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- Also called:
  Syntactic Categories.

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- Adjective:
  - Modifier that expresses quality, quantity or extent.

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- Preposition:
  - Modifier that indicates location or origin.

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- Not so clear cut:
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  - Sincerity is an important quality
  - Tucson is where New Yorkers flee for the winter

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- Multiple parts of speech?
    - Gabrielle's father is an axe-murderer
    - Anteaters father attractive offspring
    - ?Wendy's father country is Iceland

Time flies like an arrow;

fruit flies like a banana.

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(first *flies* is a verb, second *flies* is a noun. First *like* is a comparative conjunction, second *like* is a verb.)

Problems with the semantic def.

- Cross-linguistic Problems

  - Irish Gaelic:
    a) Ní **ith**-eann   Seán
       Neg eat-3sm   John
       "John doesn't eat."

    b) Ní **dochtúir**-é   Seán
       Neg doctor-3sm   John
       "John is not a doctor" (lit. John doctors not)

Problems with the semantic def.

- Cross-linguistic Problems

  - Kwamera:

    a) Iak-imiki Kuri u
       1s.dislike dog this
       "I don't like this dog"

    b) ianpin iak-am-óuihi ihi
       when 1s-prog-small still
       "when I was still small"

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  - Warlpiri:

    Wita-rlu ka maliki wajilipinyi
    Small-subj aux dog chase.present
    "The small one is chasing the dog"

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  - nindin -noun
  - pidibs -noun

Problems with the semantic definition

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What do the underlined words mean?

I think <u>that</u> John is in the kitchen
A picture <u>of</u> Mary
I want very much <u>for</u> you to win the prize

Distributional definitions

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- The definition of P.O.S is *distributional*

- Because they are distributional, POS definitions are *language specific*.

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- **Syntactic distribution**
  (position relative to nearby words.)

P.O.S distributionally
(English) -- Nouns

- **Derivational Suffixes:**
  - *-ment, -ness, -ity, -ty, -(t)ion, ation, -ist, -ant, -ery, -ee, -ship, -aire, -acy, -let, -ling, -hood, -ism, -ing*

- **Inflectional Suffixes:**
  - plural *-s, -es, -en, -ren, -i, -a.*

- **Syntactic Distribution:**
  - after determiners such as the, those, these, (e.g., these peanuts)
  - can appear after adjectives (the big peanut).
  - follow prepositions (in school).
  - subject of the sentence or as the direct object
  - negated by no

P.O.S distributionally
(English) -- Verbs

- **Derivational Suffixes**: -ate, and ize/-ise,

- **Inflectional Suffixes**:
  - In the past tense, *-ed* or *-t*
  - Present tense, third person singular *-s*.
  - progressive *-ing* perfective *-en* passive *-ed* and *-en*

- **Syntactic Distribution**:
  - Follow auxiliaries and modals and the special infinitive marker *to*
  - follow subjects*
  - can follow adverbs such as *often* and *frequently*.*
  - can be negated with *not* (as opposed to *no* and *un-*) *not very reliable

P.O.S distributionally
(<u>English</u>) -- Adjectives

- **Derivational Suffixes**: *-ing, -ive, -able, -al, -ate, -ish, -some, -(i)an, -ful, -less, -ly*

- **Inflectional Suffixes**:
  - comparative form *-er* (or follow *more*).
  - superlative form *-est* (or follow *most*).
  - negated used the prefix *un-*

- **Syntactic Distribution**
  - between determiners and nouns.
  - They also can follow the auxiliary *am/is/are/was/were/be/been/being* (warning: this distribution overlaps with verbs).
  - adjectives can be modified by the adverb *very* (warning: this distribution overlaps with adverbs).

P.O.S distributionally
(English) -- Adverbs

- **Derivational Suffixes**: Many adverbs end in -ly: quickly, frequently, etc.

- **Inflectional Suffixes**:
  - generally don't take any inflectional suffixes.
  - on rare occasions they can be used comparatively and follow the word more: She went more quickly than he did.

- **Syntactic Distribution**
  - Adverbs can't appear between a determiner and a noun or after *is* and its variants.
  - can really appear pretty much anywhere else in the sentence, although typically they either appear at the beginning or end of the clause/sentence.
  - can be modified by the adverb very.

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- Each language has its own set of distributional criteria.

- Not all languages have the same sets of parts of speech as English. Some may have less (eg. They may not distinguish verbs from adjectives) or they may have more!

Open vs. Closed P.O.S

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- Open Class POS:
  - ✦ allow neologisms (new words)
  - ✦ express content
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- Open Class POS:
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- Closed Class POS:
  - don't allow new additions
  - express function
  - Prepositions, conjunctions, modals, auxiliaries, determiners (articles), pronouns, among others.

Lexical vs Functional

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- **Lexical Parts of Speech**: (usually open class, but some exceptions, e.g. pronouns) Express the contentful/referential part of the meaning. (N (including pronouns), V, A,). All that is usually left when you speak telegraphically.

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- **Functional Parts of Speech**: (closed class). Expresses the grammatical information in the sentence. The "glue" that holds the sentence together. (P, T, C, D, Neg, Conj)

Some closed class POS

- **Prepositions** (P): to, *from, under, over, with, by, at, above, before, after, through, near, on, off, for, in, into, of, during, across, without, since, until*

- **Determiners** (D)
  a) Articles: *the, a, an*
  b) Deictic articles: *This, that, these, those, yon*
  c) Quantifiers: *Every, some, many, most, few, all, each, any, less, fewer, no*
  d) Numerals: *one, two, three, four,* etc.
  e) Possessive pronouns: *my, your, his, her, its, our, their.*
  f) Some wh-question words: *which, whose*

Some closed class POS

- **Conjunctions** (Conj): *and, or, nor, neither… nor, either … or*

- **Complementizers** (C): *that, for, if, whether*

- **Tense** (T)
    - Auxiliaries: have/has/had, am/is/are/was/were, do
    - Modals: will, would, shall, should, can, could
    - Non-finite Tense marker: to

- **Negation** (Neg): not

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Note spelling!

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Subcategories

- Within categories we want to make distinctions. These are subcategories.

- For example within nouns:
    - Count nouns require a determiner, Mass nouns do not:
        - *cat / the cat
        - sugar / the sugar

- We capture this with features: *cat* is of category $N_{[+count]}$

Subcategories of T

- Auxiliaries (can have more than 1, usually *do*, *have* and *be*)
  - [-modal, -nonfinite]

- Modals (can only have 1, must come first, e.g. should, can etc.)
  - [+modal, -nonfinite]

- Infinite marker to: appears only in non-finite contexts:
  - [-modal, +non-finite]

- Can also make tense distinctions using [±past]

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- The philosopher   loves   caramel apples.
  argument   predicate   argument

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    - The philosopher gave the book to the linguist 3 arguments

Transitivity
some loose definitions

Name	# of Arguments	example
intransitive	1 argument	smile, arrive
transitive	2 arguments	hit, love, kiss
ditransitive	3 arguments	give, put.

Subcategories of V

- More fine tuned restrictions:

  - Intransitive arrive does not allow an object
    - The package arrived.
    - *The man arrived the package.
    - $V_{[NP \_\_\_]}$

  - Hit only allows NP complements
    - I hit [$_{NP}$ the ball]
    - *I hit [$_{CP}$ that you knew the answer]
    - $V_{[NP \_\_\_ NP]}$

  - Ask allows both NP and clausal complements (objects)
    - I asked [$_{NP}$ the question]
    - I asked [$_{CP}$ if you knew the professor]
    - $V_{[NP \_\_\_ \{NP/CP\}]}$

Subcategories of V

- More fine tuned restrictions:

  - Spare requires two NP objects
    - I spared [NP him] [NP the trouble.]
    - *I spared [NP the trouble] [PP to him.]
    - V[NP__ {NP/PP}]

  - Put requires 1 NP and 1 Prepositional Phrase (PP)
    - *I put [NP the box] [NP the book]
    - I put [NP the book] [PP in the box]
    - V[NP __ NP PP]

  - Give allows either two NP objects or an NP and a PP
    - I gave [NP the box] [PP to Leah]
    - I gave [NP Leah] [NP the box]
    - V[NP__ NP {NP/PP}]

Subcategories of V

- More fine tuned restrictions:

  - Tell allows an NP object and either another NP, CP or PP
    - I told [$_{NP}$ Daniel] [$_{NP}$ the story]
    - I told [$_{NP}$ Daniel] [$_{CP}$ that the exam was cancelled
    - I told [$_{NP}$ the story] [$_{PP}$ to Daniel]
    - V $_{[NP \_\_ \{NP/CP/PP\}]}$

- There are many other types of verbs (e.g. *happen* takes a CP subject). But the ones listed here should be a start.

Subcategories of V

[NP__]	intrans 1	*arrive*
[NP __ NP]	trans 1	*hit*
[NP __ {NP/CP}]	trans 2	*ask*
[NP __ NP NP]	ditrans 1	*spare*
[NP __ NP PP]	ditrans 2	*put*
[NP __ NP {NP/PP}]	ditrans 3	*give*
[NP __ NP {NP/PP/CP}	ditrans 4	*tell*

Subcategories of Other Categories

- Nouns: [±count], [±pronoun], [±plural], [±anaphor]

- Determiners [±deictic], [±quantifier], [±wh] etc.

- Adverbs & Adjectives -- there is an optional problem set on this in the textbook.

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