

LG105
Morphology

Word Structure: Words and word classes

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Morphology segment

- Class 8: Words & word classes (Radford et al. p125-139)
- Class 9: Building words (Radford et al. p140-155)
- Class 10: Morphology across languages (Radford et al. p156-169)
- Office hours (Rm 4.209): Tuesdays 15-17

Class outline

- What are words?
- Classes of words
 - Lexical categories
 - Functional categories
- Labelled bracketing

Words vs. sentences

A: where are you going?

B: shopping

A: what for?

B: some socks

A: whareying?

B: shing

A. Whor?

B: smsks

Words

- A word is the smallest free form found in a language.
- A free form is an element that
 - can occur in isolation
 - does not have an entirely fixed position

e.g. the *birds* left

birds avoid cats

cats chase *birds*

Word classes

(1) A giergy has arrived.

- Even if we do not know what *giergy* means we can infer that we can have;
- the giergy
- two giergies
- every giergy
- a yellow giergy
- We do this because we assign *giergy* to a word class.

Word classes

- Lexical words vs. function words
- Lexical words denote concrete objects, activities, ideas, events, states, properties, etc. (Dictionary words with specific meanings)
- Function words: words that fulfil a particular function in a sentence (cannot easily be assigned a dictionary meaning)

Lexical vs. function words

(2) John thinks that Bill has been visiting Mary to ask for her help with the assignment which must be finished by Friday.

Lexical words

thinks

visiting

ask

Bill

assignment

Function words

that

have been

to

the

which

Word classes of lexical words

- *cat, house, exercise* Noun
- *hit, sing, think* Verb
- *red, tall, difficult* Adjective
- *often, there, quickly* Adverb
- *on, through, for* Preposition

Word classes of lexical words

- How do we assign words to classes?
- By their meaning
- By their morphological properties
- By their distributional patterns

Meaning (semantic properties)

- Noun Things
- Verb Actions
- Adjective Properties
- Adverb Manners, Times, Places, Reasons, ...
- Preposition Relations (*cat on mat*)

Non-canonical meanings

- Non-things as nouns:
idea, singing (is fun), redness
- Non-actions as verbs:
remain, suffice, equal (2 + 2 = 4)
- Non-properties as adjectives
*alleged (the alleged attacker), former (president),
the *singing* detective*

Morphological properties

- A given word may have several different forms, called inflected forms
- For nouns, verbs and adjectives the set of inflected forms often help us identify the word class
- E.g. noun 'cat': singular *cat*, plural *cats*

Nouns: morphological properties

- Plural form (only for count nouns, i.e. nouns denoting things that can be counted like *cats*, not mass terms such as *water*)
- *cats, criteria, knives, teeth, sheep*
- How do we know that *sheep* is a plural form?

Verbs: morphological properties

- Four (regular verbs) or five forms (some irregular verbs)

Regular verbs

walk

walks

walking

walked

Irregular verbs

sing

sings

singing

sang

sung

Adjectives: morphological properties

- Comparative/Superlative forms

Meanings

more green Comparative

the most green Superlative

Adjectives: morphological properties

- The comparative and the superlative can be formed by adding the endings *-er* or *-est* to adjectives as in the following:

adjective

green

happy

comparative

greener

happier

superlative

greenest

happiest

Adjectives: morphological properties

- However, some adjectives do not take these endings:

curious *curiouser *curiousest

foolish *foolisher *foolishest

- But *more curious, most curious*
 more foolish, most foolish

Adverbs and Prepositions: morphology

- Adverbs can often be recognized as being derived from adjectives by adding *-ly*
curiously, foolishly
- But they don't have any other regular forms and are not inflected themselves
- Prepositions don't take any special form and don't inflect

So far...

- We have seen how Lexical words can be categorised into classes in terms of meaning and in terms of their morphological structure.
- We now see how they can also be categorised with respect to their distribution.

Distributional criteria

(3) The children are applauding a crazy clown.

- Nouns

- A noun is often preceded by a definite (the) or an indefinite article (a/an).
- Nouns can be modified by adjectives: *crazy clown*.
- Nouns cannot be modified by adverbs: **foolishly clown*, **clown foolishly*

Distributional criteria

- Verbs

- Verbs can take nouns as complements or arguments:

(4) The waiter stole a cake

- Verbs are modified by adverbs;

(5) The waiter *laughed foolishly*

- Verbs do not take articles; are not modified by adjectives

(6) * *the steal* ; * *crazy stole*

Distributional criteria

- Adjectives
 - Can be used with another adjective to modify a noun; the *crazy green clown*
 - Unlike verbs: **steal applauding*, or nouns.
 - An adjective can be used after a form of the verb *be* to denote a property of a noun; *John is happy*

Distributional criteria

- Adverbs
 - An adverb typically modifies a verb indicating how, when or why something happened or the degree of a property; *carelessly dropped*.
 - Like adjectives two can be used to modify a verb; *the audience applauded the clown very enthusiastically*.

Labelled bracketing

- Thus when we hear a sentence we can identify the word classes in it and label them as follows:

(7) John called Bill on Friday evening.

[_NJohn] [_Vcalled] [_NBill] [_Pon] [_NFriday]

[_{ADJ}evening]

(8) Bill laughed heartily

[_NBill] [_Vlaughed] [_{ADV}heartily]

Lexical word classes summ...

- We have identified the following major lexical word classes:

Nouns Verbs Adjectives Adverbs and Prepositions

- We can identify them by their **meaning**, their **morphological properties** or their **distributional patterns**.

Function words

- Function words can be differentiated from lexical words because they are not content words.
- They have grammatical rather than lexical meaning.
- They usually don't have referents.
- They form a closed class.

Auxiliaries

- Can be identified by their distribution:
- allow inversion in questions
 - May I go? Did John go? *Go John yesterday?
- attract negation
 - John didn't go. Mary will not eat. *John go not.
- they can be emphasised (easily)
 - John *did* sing that song. ??John *eats* bread.

Auxiliaries

- Can be used as question tags
 - John came, didn't he? John plays the violin, doesn't he? * John eats apples, eatsn't he?
- Can be used in gapping
 - A: John ate the apple.
 - B: Yes he did
 - C: No he didn't
 - B: yes he did!

Co-occurrence of lexical & function words

- Words of a given major lexical class (N, V, Adj,) will often be accompanied by
 - particular kinds of function words
 - or lexical words
 - or phrases

Co-occurrence with nouns

determiners (*the, a, some, all, every, ...*)

demonstratives (this man,...)

conjunctions (Jack and Jill)

complementizers (If John comes...)

adjectives (the fluffy toy)

relative clauses (*the girl that/who is wearing a red coat*)

Co-occurrence with verbs

auxiliary verbs (may be being checked, will have been checked)

pronouns (she gave *him* a hat)

adverbs (arrived *now*, came *quickly*, ...)

adverbial clauses (left when Jill arrived/because she was bored...)

Co-occurrence with adjectives

- modifiers *too, very, more/most, (tall) enough*
- comparative phrases *more intelligent than her brother*

Labelled bracketing

- We can now label more complicated sentences:

(9) John thinks that Bill has been visiting Mary to ask for her help with the assignment which must be finished by Friday.

[_NJohn] [_Vthinks] [_{COMP}that] [_NBill] [_{AUX}has]
[_{AUX}been] [_Vvisiting] [_NMary] [_Pto] [_Vask] [_Pfor]
[_{PRN}her] [_Nhelp] [_Pwith] [_{DET}the] [_Nassignment]
[_{PRN}which] [_{AUX}must] [_{AUX}be] [_Vfinished] [_Pby]
[_NFriday].

Summary

- Words can be divided into word classes.
- We can broadly distinguish lexical from function words.
- The major word classes in lexical words are nouns, verbs, prepositions, adjectives and adverbs.
- Word classes under function words include; auxiliaries, determiners, demonstratives, pronouns and conjunctions.

For next week...

- Read Radford et al. Chapter 9: Building words (p162-179)