

Syllabus for HSSP Class 3390: How Language Works (Spring 2010)

Phonology - how sounds form speech

Sounds are not discrete like letters.
Phonemes: different languages divide sound space in different ways.
Variation: co-articulation, different voices, noise, ...
Categorical perception: adults do it, babies don't.
Context: dash/tash vs. dack/tack.
The McGurk Effect (demo): visual cues.

Morphology - how morphemes form words

Morphemes: parts with meanings.
Lexicon: storing the parts.
Affixes: prefixes, postfixes, and infixes.
Allomorphs: a and an.
The wug test: this is a wug. now there are two. there are two ____.
Polysynthetic languages: sentences as single words.
Free vs. bound: which morphemes can stand alone.
Derivational vs. inflectional: fixable vs. fixed.
Ambiguity and internal structure: ununlockable.

Syntax - how words form sentences

Meaning-independent: Colorless green ideas sleep furiously.
Ambiguity: I saw the man with the telescope.
Categories of words.
X-bar theory: phrases, heads, and binary-branching trees.
Constituents: complete sub-trees.
Recursion and infinity: N' -> N' PP
Argument structures and theta roles: I read the book vs. I put the book.
Movement: questions, passives.

Semantics - how sentences have meanings

Set theory, first-order logic, second-order logic.
Individuals, truth-values, and worlds.
Compositionality: meaning of whole = structure + meanings of parts.
Functions and the lambda notation.
Quantifiers and movement.
Pronoun reference and binding principles.
Ellipsis.

Acquisition - how babies learn language

Babies don't learn language by being told the rules.
No negative evidence: what is not a grammatical sentence.
But: infant-directed speech.
Word segmentation: statistical regularities.
Learning word meanings: this is a dog, but not, this is a between.
Mutual exclusivity and fast-mapping.
Shape bias in nouns.
Cross-situational word learning: co-occurrence.
Social cues.
Syntax: principles-and-parameters vs. item-based acquisition.