

# Lecture 7

## Linguistic Essentials

# Parts of Speech and Morphology

- *Morphology* – word formation
- *Syntax* – sentence structure
- *Semantics* – meaning
- *Lexicon* – vocabulary, dictionary

# Parts of Speech

- Syntactic or grammatical categories = *parts of speech*
  - *Nouns*
    - Refer to people, animals, concepts or things
  - *Verbs*
    - Express action in a sentence
  - *Adjectives*
    - Describe properties of nouns

# Word classes

- *Open or lexical categories*
  - Nouns, verbs, adjectives
  - Large number of members
  - New words normally added here
- *Closed or functional categories*
  - Prepositions, determiners, some pronouns
  - Words like *of, at, on, the, a*

# POS Tags

- Traditional parts of speech distinguish about 8 categories
- Linguists want to use fine-grained classification known as *parts-of-speech tags*
- Best known system is based on the Brown corpus

# Morphological Processes

- Word categories are systematically related to each other by *morphological processes*.
  - For example, formation of plural from singular nouns:  
dog → dogs, teacher → teachers
- Morphological processes are important because in a given text we can encounter words and word forms we have not seen before, but words that may be morphologically related to words we have seen.
- In English, a regular verb has 4 forms, an irregular verb at most 8.
- In Finnish, a verb may have 10,000 forms.

# Root Forms and Inflections

- *Inflections* are the systematic modification of a root form by prefixes or suffixes.
- Inflections do not change the word class (POS), but vary features like tense, number, plurality.
- All the inflectional forms of a word are grouped as manifestations of a single *lexeme*.

# Derivation

- *Derivation* is a less systematic change to a root that often involves a change of meaning.
  - wide → widely (a widely held belief)
  - adding –ly to make an adjective into adverb
    - *oldly, difficultly* don't exist
    - You can *progress* or you can *regress*, but you cannot *gress*
  - adding –en transforms adjectives into verbs (weaken, soften)
  - adding –able transforms verbs into adjectives (remarkable, acceptable)
  - adding –er transforms verbs into nouns (teacher, leader, computer)
- *Compounding* refers to merging two words into a new word, can be noun-noun or other
  - *tea kettle, disk drive, college degree, overtake, heart attack, nuclear weapon*

# Nouns and Pronouns

<b>Type of Inflection</b>	<b>Instances</b>
number	singular, plural
gender	feminine, masculine, neuter
case	nominative, genitive, dative, accusative

# Nouns and Pronouns

- English has only one inflection of a noun, the plural form is usually formed by adding –s.

dog : dogs	tree : trees	person : persons
hat : hats	speech : speeches	woman : women
idea : ideas	philosophy : philosophies	child : children

# Nouns and Pronouns

- Irregular – a few forms do not follow the pattern like woman-women
- English does not have a system of gender inflections for nouns, but does have for third person singular pronoun: *he, she, it*.
- In some languages, nouns appear in different forms when they have different functions such as subject, object, possessive.
- The only case in English that is systematically indicated is genitive (possessive)
  - Usually written a 's or just ' after a word ending in s.
  - Woman's house, students' grievances (called a *phrasal affix* or *clitic*).

# Pronouns

	Nominative	Accusative	Possessive	2nd Possessive	Reflexive
Tag(s)	PPS (3SG) PPSS (1SG,2SG,PL)	PPO	PP\$	PP\$\$	PPL (PPLS for PL)
1SG	I	me	my	mine	myself
2SG	you	you	your	yours	yourself
3SG MASC	he	him	his	his	himself
3SG FEM	she	her	her	hers	herself
3SG NEUT	it	it	its	its	itself
1PL	we	us	our	ours	ourselves
2PL	you	you	your	yours	yourselves
3PL	they	them	their	theirs	themselves

**Table 3.2** Pronoun forms in English. Second person forms do not distinguish number, except in the reflexive, while third person singular forms distinguish gender.

# Pronouns

- Pronouns are a subclass of nouns that act as variables; they stand in for a person or thing that is salient in the discourse.
  - Pronouns can distinguish the number (singular, plural)
  - They distinguish case nominative (subject), accusative (object), genitive (possessive).
    - Genitive has two forms: *my* friend, friend of *mine*
  - Reflexive pronouns
    - Mary saw *herself* in the mirror.
    - Mary saw her in the mirror.

# Brown Tags

- Singular nouns candy, woman, money NN
- Proper nouns Mary, United States NNP
- Adverbial nouns home, west, tomorrow NR
- Plural nouns women, monies, candies NNS
- Plural proper nouns Edwards, Europeans NNPS
- Plural adverbial nouns tomorrows, years NRS
- Possessive singular nouns NN\$
- Possessive plural nouns NNS\$
- Possessive singular proper nouns NNPS\$
- Possessive plural proper nouns NNPS\$
- Possessive adverbial nouns NR\$

# Determiners

- Determiners describe a particular reference to a noun
  - *Articles*
    - *the* tree – when we discuss something we already know about
    - *a* tree, *an* apple – when we discuss something we have not yet spoken of
  - *Demonstratives*
    - this tree, that tree

# Adjectives

- *Attributive or adnominal*
  - *red* rose, this *long* journey, *intelligent* students, *trendy* class
- *Predicative*
  - Used with verb “to be”
  - The rose is *red*. The journey will be *long*.
- Morphological modifications
  - Suffix –ly to make adjective into adverb
  - Suffix –er *comparative form* (richer, trendier)
  - Suffix –est *superlative form* (richest, trendiest)
  - *Periphrastic forms* (more intelligent, most intelligent)
  - No suffix *positive form* (rich, trendy, intelligent)

# Brown Tags for Adjectives and Some Pronouns

- Positive form JJ
- Comparative form JJR
- Superlative forms JJT
- Semantically superlative: *chief, main, top* JJS
- Cardinals: *one, two, 100* CD
- Ordinals: *first, second* OD
- Articles: *a, an, the* AT
- Singular determiners: *this, that* DT
- Plural determiners: *these, those* DTS
- Determiners ambiguous: *any, some* DTI

# Brown Tags for Adjectives and Some Pronouns

- Double conjunction determiners: *either, neither* DTX
- Quantifiers: *some, any*
- Pre-quantifiers: *all, many* ABN
- Nominal pronoun: *one, something, anybody* PN
- Interrogative pronouns and determiners
  - *wh*-determiner: *what, which* WDT
  - Possessive *wh*-pronoun: *whose* WD\$
  - Objective *wh*-pronoun: *whom, which, that* WPO
  - Nominative *wh*-pronoun: *who, which, that* WPS
- *There* used to denote existence in beginning of a sentence EX
  - There is a house in New Orleans

# Verbs

- Verbs describe action (She *threw* a stone.) or states (I *have* \$10.)
- Regular English verbs have the following morphological forms
  - Base form: walk
  - Third person singular present tense: walks
  - The gerund and present participle: walking
  - The past tense and past passive participle: walked
- Most of these forms do duty in several functions
  - Present tense
    - I walk, you walk, we walk, they walk, but she walks, he walks, it walks
  - Infinitive
    - She like *to walk*. She has *to walk*. *To walk* is fun.
    - She shouldn't *walk*. She helped me *walk*.

# Verbs

- Progressive –ing form is used to indicate that an action is in progress
  - She is *walking*. She was *walking*. She will be *walking*.
- Gerund. A derived form where the verb gains some or all of the properties of a noun.
  - This is the most *walking* that I ever wish to do. *Walking* is fun.
- The –ed form serves as past tense.
  - She *walked*.
- Present perfect. It also functions as the past participle in the formation of the present perfect.
  - She has *walked*.
- Past perfect.
  - She had *walked*.
- Future perfect
  - She will have *walked*.

# Verbs

<b>Feature Category</b>	<b>Instances</b>
subject number	singular, plural
subject person	first, second, third
tense	present, past, future
aspect	progressive, perfect
mood/modality	possibility, subjunctive
participles	present (walking), past (walked)
voice	active, passive, middle

# Verbs

- Irregular: e.g. drive, take
  - She *drove* the car. She has never *driven* a car.
  - She *took* off on Monday. I have never *taken* off a day for vacation.
- Auxiliaries: verbs that accompany a verb in a verb group
  - *have, be, will* – I will donate a dollar. I am donating a dollar.
  - Forms that are built using auxiliaries rather than direct inflection are called *periphrastic forms*
- Modal auxiliaries: lack some forms of ordinary verbs: no infinitives, no progressive forms.
  - *can, may* express possibilities; *should* expresses obligation.

# Adverbs, Prepositions, Particles

- *Adverbs* modify a verb just as an adjective modifies a noun.
  - She *often* travels to Las Vegas
  - He *allegedly* wrote his dissertation.
  - She started her career off *impressively*.
- *Adverbs* can also modify adjectives and other adverbs.
  - His authorship of this dissertation is a *very* unlikely event.
  - We had a *shockingly* candid exchange.
  - She started her career off *very* impressively.
- Certain adverbs such as *very* always modify other adverbs and never verbs. These are called *degree adverbs*, and are sometimes regarded as a separate part of speech called a *qualifier*.

# Adverbs, Prepositions, Particles

- *Prepositions* are small word typically used to express spatial relationships.
  - *in* the glass, *on* the table, *over* their heads, *about* an interesting idea, *concerning* your invention, *since* last Tuesday
- Most prepositions do duty as *particles*.
  - Particles are a subclass of prepositions that enter into strong bonds with verbs in the formation of *phrasal verbs*.
    - The plane *took off* at 8 am.
    - Don't *give in* to him.
    - It is time to *take on* new responsibilities.
    - He was *put off* by such indolence.
    - He *put me off*.
    - I don't want to *take* that responsibility *on* right now.
    - She ran up a bill. vs. She ran up a hill.

# Brown Tags

- Ordinary adverbs (simply, late, well, little) RB
- Comparative adverbs (later, better, less) RBR
- Superlative adverbs (latest, best, least) RBT
- Negative (not) \*
- Qualifier (very, too, extremely) QL
- Post qualifier (enough, indeed) QLP
- Prepositions (in, over, through) IN
- Particles RP

# Conjunctions

- Coordinating conjunctions: join two words or phrases in the same category
  - husband *and* wife [nouns]
  - She bought *or* leased the car [verbs]
  - the green triangle *and* the blue square [noun phrases]
  - She bought the car, *but* she considered leasing it. [sentences]
- Subordinating conjunctions: link two sentences.
  - She said *that* he would be late. [proposition]
  - She complained *because* he was late. [reason]
  - She complained *since* he was late. [temporal]
  - She left *before* he arrived. [temporal]
  - I won't wait *if* he is late. [condition]
  - She thanked him *although* he was late. [concession]