Bureaucracy:

HOUR EXAM MOVED TO 2/25!
How are we on the list? textbooks, handouts, online materials.

Substantive:

Session 4. January 28. What is Language - Whence Language? Where did it come from? We will explore the Chomskyan revolution.

Put RED on board.

Discussion:

A. What is Language?

1. Chomsky: Plato's problem
   1. What does it mean to "know" English? Japanese?

2. Generative Grammar. Pinker's account of Chomsky. terms you need to know: phonology; morphemes; morphology; syntax; lexicon; semantics.
   Grammar includes all above plus terms for writing.

3. Chomsky: What are the problems with Markov? (Finite-state, phrase structure)

   1. Saussure (ca 1900 student notes):
      1. Accepted: arbitrary relation of signifier to signified ( tho terms not used by linguists now).
      Saussure's notion of language is just words.
      2. To "know" a language = dictionary in the head???
      3. Phrases (or sentences) accounted for as what Pinker will call "listemes": good evening; later alligator. 142.9. Same in Saussure
         1. Phrase structure gets sophisticated w/ Bloomfield et al. 1933. In the writing of Language, Bloomfield created a structuralist (+ and -) approach, also behaviorist. Focused on surface behavior. Adhering to behaviorist principles, he avoided all but empirical description. Can build sentences as Pinker describes.

      2. 3 problems with Markov
         1. produces ungrammatical sentences
         2. can't handle sentences that refer back or forward (either-or; if-then)
         3. invisible phrase structure determines meaning ("the horse raced round the barn dropped dead") 211: so-called "garden path" sentences.

      The horse raced past the barn / fell.
The prime number few.
Fat people eat accumulates.
I kissed Joan / and Mary laughed.
The man who hunts ducks / out on weekends.
As you read this essay / will slip in some new thoughts

4. same phrase, different meanings phonologically: "dark room cleaner" "light house keeper"

-----In general, you can't derive following word from preceding.

3. X-Bar structure. Ask to identify head, argument, adjunct. Mnemonic: SHARGAD.
0. Subject (of verb)
1. head. P. 508. The single word that determines meaning and properties of the whole.
(Nadeau says [in conversation] verbs less important than adjectives.)
2. argument (Pinker: "role-player"). P. 504: one of the participants defining a state, event, or relationship. I promised Jane to go to the movies. I promised Jane. I promised to go to the movies.
Cp. I persuaded Jane to go to the movies. I persuaded Jane. * I persuaded to go to the movies.
3. adjunct (Pinker: "modifier"). P. 503: a phrase that comments on or adds parenthetical information to a concept

4. How do you determine what is adjunct and what is argument? Examples:
   1. I persuaded Geena that pigs have wings. I persuaded Geena of the value of pigs' having wings. I persuaded Geena. * I persuaded that pigs have wings. Pigs have wings. * Pigs have. * Of pigs have wings. Of pigs' having wings.
   2. Adj-Arg determined by form, "slots," not meaning!! "Native speaker."

4. Wags say Chomsky's greatest invention was the asterisk denoting improper grammar.

   2. 167.5: 6 speech organs: larynx; soft palate; tongue body; tongue tip; tongue root; lips. A structuralist description. Nadeau: phonemes are learned through PDP.
   3. 190ff.: The parser: understanding sentences.

5. 230.7+: the conduit metaphor. Rampant in Engl depts.

B. Universal Grammar. UG--what is it?
4. "Principles and parameters" theory.
   1. "Chn were born knowing the super-rules" (Pinker 104.9). Is there a neural system for these rules? Where is it located? How does it function? Chomsky's 80 switches.
   2. In English, the header comes first. English is an SVO language. Turkish or Japanese are SOV languages, and in those, and apparently in all such languages, the header comes last.
   3. How might you investigate this?
1. Questions of people with lesions or one lobe deactivated, questions asking about word order. Or to inflect words in an inflected language.
   2. Ask them to arrange words on cards, say, or speak words.
Huge uniformity. Fowler. Conclude: general property of mind. What kind of errors would lead to what kind of lesions?

C. This is an investigation from the right side of the Alp (linguistic side). It works by pointing to a universality.
   1. Can we do any more from the right than suggest "device" in a general sense?
   2. What kind of thing is this language device?
      1. Too complicated to inherit?? Cp. eye. Finite-state too complicated; has to be learned.
      2. Gene expression? Nets of neurons?
      3. Artificial neural networks can learn verb forms. PDP. Nadeau.. Maybe recursion.
      4. What kind of thing is inherited? Ucs knowledge (117.6). Kinds of memory (knowledge?): procedural (implicit) and episodic (declarative).
   3. Coming from the neuro side of the Alp, what kinds of lesions would you expect to cause failure in the language device?

D. Query for litry folk: Why none of this in English depts?
   1. The "it means" problem. That's what people want to talk about.
      1. Doesn't Pinker fall into this?
         1. rules / grammar. Formally valid. Shared. Proper question: what is shared?
         2. vocabulary (gets personal). Problem of categories. "Colorless green ideas sleep furiously."
            In the grammar? In the vocabulary? In the brain? "Sleep furiously, colorless green ideas."
      2. As a psychological issue -- projection. Basic bargain of people in literature. Not me - the text.
      3. Writer's problem: to elicit desired response. What goes in in CRW classes?

E. General problem of the Alp. Neuro approach to language dismisses this approach Pinker-Chomsky as "The Black Box Approach," because "the brain itself is not studied." Can constrain theories of brain function w/o refce to brain anatomy, chemistry, or physiology. Neurologists develop block diagrams (black boxes), but can't say what a parser is or a phonological lexicon. Very sad that cross-talk not effective.

F. Where did language come from?
   2. Does anyone have a problem with evolution?
      There is a useful web site devoted to the teaching of evolution at the secondary school level, with relatively non-technical papers at <a href="http://www.indiana.edu/~ensiweb/paper.fs.html">http://www.indiana.edu/~ensiweb/paper.fs.html</a>.
Cromie, "Researchers Debate." <a href="http://www.news.harvard.edu/gazette/2002/12.12/01-language.html">online</a>. This paper will serve as an introduction to the more complicated one that follows.

Wade, "Early Voices." Handout. 9 pp. So will this one.

Hauser, Chomsky, and Fitch, "The Faculty of Language." Handout, 11 pp. RECURSION!

G. What do you think is the crucial step from language to literature?

Next week:

What is going on in our brains when we are "rapt, "absorbed, "engrossed" in a movie, play, story, or poem? This turns out to be pivotal in our mind-brain's experience of literature.

Reading:


117.7 Left hemisphere locks onto proper meaning after other meanings are accessed. 118.2 Important for th eliterariness of language, metaphors, jokes.

125.7 "Embedding" = recursion.


To be handed out this week.

Reading for Feb. 4:


6. Hogan, "The Reader," ch. 6, pp. 140-165. For reading the latter part of this chapter, you can look at the Picasso painting Hogan discusses here. 26 pp.