. \*Lily went to enchanted forest.

#### **Homework Questions**

1. Verb Creation: Describe the meaning of the *italicized* verbs in the sentences below. (In other words, give me a meaning that could be substituted into the sentence to make it make sense.)

Example: They *Amtraked* to London. *Amtrak* = go by means of Amtrak

- a) Sarah *glittered* herself from head to toe.
- b) Hermione *owled* a letter to Harry.
- c) Lucius *sneered* his way into the gathering.
- 2. Unconscious Knowledge of the Sound System: Which of the following words could be possible words of English and which couldn't be?

Example:  $sprake \rightarrow yes$ ,  $kprase \rightarrow no$ 

- a) nded
- e) veela
- b) dend
- f) vlee
- c) plem
- g) lvee
- d) mepl
- h) alvee
- 3. Unconscious Knowledge of Syntax: Which of the following sentences are possible sentences of English and which are not? For each unacceptable sentence, change it so it sounds acceptable.

Example:

The goblins' king left himself with nothing to do all day. (acceptable)

The goblins' king left themselves with nothing to do all day. (unacceptable, themselves → them)

- a) Jack is eager to head off on his quest.
- b) This is the wizard who I took a picture.
- c) Jareth made Sarah a promise.
- d) Jareth made a promise Sarah.
- e) That Buffy continually refuses his advances surprise Spike.
- f) Draco will follow the dragon to what city it flies to.