

Week 3: Word classes, from lexical to minor

1. Recap

- a word consists of ≥ 1 morpheme
- bound v. free morphemes; prefixes v. suffixes; inflection v. derivation
- sentences have structure, which can be analysed
- constituent structure must *make sense* (syntactic structure is grounded in conceptual structure \rightarrow meaning!)
- analysing a sentence into its constituent can be aided by constituency tests
- when two meanings/interpretation are available then that be a case of structural ambiguity

(1) We are currently addressing the issue of Cuban cigars in the Oval Office.

\rightarrow [the issue of Cuban cigars in the Oval Office] object of *addressing* vs. [the issue of Cuban cigars] = object; [in the Oval Office] = adverbial (of place) — describing where the ‘addressing’ is taking place

- ... though e.g. lexical ambiguity is also possible

(2) We parked the car near the bank.

2. Classifying words: major (lexical) and minor (grammatical)

- WORD CLASSES, PARTS OF SPEECH, SYNTACTIC CATEGORIES
- NOUNS (including PRONOUNS) VERBS (including AUXILIARIES), ADJECTIVES, ADVERBS, PREPOSITIONS, CONJUNCTIONS, DETERMINERS
- *yuck!, damn!, shhh!* \rightarrow INTERJECTIONS
- recognising \rightarrow categorisation in terms of FORM and FUNCTION

Jabberwocky

'Twas brillig, and the slithy toves
Did gyre and gimble in the wabe;
All mimsy were the borogoves,
And the mome raths outgrabe.

"Beware the Jabberwock, my son!
The jaws that bite, the claws that catch!
Beware the Jubjub bird, and shun
The frumious Bandersnatch!"
(...)

"It seems very pretty," she said when she had finished it, "but it's rather hard to understand!" (You see she didn't like to confess, even to herself, that she couldn't make it out at all.) "Somehow it seems to fill my head with ideas -- only I don't exactly know what they are! However, somebody killed something: that's clear, at any rate --"

- (4) *borogroves*
- (5) *outgrabe*
- (6) *frumious*

- structural properties:
 - a. morphological properties \rightarrow the kind of bound morphemes, both inflectional and derivational, that tend to occur with words of a particular class
 - b. syntactic properties \rightarrow the typical position(s) in the clause that words of a particular class tend to occupy
- but also: semantic properties \rightarrow the kind of meanings that tend to be coded by words of a particular class — these properties (in other words, the way we think about/conceptualise the world) may be seen as underlying the structural properties, even if they're not always easy to identify

(7) One, two, three, testing, testing... There's no need to test this gadget, you can see the words appearing right in front of your eyes on the screen, but I'm making an audiorecording at the same time so I can go over the text later and put in the dots for pauses... I'd no idea this voice recognition software was so good... You'd think a Centre for Cognitive Science would have the latest dope on such things but to my amazement when I asked around there wasn't anyone on the staff who actually owned such a program or had any experience of using one... They seemed to think it was some kind of toy, something you might buy at Dixon's for your kids at Christmas but nothing of serious interest just shows you how conservative and blinkered academics are...
(David Lodge, *Thinks...*)

\rightarrow entities (*gadgets, words, amazement*), actions/events/process/states (*test, see, making, was*), qualities/properties (*good, cognitive, serious, conservative*), places/locations (*in front of, on, at*), connections between ideas/propositions (*but, and, when*), subtle modifications of e.g. spatial relations (*right in front of*), actions and states (*making an audiorecording at the same time, actually owned*)

2.1 Major categories

- open
- many members (though cf. pronouns)
- relatively complex, full, lexical meanings (though cf. pronouns)

2.1.1 Nouns

- e.g. *gadget, word, eye, screen, software, amazement*
- typically refer to entities (concrete, e.g. physical objects or people, or abstract, e.g. feelings, ideas), which tend to be relatively time-stable
- number, case (i.e. genitive -'s compare much richer case marking system in Old English, as well as grammatical gender distinctions, e.g. Smith 1999)
- common derivational morphemes yielding nouns: *-ness, -ity* (A → N), *-er, -ee, -ation, -ment, -ing* (V → N), *-dom, -hood, -ist* (N → N)
- syntax: *the* ___ (→ noun phrase)
- subtypes:

(8) *Christmas v. festival* (→ **the Washington, Washongtons v. the city, cities*)

→ PROPER v. COMMON

(9) *gadget v. software* (→ *a gadget, two gadgets v. *a software, *two softwares*)

common nouns → COUNT v. NON-COUNT/MASS (distinction has a semantic basis)

- PRONOUNS!
 - PERSONAL (*I v. me*; have NP antecedent, not necessarily in same clause)
 - INDEFINITE (*something, everyone, many, most, some*; don't have antecedent)
 - REFLEXIVE (*myself*, etc. usually has antecedent, in same clause)
 - RECIPROCAL (*each other, one another*, have antecedent in same clause)
 - POSSESSIVE (*my, mine*, etc.)
 - DEMONSTRATIVE (*this, these, that, those*)
 - INTERROGATIVE (*who, whom, whose, what, which*)
 - RELATIVE (*which, whose, that* → more about these in Week 8)

2.1.2 Verbs

- e.g. *test, see, appear, make, think, ask, buy, be*

- typically describe actions, events, processes or states
- some inflections: *-s, -ed* (simple past), *-ed* (past participle), *-ing* (progressive/continuous)
- common inflectional morphology: *en-, -en, -ify, -ate* (A → V), *en-, -ise (-ize), de-* (N → V), *de-, un-* internal vowel change in causatives
- as regards syntax, the verb forms the central part of the sentence; together with a subject noun phrase it is enough to constitute a full sentence; it (i.e. its semantics) puts constraints on the type of subject and complements it can co-occur with
- *am making* → AUXILIARY v. LEXICAL verbs (we'll get back to this distinction in Week 7)

2.1.3 Adjectives

- e.g. *good, cognitive, late, serious*
- describe qualities of entities, which are typically inherent in those entities and as such relatively concrete stable, though they may also be less inherent (evaluative judgments) or more transient states
- inflections: comparative *-er* (or *more* A), superlative *-est* (or *most* A)
- in terms of syntactic behaviour, adjectives may describe some property of the noun by being used either predicatively or attributively; also, they may be found after intensifiers such as *very* or *rather*

2.1.4 Adverbs

- e.g. *right, so, actually, there, then, often, certainly, possibly*
- often express time, frequency, manner, location, truth/certainty/probability, desirability
- sometimes inflect for comparative and superlative degree: *-er, -est* (more commonly *more, most* Adv)
- many are derived from adjectives by using the *-ly* suffix
- as for syntax, adverbs head adverb phrases, which, because of adverbs' verb/adjective modifying function, are often to be found in the vicinity of verbs and adjectives

2.2 Minor categories

- closed

- few members
- relatively simple, grammatical meanings

2.2.1 Prepositions

- e.g. *in front of, on, at, over, in*
- relationships between things and between events
- basic meaning spatial though more grammatical meanings also observed (e.g. *of* 'away from' → possession, *by* 'near' → agent marker in passive)
- morphological criteria n/a
- regarding syntax, prepositions can often be preceded by the adverb *right* → *right in the Oval Office*

2.2.2 Conjunctions

- join constituents together
- constituents may have the same status:

- (10) ...conservative *and* blinkered...
- (11) You'd think a Centre for Cognitive Science would have the latest dope on such things *but* to my amazement when I asked around there wasn't anyone on the staff who actually owned such a program or had any experience of using one...
- (12) actually owned such a program *or* had any experience of using one...

→ COORDINATORS/COORDINATING CONJUNCTIONS

- ...or not:

- (13) *when* I asked around there wasn't anyone on the staff who actually owned such a program or had any experience of using one...

→ SUBORDINATORS/SUBORDINATING CONJUNCTIONS/COMPLEMENTISERS link constituents by making one of them part of another; the subordinating conjunction marks the incorporated constituent (which is somehow backgrounded relative to the incorporating element)

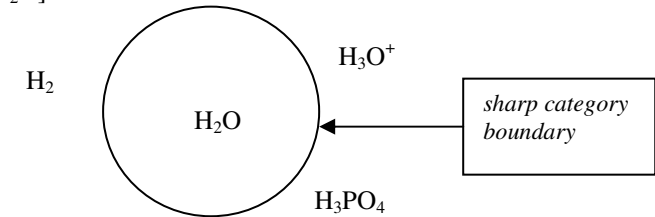
2.2.3 Determiners

- e.g. *no, this, the, a(n), this, any*
- specify the number and definiteness of a noun phrase
- occur before the noun in the NP (and before adjectives in the NP)

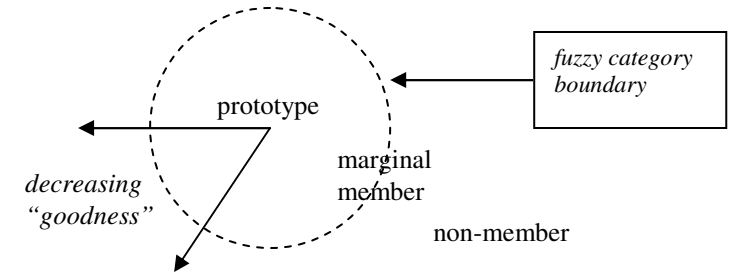
→ **NB:** over time words can change their category membership, e.g. *bin* (N > V, 19th C) *while* (N > Conj, eME); developments from more lexical to more grammatical (as in the case of *while*) are called GRAMMATICALISATION (see e.g. McMahon 1994:160-73)

3. Syntactic categories: logical or natural?

- H₂O, Fe → LOGICAL categories, necessary and sufficient conditions, sharp boundaries, [+H₂O]



- man [+human], [+adult], [+male] vs. woman [+human], [+adult], [-male]
- stallion [+animal], [+adult], [+equine], [+male] vs. mare [+animal], [+adult], [+equine], [-male]
- top model [+human], [+adult], [+female], [+does modelling work],



- PROTOTYPES, fuzzy boundaries, gradient membership depending on the extent to which an entity is similar to the prototype (cf. also Givón's discussion of natural classes v. logical classes (1993:52-3))
- are syntactic categories classical categories with sharp boundaries and a clearly delimited set of membership criteria (like H₂O), or are they NATURAL categories, with fuzzy boundaries and degrees of membership?

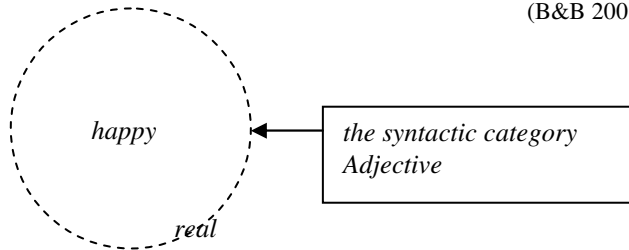
(14) We can make the characters act the way a *real* kid acts. (B&B 2001:68)

- *real* adjective? problems: *rather/very *real*, *realer/reallest

→ substitute and coordinate *real* with *happy* (use prototypical members in these tests (B&B 2001:68-70)) → grammaticality indicates that the words belong to the same word class

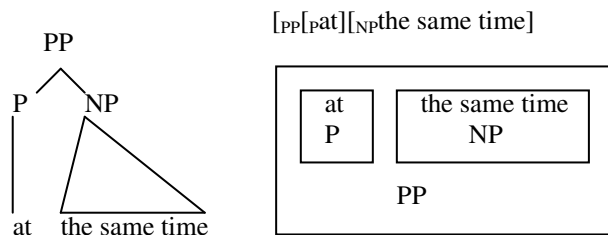
[N]ot every member of a class will necessarily have all the identifying properties. We're dealing here with fuzzy categories.

(B&B 2001:65)



4. Phrasal categories

- the major categories (N, V, A, Adv) and prepositions (P) can combine with other words to form larger PHRASES
- the name of a phrase is based on the name of its central element (N, V, A, Adv, P); thus NP, VP, AP, AdvP, PP – these are called the PHRASAL CATEGORIES
- the semantic characteristics of these phrases are similar to those of their central elements; thus a NP describes an entity, a VP, an action/event/..., an AP a quality, etc.
- the structure of phrases can be analysed using trees, brackets or boxes.:



- in the section on phrasal categories B&B (2001) introduce the distinction between complements and modifiers (p.73ff) — this is however accommodated much more naturally under next week's topic (grammatical functions)

5. Concluding remarks

- categorisation is a fundamental cognitive process
- in categorising entities in daily life we use both formal and functional properties of those entities
- the same cognitive mechanisms are at work in categorising words: we use formal and functional criteria to assign them to syntactic categories (noun, verb, adjective, etc.)
- most categories in real life are natural categories, i.e. there are no sharp boundaries and no finite list of necessary and sufficient membership criteria; instead: prototypes, fuzzy boundaries, various degrees of membership which depend on the similarity to the category prototype
- syntactic categories are just like most other categories, i.e. natural categories → there are more vs. less prototypical members; degree of membership depends on the number of formal/functional properties a word shares with the prototype (e.g. *happy*)
- words may combine to form larger units, i.e. phrases
- the structure of phrases can be analysed using brackets, boxes or trees, just like the structure of words or sentences (see e.g. Week 2)

References

- Börjars, Kersti & Kate Burridge. 2001. *Introducing English grammar*. London: Arnold, Ch. 3.
- Givón, Talmy. 1993. *English grammar: a function-based introduction*. Vol. I. Amsterdam: John Benjamins, Ch.2.
- McMahon, April M.S. 1994. *Understanding language change*. Cambridge: Cambridge University Press, pp. 160-73 [section on grammaticalisation].
- Smith, Jeremy. 1999. *Essentials of early English*. London: Routledge.