Parts of Speech

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Parts of Speech (POSs)

Part of speech is a formal property of word-types that determines their acceptable uses in syntax.

Parts of speech (syntactic categories) can be regarded as classes of words. Examples:

- nouns
- verbs
- adjectives
- adverbs

POS does not define how a word participates in the semantic interpretation of a sentence (although not entirely independent).

A word-type can have more than one POS, but a word-token has exactly one, e.g.:

\[ \text{I can}_{\text{Aux}} \text{ kick the can}_{\text{N}}. \]
Parts of Speech

Content categories

• large classes
• new (neologisms) and archaic/extinct words
• semantically rich and independent
• examples: nouns, verbs, adjectives

Function(al) categories

• small classes
• conservative — few words lost or gained over time
• semantically dependent on content words
• examples: determiners, prepositions, conjunctions
Nouns

Nouns refer to *varieties*: entities and concepts in the world

Examples: cat, hat, Fred, life, philosophy, him

Properties:

- case (language specific)
- person
- number (language specific)
- gender (language specific)
  - grammatical gender and/or
  - natural gender
Nouns

Nouns refer to *varieties*: entities and concepts in the world

Examples: cat, hat, Fred, life, philosophy, him

Properties:

- case (language specific)
  - nominative
  - genitive/possessive
  - accusative/objective
  - vestiges of others, e.g., -ward
  - pronominal clitic forms

- person

- number (language specific)

- gender (language specific)
Nouns

Nouns refer to *varieties*: entities and concepts in the world

Examples: cat, hat, Fred, life, philosophy, him

Properties:

- case (language specific)
- person
  - first: speaker/author
    * inclusive (of hearer/reader)
    * exclusive
  - second: hearer/reader
  - third: everyone else
- number (language specific)
- gender (language specific)
Nouns

Nouns refer to *varieties*: entities and concepts in the world

Examples: cat, hat, Fred, life, philosophy, him

Properties:

- case (language specific)
- person
- number (language specific)
  - singular: one (or less)
  - plural: two/three or more
  - dual: exactly two
- gender (language specific)
Nouns

Nouns refer to *varieties*: entities and concepts in the world

Examples: cat, hat, Fred, life, philosophy, him

Properties:

- case (language specific)
- person
- number (language specific)
- gender (language specific)

Verbs agree with their *subjects* in person, number (and gender)

In the English present tense, only third-singular is overtly inflected
Nouns

Nouns refer to *varieties*: entities and concepts in the world

Examples: cat, hat, Fred, life, philosophy, him

Other distinctions

- proper vs. common noun
- pronouns: like proper nouns, but with *anaphoric reference*
  - discourse
  - reflexive
  - reciprocal
- mass vs. count noun
Nouns

Nouns refer to *varieties*: entities and concepts in the world

Examples: cat, hat, Fred, life, philosophy, him

Nouns bear *grammatical functions*:

- subject: *John* gave Mary the book
- (direct) object: John gave Mary *the book*
- indirect object: John gave *Mary* the book
- object of preposition: John gave the book to *Mary*

and *thematic roles*: agent, patient, theme, location in, location to, instrument, recipient, beneficiary, ...
Mapping Grammatical Function to Case

This is language-specific, but in languages like English:

<table>
<thead>
<tr>
<th>Gram. Fn.</th>
<th>Subject</th>
<th>Direct Object</th>
<th>Indirect Object</th>
<th>(Oblique)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case</td>
<td>Nominative</td>
<td>Accusative</td>
<td>Dative</td>
<td>Preposition + Case</td>
</tr>
</tbody>
</table>

...and this is just for verbal grammatical functions. Some nouns can have arguments with grammatical functions, for which the genitive case is generally used, e.g., the ship’s destruction, the student’s thought, the boy’s search.
Adjectives

Adjectives qualify or describe varieties

Examples: good, tall, red, thorough, clever, former

Properties:

• case (agrees with noun)
• number (agrees with noun)
• gender (agrees with noun)
• degree
  – positive: happy
  – comparative: happier
  – superlative: happiest
Adjectives

Adjectives qualify or describe varieties

Examples: good, tall, red, thorough, clever, former

Other distinctions:

• colour, size, . . .
  – big red vs. red big

• intensionality
  – former, alleged

• attributive vs. predicative
  – mine, (arch.) thine
  – ours, yours, theirs
Prepositions

“anywhere a mouse can go:”

- *over, under, in, out, ...*

but also:

- *by*
  - alongside: a cottage *by* the lake
  - agentive: ...given to Mary *by* John

- *for*
  - benefactive: a newspaper *for* your father
  - purpose: reserve a room *for* a lecture

- *of*
  - possessive: office *of* a professor
  - partitive: leg *of* a table
  - measure: three cups *of* sugar
  - appositive: the province *of* Ontario
  - objective: destruction *of* the aircraft
Prepositions

“anywhere a mouse can go:”

- *over, under, in, out, ...*

but also:

- *with*
  - sociative: watch a film *with* a friend
  - instrumental: hit a nail *with* a hammer

- *others ...*

Most of the exceptions are uses of prepositions where other languages would use case.
Determiners

Semantically, these are quantifiers (as in logic)

Syntactically, they are the leftmost modifiers of nouns in a *noun phrase*

Kinds:

- articles: *a, the*
- quantificational: *every, some, most*
- demonstrative: *this, that*
- numerical: *one, two, three*

Determiners typically agree in case, number, and gender with their nouns (like adjectives).
Verbs

Verbs *predicate* events or states of being

Properties:

• person (agrees with subject)
• number (agrees with subject)
• often gender (agrees with subject)
• tense: present, past, future, ...
• aspect: durative, iterative, progressive
• voice: active, passive, (middle)
• mood
  – infinitive: *to go*
  – indicative: *he goes/went*
  – imperative: *(you) go!*
  – interrogative: *Did he go?*
  – subjunctive: *if he were to go …*
  – optative: … *then she would go too*
Mapping Thematic Role to Grammatical Function

This is language-specific as well as verb-specific, but there are systematic alternations that are captured by voice:

Active voice, e.g., *John threw the ball to Mary:*

<table>
<thead>
<tr>
<th>Them. Role</th>
<th>Agent</th>
<th>Theme/Patient</th>
<th>Beneficiary</th>
</tr>
</thead>
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<tr>
<td>Gram. Fn.</td>
<td>Subject</td>
<td>Direct Object</td>
<td>Indirect Object</td>
</tr>
<tr>
<td>Case</td>
<td>Nominative</td>
<td>Accusative</td>
<td>Dative/to+Accusative</td>
</tr>
</tbody>
</table>

Passive voice, e.g., *The ball was thrown by John to Mary:*

<table>
<thead>
<tr>
<th>Them. Role</th>
<th>Theme/Patient</th>
<th>Beneficiary</th>
<th>Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gram. Fn.</td>
<td>Subject</td>
<td>Indirect Object</td>
<td>Obj. of Prep.</td>
</tr>
<tr>
<td>Case</td>
<td>Nominative</td>
<td>Dative/to + Accusative</td>
<td>Instrumental/by+Acc.</td>
</tr>
</tbody>
</table>
Verbs

Other distinctions

• transitive vs. intransitive
• auxiliaries and modals
• stative: become, feel
• copular: be
Adverbs

Modify verbs, adjectives, and other adverbs:

- run quickly
- very happy, much more
- very quickly, very much

Adverbs indicate:

- time: soon, now, yesterday, ...
- place: here, far, ...
- manner: quickly, angrily, ...
- degree: very, much