January 6, 2004 Chapter 1, Syllabus Introduction, Organizational matters

### Administrivia

- Syllabus, expectations
- No class Thursday
- About your instructor

# Prescriptive v. descriptive grammar

- Prescriptive
  - Rules against certain usages. Few if any rules for what **is** allowed.
  - Proscribes forms which are generally in use.
  - Explicitly normative enterprise.
- Descriptive
  - Rules characterizing what people do say.
  - Goal is to characterize all and only what speakers find acceptable.
  - Tries to be scientific.

# Examples of prescriptive rules

- Don't end a sentence with a preposition.
- Avoid double negatives.
- Others?

#### Descriptive grammar: An example

- F— yourself!
- Go f— yourself!
- F— you!
- •\*Go f— you!

# Artificiality of prescriptive rules

- Fill in the blanks: *he/his*, *they/their*, or something else?
  - Everyone insisted that \_\_\_\_\_ record was unblemished.
  - Everyone drives \_\_\_\_\_ own car to work.
  - Everyone was happy because \_\_\_\_\_ passed the test.
  - Everyone left the room, didn't \_ ?
  - Everyone left early. \_\_\_\_\_ seemed happy to get home.

# What is syntax?

- A study of (part) of the system underlying human linguistic activity.
- Specifically, the part that concerns how words are put together to form phrases and sentences.
- *Generative* syntax (or generative grammar) attempts to define systems of rules which will *license* or *generate* all and only the strings that native speakers accept as well-formed sentences.

### Why study syntax?

- Because it's fun...
- A window on the structure of the mind
- A window on the mind's activity
- Natural language technologies

# The object and the data

- Syntacticians are interested in modeling:
  - The set of sentences that native speakers will accept
  - The knowledge that native speakers of their language
- Two sources of data:
  - *Corpora* of naturally occurring utterances
  - Native-speaker intuitions
- ... both are crucial.

### Competence and performance

- Competence: Speakers' internalized knowledge of their language
- Performance: Use of knowledge of language, to speak, understand others' speech, give acceptability judgments, make puns, do crossword puzzles, etc.

# More on intuitions (1/2)

- A formal grammar can characterize a string of words as grammatical (= a sentence of the language) or ungrammatical.
- Linguists hypothesize that speakers' internal knowledge is (equivalent to) such a formal grammar.
- Speakers have intuitions of acceptability or unacceptability.
- → No direct access to grammatical competence;
  competence is *tacit* knowledge.

# *More on intuitions (2/2)*

- Sentences may be unacceptable for many reasons:
  - Ungrammaticality (= syntactic ill-formedness)
  - Pragmatic infelicity
  - Semantic ill-formedness
  - Processing constraints
- Examples?

# *More on competence (1/2)*

- Sentences of English (or any other language) can be made arbitrarily long.
- Examples?
- Linguistic competence must be finite:
  - Acquired in a finite amount of time
  - Stored in brains with finite capacity
- Therefore, linguistic competence must involve systems of rules capable of generating infinitely many sentences.

# *More on competence (2/2)*

- Simply listing all the sentences of a language wouldn't work.
- Why else would that be implausible?
- What kinds of systems can generate infinitely many sentences?

#### Two levels of linguistic hypotheses

- Micro: Analyses of particular phenomena
- Macro: Theories of possible human languages, proposals of formal systems for describing human languages

# Hypothesis generation and testing (micro) (1/2)

- Observe a pair of strings with contrasting acceptability.
- State a rule, as general as possible, which licenses the good sentence while ruling out the bad sentence.
- Consider what the rule predicts about other strings.
- Test those predictions by determining the acceptability of the strings.
- Refine the rule and repeat as necessary.

# Hypothesis generation and testing (micro) (2/2)

- The rules linguists propose are influenced by:
  - Traditional grammar
  - The linguists' or consultants' intuitions about sentence structure.
  - Theories of possible rules

# Example: Reflexive pronouns in English (1/8)

- •\*We like us.
- We like ourselves.
- She likes her. [where, she  $\neq$  her]
- She likes herself.
- Nobody likes us.
- •\*Leslie likes ourselves.
- •\*Ourselves like us.
- •\*Ourselves like ourselves.

#### Example: Reflexive pronouns in English (2/8)

• Hypothesis I: A reflexive pronoun can appear in a sentence only if that sentence also contains a preceding expression that has the same referent (i.e. a preceding COREFERENTIAL expression); a nonreflexive pronoun cannot appear in a sentence that contains such an expression.

# Example: Reflexive pronouns in English (3/8)

- She voted for her. [she  $\neq$  her]
- She voted for herself.
- We voted for her.
- •\*We voted for herself.
- •\*We gave us presents.
- We gave ourselves presents.
- •\*We gave presents to us.
- We gave presents to ourselves.

## Example: Reflexive pronouns in English (4/8)

•\*We gave us to the cause.

- We gave ourselves to the cause.
- •\*Leslie told us about us.
- Leslie told us about ourselves.
- •\*Leslie told ourselves about us.
- •\*Leslie told ourselves about ourselves.

#### Example: Reflexive pronouns in English (5/8)

- We think that Leslie likes us.
- •\*We think that Leslie likes ourselves.

#### Example: Reflexive pronouns in English (6/8)

• Hypothesis II: A reflexive pronoun can appear in a clause only if that clause also contains a preceding, coreferential expression; a nonreflexive pronoun cannot appear in any clause that contains such an expression.

### Example: Reflexive pronouns in English (7/8)

- Our friends like us.
- •\*Our friends like ourselves.
- Those pictures of us offended us.
- •\*Those pictures of us offended ourselves.
- We found your letter to us in the trash.
- •\*We found your letter to ourselves in the trash.

#### Example: Reflexive pronouns in English (8/8)

• Hypothesis III: A reflexive pronoun must be an argument of a verb that has another preceding argument with the same referent. A nonreflexive pronoun cannot appear as an argument of a verb that has a preceding coreferential argument.

# Hypothesis generation and testing (macro)

- Looking for interesting generalizations across the grammars of different languages.
- Typically expressed as constraints on possible grammars.

Constraints on grammars

- Examples:
  - Autonomous syntax principle
  - Structure-dependence principle
- What might explain such constraints?

### Big question: Innateness (1/2)

- Innateness hypothesis: Humans are born with a considerable amount of specifically linguistic knowledge, which greatly eases the process of language acquisition.
- Opposing hypothesis: Humans learn language with the same general learning capacity they apply to other problems.

### Big question: Innateness (2/2)

- (Nearly) everyone agrees:
  - Language is species-general: Any human can learn any human language, if raised in the proper environment.
  - Language is species-specific: Human language is qualitatively different from all (other) forms of animal communication.

#### Summary

- Prescriptive v. descriptive grammar
- What is syntax, and why study it?
- Competence and performance
- Generating and testing linguistic hypotheses
- Specific example: English reflexive pronouns
- Constraints on grammars
- Innateness hypothesis