introduction to linguistics II: morphosyntax

Winter Term 2006/2007

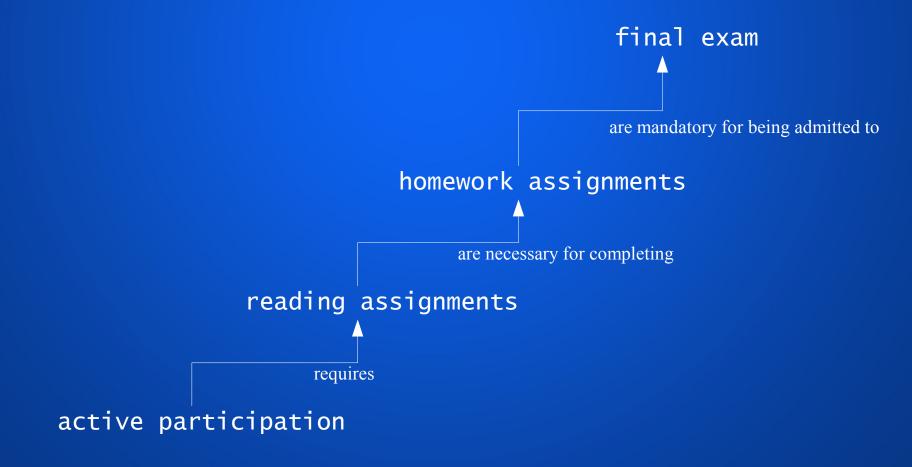
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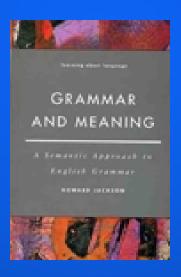
Sprechstunde: Donnerstags, 14-15h

www.daniel-wiechmann.net

requirements



reading materials



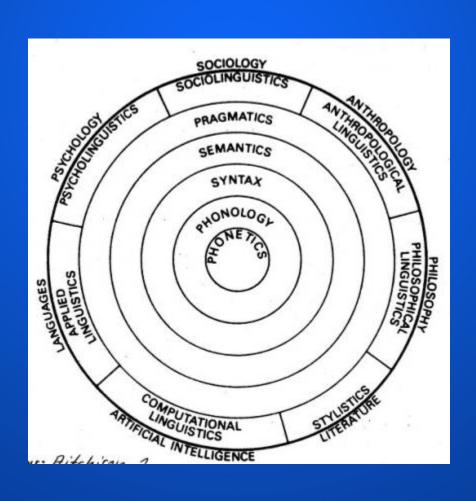
Jackson, Howard. 1990. *Grammar and Meaning: A semantic approach to English grammar*. London: Longman.

additional materials

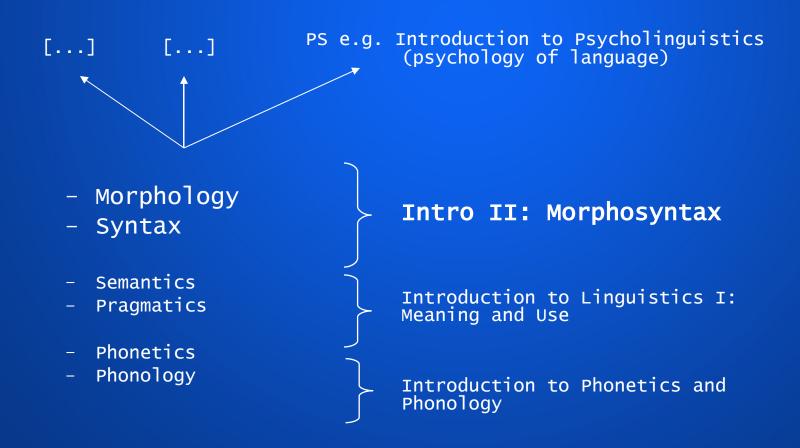
materials used in class can be downloaded from my website

www.daniel-wiechmann.net

branches of linguistics



where are you?



aims of the course:

- introduction of elementary concepts of syntactic and morphological description
- enable you to analyze syntactic structures of concrete linguistic data (up to the level of complex sentences) and relate them to semantic structures

grammar: some elementary observations

Phenomenon 1:

(s) All the passengers on the plane would rather listen to Abbott and Costello than watch another crummy movie.

Phenomenon 2:

- (s_1) Sara is a graduate student.
- (s_2) William believes that Sara is a graduate student.
- (s_3) Peter said that William believes that Sara is a graduate student.
- (s₄) Mary remarked that Peter said that William believes that Sara is a graduate student.
- $[S_1, \ldots, S_n]$

grammar: central assumptions

From this it follows that S cannot have simply memorized the set of sentences of L. (=the knowledge of L cannot be characterized as a list of sentences)

As a working hypothesis, we will say that this knowledge is better conceived of as consisting of a finite set of rules and principles (mental grammar) applied to a finite set of lexical items (mental lexicon).

The aim of linguistic analysis is to make that knowledge explicit by means of rational reconstruction.

Rational reconstruction is a method that systematically translates intuitive knowledge of rules into a logical form.

basic units in grammatical analysis

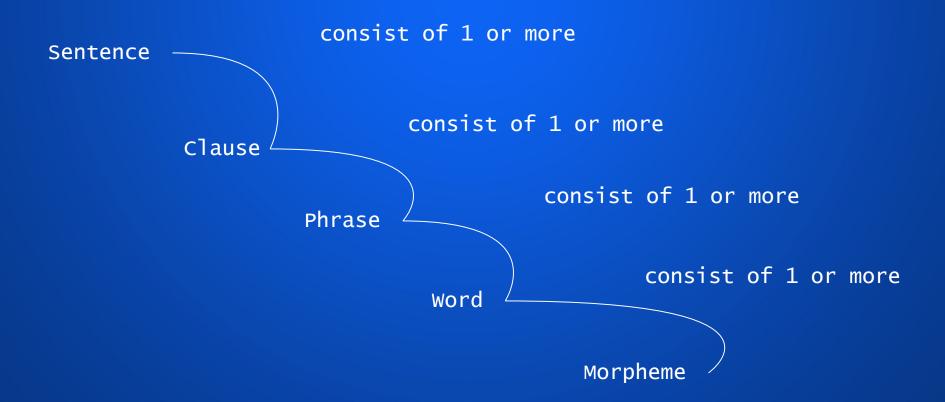
In order to state rules about the structure of sentences, it is necessary to refer to units smaller than sentences.

The *formal* units will be called:

- clause
- phrase
- word
- morpheme

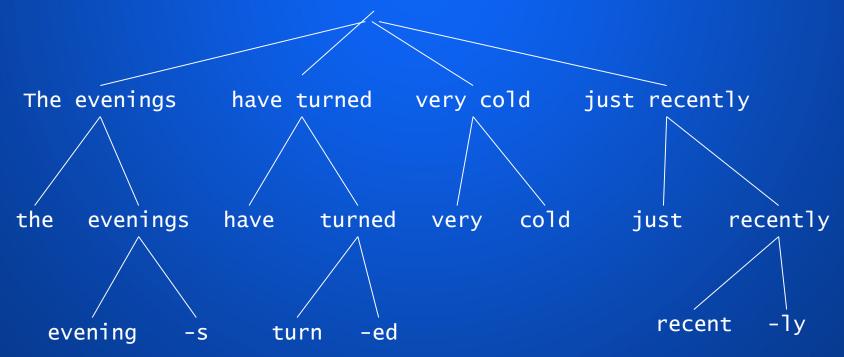
sentences and their parts

Grammatical units of English:

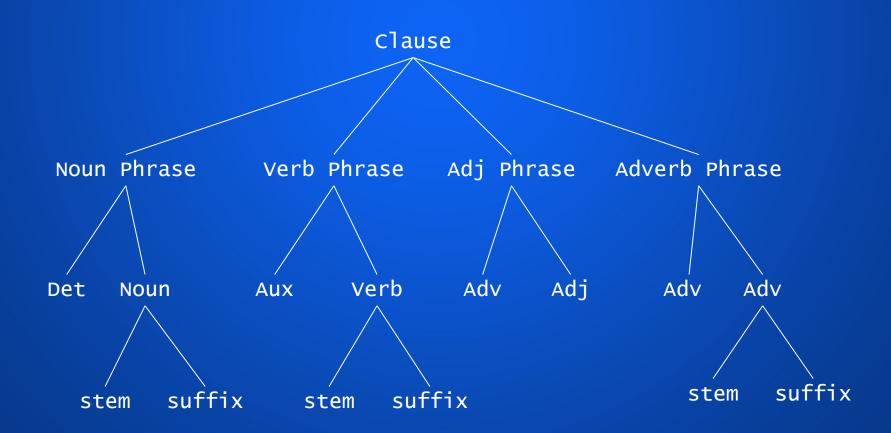


scientific description proceeds from the concrete...

The evenings have turned very cold just recently

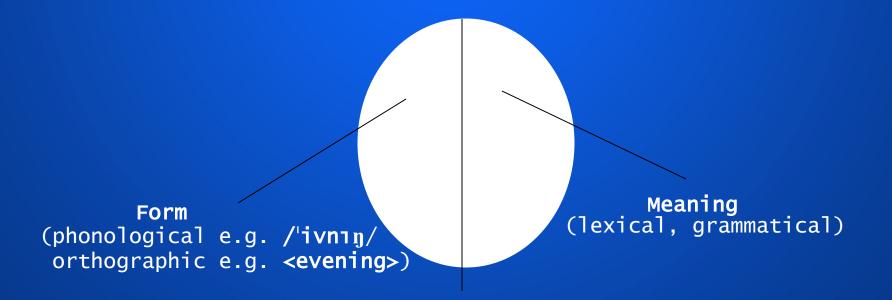


...to the abstract: generalisation

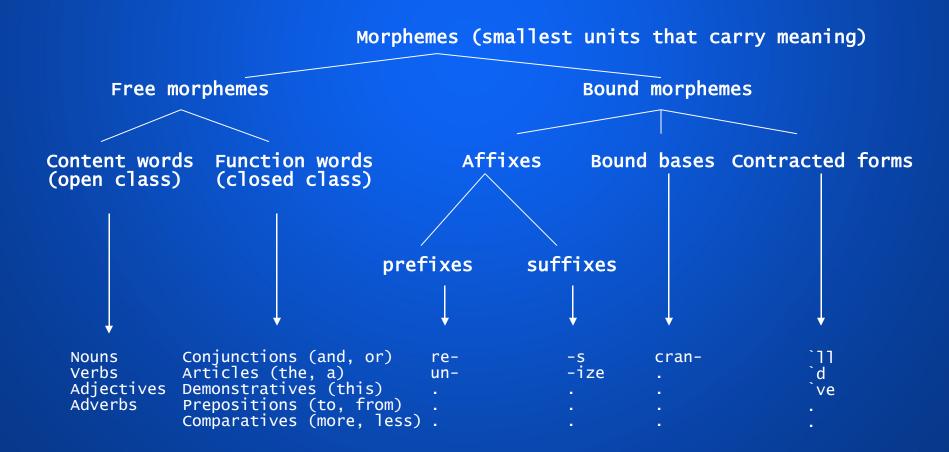


starting small: revisiting linguistic signs

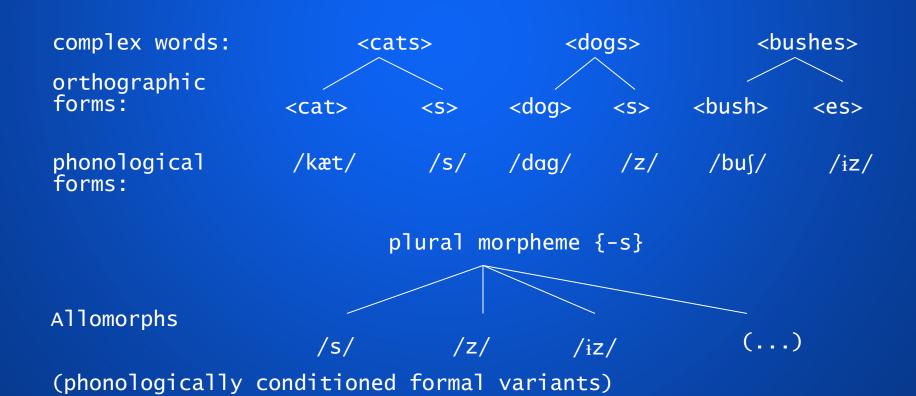
Morpheme (minimal pairing of form and meaning)



classification of morphemes



morphemes and their realizations



inflectional vs. derivational morphemes

- inflectional affixes
 - never change word
 class (POS)
 - follow derivational
 affixes (outer layer)
 - > function: create new word forms
 - semantic impact is highly predictable

- derivational affixes
 - may or may not change word class (POS)
 - precede inflectional affixes (inner layer)
 - function: create new words
 - semantic impact is unpredictable

word-formation

- Different ways to enter the lexicon
 - Coinage: invention of totally new terms
 - Derivation: attaching (derivational) affixes to a stem
 - Compounding: joining of separate words to produce a single form

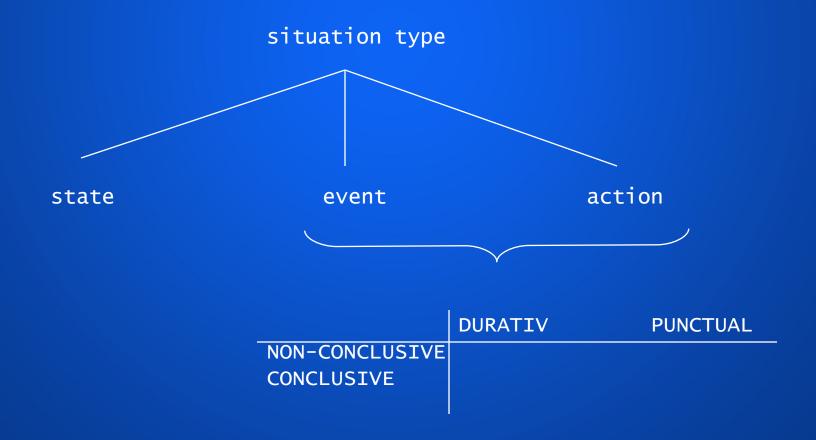
word-formation

- Clipping: a word consisting of more than one syllable is reduced to a shorter form
- Backformation: special type of reduction; analysis of form as a result of derivation and takes away the alleged affix
- Conversion (aka zero-derivation): change of syntactic category (part of speech, word class) without adding any material

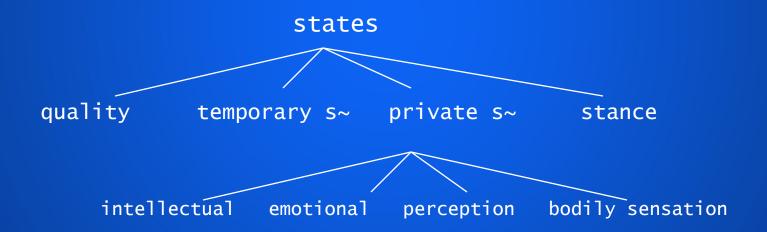
word-formation

- Acronyms: formed from initial letters of a set of other words
- Blending: combining parts of two separate words to produce a single form
- Borrowing: taking words from other languages

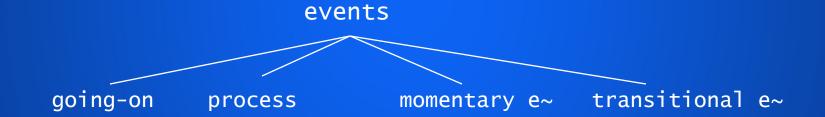
from a semantic point of view: situation types



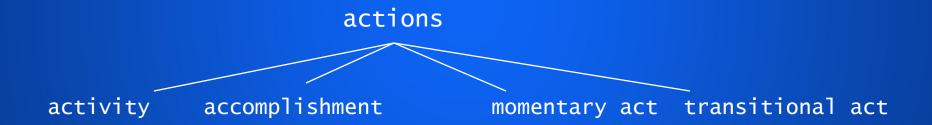
states, events, actions



states, events, actions



states, events, actions



situation types and grammatical categories

Using the proposed classification, we end up with fifteen situation types.

We may say that the verb is the unit in natural languages whose meaning refers to these situation types.

Hence, we end up with fifteen semantic sub-classes into which the set of verbs may be devided.

Anchoring a situation in space, time, and reality

tense aspect modality

tense

tense is a deictic, temporal relation

i.e. a relation denoting a period of time prior to (past) or after (future) a pragmatically determined "moment of speaking"

Only two tenses are morphologically coded in English(L_F):PAST (-ed) and NON-PAST

FUTURE TENSE can only be expressed by means of modal auxiliaries (will, shall, be going to)

aspect

aspect is a non-deictic characterization of internal temporal structure of event/situation

i.e. aspect indicates the way in which a situation is perceived/conceptualized: extended, completed, ongoing etc.

L_E has a rather basic aspectual system: SIMPLE and PROGRESSIVE

modality

modality relates the described situation to reality: used to indicate whether a state is likely, possible, necessary etc.

Modal verbs of L_F:

will, would, can, could, may, might, shall, should, must, ought to, need, dare, used to

voice

Voice: change in the perspectivization of a given event (e.g. in order to de-emphasize the agent of an action)

L_E has **active** and **passive** voice

modality: epistemic vs. deontic

Epistemic modality is concerned with the speaker's degree of certainty as to the truth of the proposition expressed (central concepts: certainty, possibility, probability)

(i) He must be there. His car is parked in front of the house.

Deontic modality is concerned the way in which the event denoted relates to the speaker's social reality

(central concepts: permission, obligation, volition)

(ii) You **must** be there, or else... (~ I order you to be there)

TAM information

```
(i) Kate hugged the baby.
(ii) Kate was hugging the baby.
(iii) Kate has been hugging the baby.
(iv) Kate might have been hugging the baby
```

Formally, TAM information is expressed through verbs and a number of (modal) auxiliaries

auxiliary verbs: properties

Primary auxiliaries (be, have, do) are marked for tense, person, number (negation with not, often as clitic form)

Central modal auxiliaries (will, would, shall, should, can, could, must, may, might) do not do not carry tense-/person-/number-information (except in reported speech)

Semi-modals (ought to, dare (to), need (to), have (got) to, be able to, be supposed to, had better, would rather)

relative ordering of operators

Sequencing operators: The branch...

MODALITY	> PERFECT	> PROGRESSIVE >	PASSIVE >	MAIN VERB
			was [+past]	shaken
	had		been	shaken
		was [+past]	being	shaken
	has	been	being	shaken
wi 11	have		been	shaken
miaht	have	heen	heina	shaken

what's in a situation participants: nouns

In the present account, we might say that a verb(sense) evokes a situation.

Situations are not only characterized by the property/type of relation (expressed by the verb), but also by the entities that prototypically take part in them.

These obligatory entities are often called participants and usually formally expressed by nouns (or, more precisely, noun phrases)

what's in a situation participants: nouns

In most formal languages, for example first order predicate logic, the meanings of sentences (propositions) are formulated in terms of arguments bound to a predicate (relation)

```
Predicate (argument, argument2)
```

= (x,y)

LOVE (peter, mary)

what's in a situation participants: nouns

Such logical predicates (relations) differ in terms of the number of arguments they require.

This is often called the *valency* of the predicate (we get: unary, binary, ternary,...,k-ary relations)

Verbs can be taken to express such predicates (relations):

For example, the English verb 'love' can instantiate the semantic predicate LOVE, which is a 2-place (binary) relation involving

an AGENT
(say, somebody doing the loving)

and a PATIENT (AFFECTED)
(say, somebody/something that is loved)

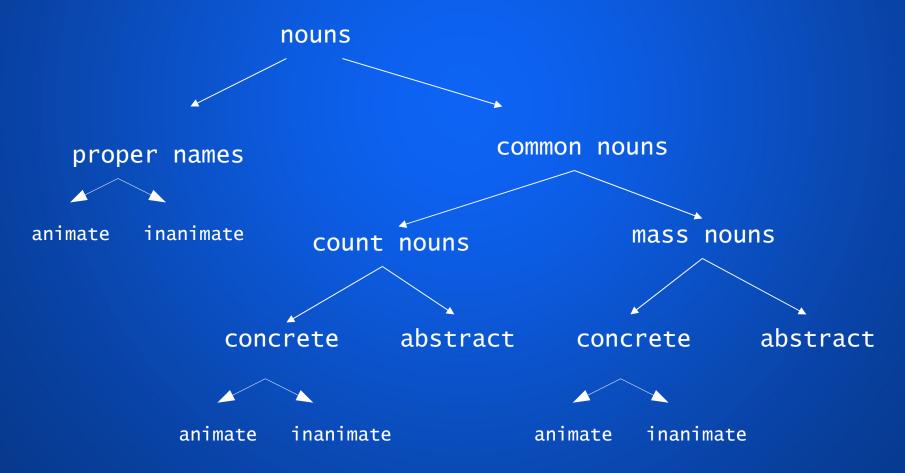
what's in a situation participants: nouns

Hence, verbs, i.e. formal categories, are associated with semantic predicates (love -> LOVE) and evoke a situation of some type (say, a state, event, or action).

Situations requires a certain set of *participants* that play some role in that situation.

Usually, these participants (semantic arguments) are formally realized as nouns (or, more precisely, noun phrases (NP))

a taxonomy of nouns



Semantic roles (employed in Jackson 1995)

AGENT(IVE)
AFFECTED (PATIENT)
ATTRIBUTE
RECIPIENT
EXPERIENCER
POSITIONER
EXTERNAL CAUSER
INSTRUMENT
EVENTIVE
LOCATIVE
TEMPORAL

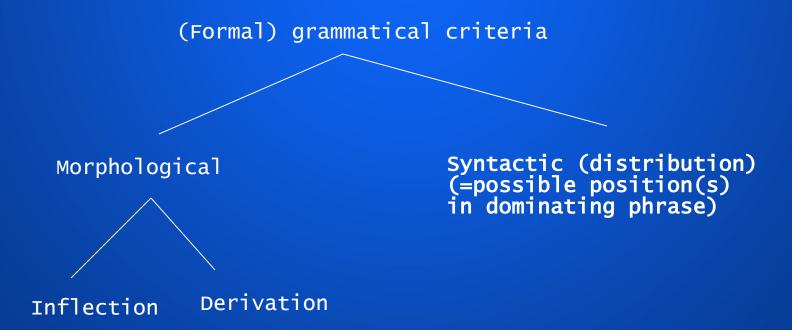
The list of proposed inventories of semantic roles (or thematic roles, theta roles, case roles, participant roles,...) is rather longish ranging from as few as 2 to as many as 16 or more roles posited. For our present purposes, however, we will stick with the roles suggested in Jackson 1995)

grammatical categories: a formalist view

What are grammatical categories (POS)?

"A grammatical category is a class of expressions which share a common set of grammatical [i.e. morphological and syntactic; DW] properties." Radford 1997: 29

criteria of classification: POS



an example

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

(Jabberwocky)

an example

```
'T[cl-prn] was[aux] brillig[adj], and[conj]the[art] slithy[adj] toves[N]
Did[aux] gyre[V] and[conj] gimble[V] in[prep] the[art] wabe[N]
All [quant[mimsy[adj] were[aux] the[art] borogoves[N],
And[conj]the[art] mome[N] rath[aux] outgrabe[adj].
```

(Jabberwocky[N])

Maybe it is possible to assign POS information to "words" on the basis of their distributional behavior alone?

syntax

"All sentences are hierarchically structured out of words and phrases, and each of the component words and phrases of a sentence belong to a specific category" Radford (1980:55)

syntax: structure dependency

Structure dependence principle:

All grammatical operations are structure dependent.

Minimal assumption: No structure dependency

TASK: Form interrogative from declarative

INPUT: John can lift 500 pounds

1 2 3 4 5

Rule 1: Move element 2 to initial position

OUTPUT: Can John lift 500 pounds?

Rule 1: Move element 2 to initial position

INPUT: Some linguists are thought to be odd

OUTPUT: *Linguists some are thought to be odd.

--> revise rule

Rule 2: Move the first *verb* in sentence initial position

'*' indicates ungrammaticality

```
Rule 2: Move the first verb in sentence initial position INPUT: You will like these women rule application

OUTPUT: *Like you will these people

--> revise rule

Rule 3: Move first auxiliary verb (AUX) in sentence initial position
```

Rule 3: Move first *auxiliary verb* (AUX) in sentence initial position

INPUT: Mary left early

rule application

OUTPUT: ??? (no aux found)

--> revise rule

Rule 4: Move first auxiliary verb (AUX) in sentence initial position; if there is no AUX, insert (proper morphological variant of) "do" in sentence initial position (and, if necessary, make appropriate changes in main verb)

Rule 4: Move first auxiliary verb (AUX) in sentence initial position; if there is no AUX, insert (proper morphological variant of) "do" in sentence initial position (and, if necessary, make appropriate changes in main verb)

INPUT: The people who are sitting over there will leave soon."

rule application

OUTPUT: *Are the people who sitting over there will leave soon

--> revise rule

Rule 5: Move the first AUX that follows the subject of the sentence in sentence initial position [& DO support-addition]

Rule 5: Move the first AUX that follows the subject of the sentence in sentence initial position [& DO support-addition]

INPUT: Yesterday John could lift 500 pounds rule application

OUTPUT: *Could yesterday John lift 500 pounds

--> revise rule

Rule 6: Move the first AUX that follows the subject immediately to the left of the subject [& DO-support addition]

Rule 5: Move the *first AUX* that follows the *subject* immediately to the left of the subject [& DO-support addition]

[the end]?

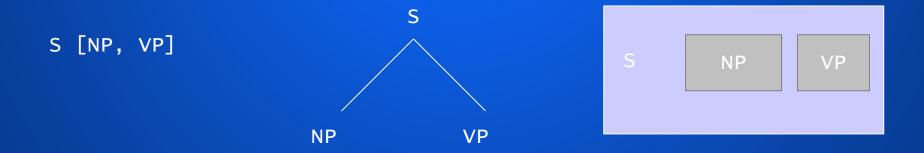
- So, what does this tell us?
- We began with the assumption, that sentences are unstructured strings of words.
- It turned out not to be possible to formulate an adequate rule without
- a) postulating parts of speech (syntactic categories)
- b) postulating the notion of *subject* (syntactic constituents)
- c) referring to *linear ordér*

three aspects of sentence structure

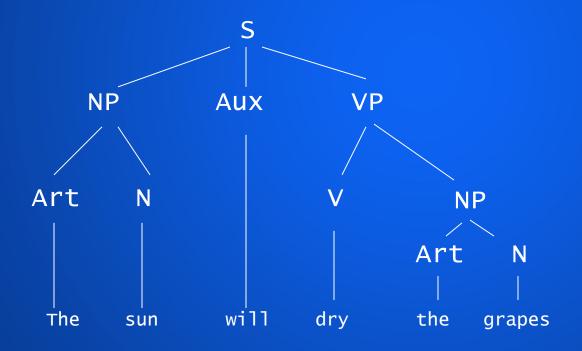
- The linear order of words in a sentence
 (i) The dog bit the horse
- The categorization of words into parts of speech (POS-tagging)
- 6. The grouping of words into structural constituents of the sentence (parsing)

syntax: notational variants

Bracketing vs. tree diagrams vs. box diagrams

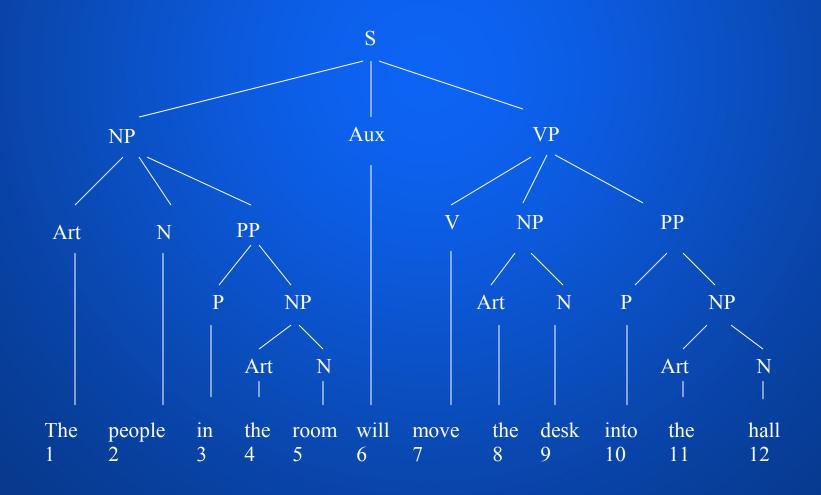


phrase markers: notational variants



 $\frac{\text{Bracketing notation}}{\left[\left[\text{The}_{\text{Art}} \text{ sun}_{\text{NP}}\right]_{\text{NP}} \left[\text{will}_{\text{Aux}}\right] \left[\text{dry}_{\text{v}} \left[\text{the}_{\text{Art}} \text{ grapes}_{\text{N}}\right]_{\text{NP}}\right]_{\text{VP}}\right]_{\text{S}}}$

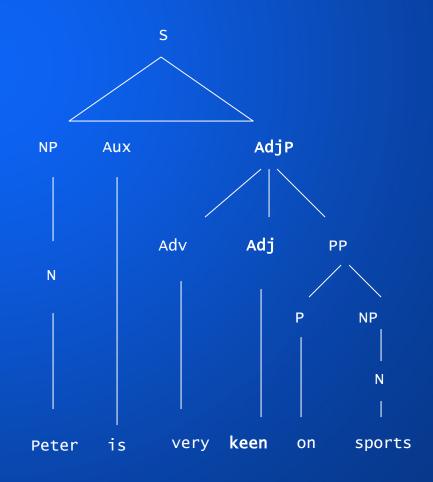
encoding of structural information: tree diagrams (phrase markers)



A projection p is a constituent c which is an expansion of a head word.

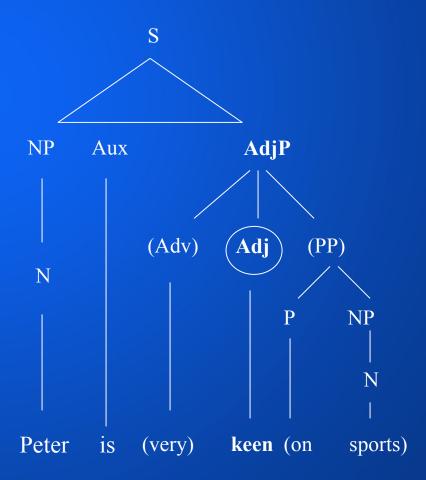
A minimal projection is a c which is not a p of some other c (hence, heads, i.e.words, are minimal p)

A maximal projection is a c which is not contained within a c with the same head

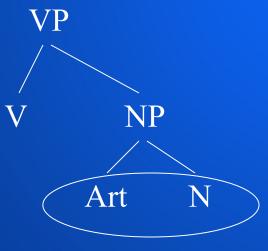


encoding of structural information:

Whenever a single unmodified lexical category X has the same distribution as a full XP, we should assign it the status of XP



relations among nodes: (immediate) dominance



'daughters of the same mother node=sisters'

<u>(immediate) dominance</u>: Relationship between a node and the material that branches down from it.

A node α immediately dominates another node β iff α is the next higher node connected to β

(α is the 'mother node' of β , and β is the 'daughter node' of α)

immediate constituent (IC) analysis

- Cleft sentences (It is X that Y- construction)
 Conjunction ([____ and ___])
 Substitution (pronominalisation)
- 4. Reordering (movement)
- 5. Ellipsis

immediate constituent (IC) analysis: For all strings x,

Does x have the **same distribution** as (i.e. can it be replaced by) an appropriate phrase of a given type? If so, it is a phrase of the respective type.

Can it undergo **movement** (i.e., preposing or postposing)? If so, it is a phrase of some sort.

Can it serve as a **sentence-fragment** (S1: Where are you going? S2: To the cinema/ The cinema) If so it is a phrasal constituent.

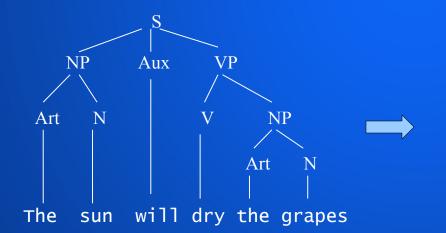
Does it permit positioning of **S- or VP-adverbials internally**? If so it is an S or VP, and not for example, an NP or PP

Can it undergo **ordinary coordination** with another string? If so, it is a constituent of the same type as the one with which it is coordinated.

Can it serve as a shared constituent in **shared constituent coordination**? If so, it is a phrase

Can it be **replace** by (or serve as an antecedent of) an appropriate **proform** If so, it is a phrase of the same type of the proform

Can it undergo **ellipsis** under appropriate discourse conditions? If so, it is a VP



Phrase structure rules

S → NP Aux VP

NP → Art N

VP → V NP

phrase structure grammars: a little background

• Traditionally (i.e. during the 'American structuralism' ~ 1930-50), IC-tests served as a (operational) procedure to discover the structure of linguistic utterances.



Leonard Bloomfield

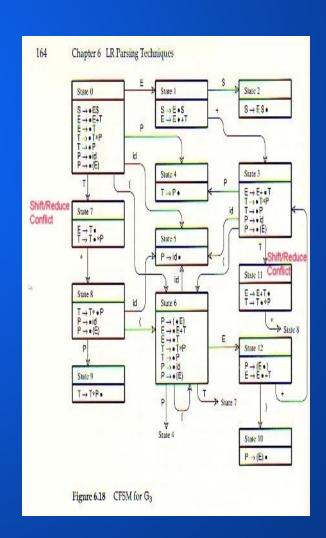


Noam Chomsky

• Later - e.g. Chomsky (1957, 1965) - this exploratory approach to discover linguistic structures was reinterpreted...

phrase structure grammars: a little background

- What started as a static means to describe structures was characterized as 'generative rules' (re-write rules, phrase structure rules) that can be seen as a characterization of a '(generative) grammar'
- A grammar is supposed to describe the tacit (=unconscious) knowledge of a idealized adult speaker/hearer about his native language (competence)
- Note: Syntactic component of grammar G is given a privileged position within the theory, but G incorporates other components as well (e.g. the phonological, (morphological), semantic, (pragmatic))



phrase structure grammars: the notion of grammaticality (syn.well-formedness)

* colorless green ideas sleep furiously

- Phrase markers are the product of phrase structure rules (PS-rules)
- The set of all PS-rules (elegantly) describes the set of all possible sentences in a given L
 - A (generative) grammar is viewed as set of formal, recursive procedures that generate all and only the well-formed sentences of a given L
 - cf. production systems in cognitive science

Example: PS-rule for NP

```
[She] is weird.
[Mary] is nice
[The girl] is nice
[A big man] walked along the river.
[An even bigger woman] passed him by.
[Water in the basement] is a bad sign
[The people in this room] are bored
[All the people in this room] are bored
[The guy who I saw last time] didn't show up
[...]
```

- From this data we get:
 - $NP \rightarrow N$
 - $NP \rightarrow Art N$
 - $NP \rightarrow N PP$
 - $NP \rightarrow Art N PP$
 - NP → Quantifier Art N
 - NP \rightarrow Art AP N
 - $NP \rightarrow Art N S$

 \rightarrow (Q) (Art) (AP) N (PP)(S)

sentences and their parts: form and function

Different levels of description:

Form classes

Functional classes

Phrase level
NP, VP, AdjP, PP

Within clause (grammatical relations)
Subject (S), Predicator (P),
Object (O), [...]

Word level N, V, Adj, Adv, P

Within phrase
Modifier (M), head (H), [...]

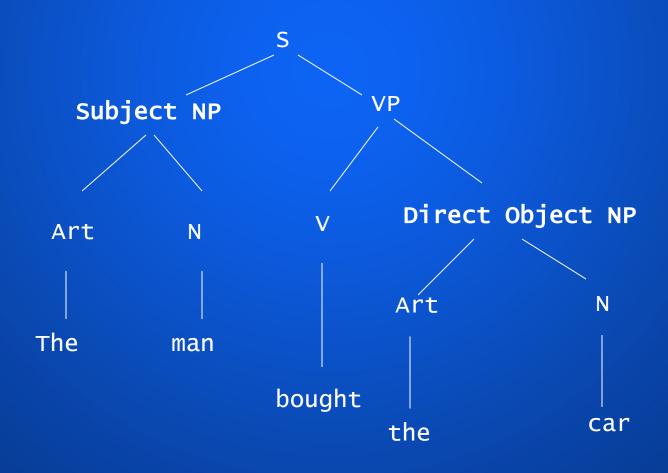
remarks on grammatical relations

These functional categories are well established in traditional grammar and can be useful for the statement of many generalizations (e.g. clause patterns, yes/no-interrogative/question formation rule); however, some linguists consider them to be epiphenomenal.

Grammatical relations might be viewed as labels for a set of (typical) properties_{semantic, syntactic, pragmatic}:

- >SEM: often more animate/in control of the action denoted by the verb:
- >SYN. subjects control co-reference and verb agreement
- >PRAG. subjects are topic

structurally defined grammatical relations



clauses: structural vs. functional description

```
He gave [Mary] [the book]
NP V NP NP

He considered [him] [a liar].
NP V NP
```

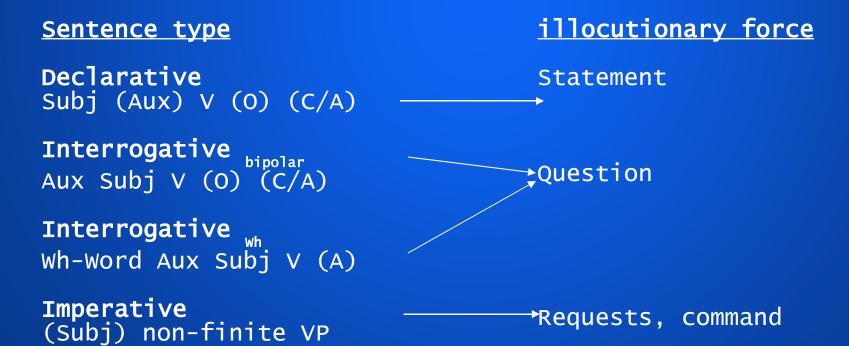
introducing functional categories

The seven basic clause patterns:

```
Subject (S)
Predicator (P)
Object (O)
Complement (C)
Adverbial (A)
```

```
SP (intransitive)
SPO<sub>i,d</sub> (monotransitive)
SPO<sub>i</sub>O<sub>d</sub> (ditransitive)
SPC (copular)
SPA (copular)
SPOC (complex-trans)
SPOA (complex trans)
```

sentence types



complex sentences

Minimally, sentences consist of just one clause (=simple sentences).

Clause patterns are typically described in terms of functional categories such as: subject (S), predicator (P), object (O), complement (C), and adverbial (A).

coordination and subordination

However, sentences usually consist of more than just one clause (=complex sentences)

two major devices for **linking clauses** within a sentence:

coordination

subordination

coordination and subordination

```
coordination: linking of two clauses of the same type
      (1) [Peter likes Mary] and [John likes bananas]
      coordinate conjunctions:
          and, but, for, so [...]
      correlatives: either...or, both...and, not
          only...but [...]
```

coordination and subordination

while [...]

```
SO: linking of a matrix clause (or superordinate, or main) and a subordinate (or dependent) clause

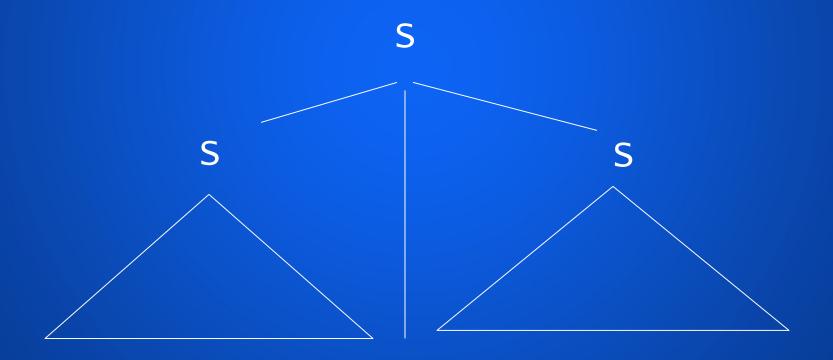
(2) [Peter thinks [that John is stupid]]
subordinating conjunctions: because, although,
```

finite vs. non-finite clauses



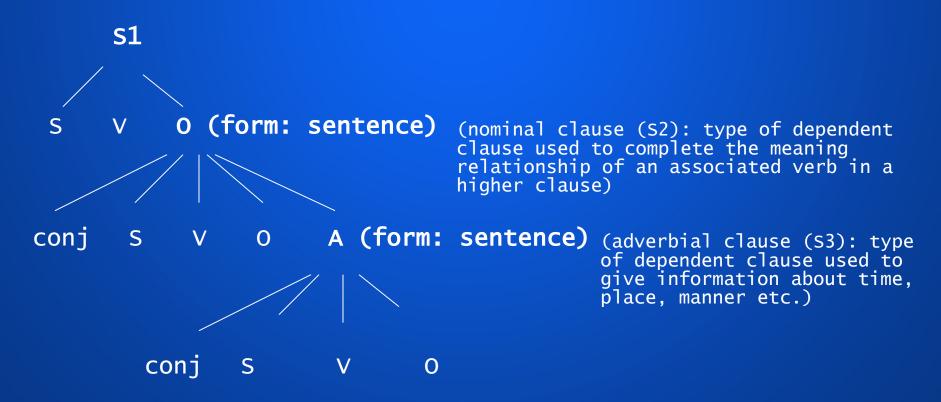
-ing participle constructions: Leaving her room, she tripped

coordination



subordination

 $_{\rm s1}$ [He [predicted [$_{\rm s2}$ [that he would discover the tiny particle, $_{\rm s3}$ [when he conducted his next experiment]]]]



three types of subordinate clauses

Subordinate clauses may function as subject, object, complement, adverbial in a superordinate clause (matrix clause).

They can also function as modifiers (=relative clauses).

Functional classes of SO clauses

Nominal clauses

Adverbial clauses

Relative clauses

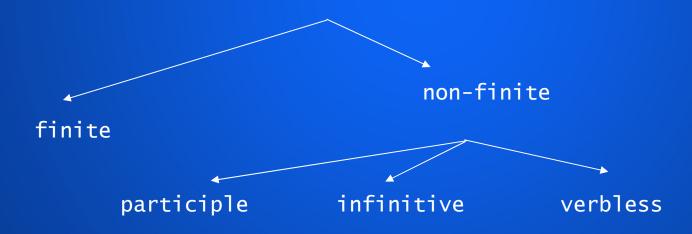
nominal clauses

Nominal clauses (these can realize arguments, i.e. S and O)



adverbial clauses

adverbial clauses



When ripe, the oranges are picked.

If possible, do your reading assignment.

A relative clause (RC) is a kind of subordinate clause that modifies a noun or nominal.

i. Micheal hates [people [who listen to Robbie Williams]]

RCs are usually introduced by an **element R** that is **anaphorically related** to the modified nominal.

This element derives its semantic interpretation from its antecedent, the external **head** of the relative clause.

i. Micheal hates [**people** [who listen to Robbie Williams]] HEAD R antecedent

```
i. The guy who you are dating ___ is an idiot. ii. The film that you like ___ is stupid. iii. The music Ø you like ___ is characterless.
                                                                                                                                            (WH relative)
(that relative)
(bare relative)
```

canonical position of argument of transitive verb

Terminology:

psycholinguistics: gap (R is filler) linguistics: trace (R_{prn} is left-dislocated wh-element)

- External syntax (filler)

 The guy we saw was Peter
 I know the guy you are talking to
 He lives in the same house where Peter lives

```
Internal syntax (gap)
The man who __ slept (S)
The man I met ___ (O<sub>d</sub>)
The man I gave the picture to ___ (O<sub>i</sub>)
```

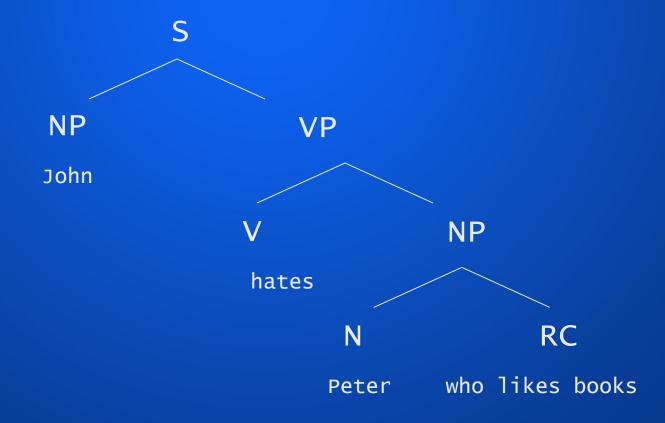
Center embedded vs. Right-branching structures

Peter who likes books hates John

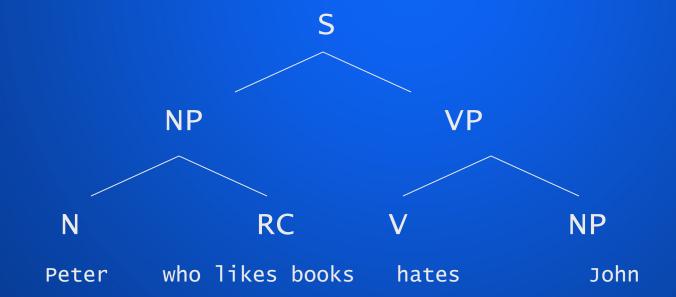
Center embedded vs. Right-branching structures

Peter hates John who likes books

center embedded vs. right-branching structures



center embedded vs. right-branching structures



relative clauses: processing difficulty

center embedded structures

[The man] that [the dog] bit laughed.
The man that the dog that the cat hates bit laughed.
The man that the dog that the cat that the bird despises hates bit laughed.
[...]

relative clauses: processing difficulty

right branching structures

[The man] likes [the guy] that bit [the dog].
The man likes the guy that bit the dog that bit the cat.
The man likes the guy that bit the dog that bit the cat that ate the bird.
The man likes the guy that bit the dog that bit the cat that ate the bird that ate the worm...
[...]

relative clause: internal syntax

R, the relativised element, can have a range of functions: (pronominal; wh-relatives)

```
my friends [who ( __ ) like MJ ]
my friends [who ( __ ) suck ]
her boyfriend [who(m) I hate__ ]
the books [which I referred to __ ]
the day [when you were born __ ]
a place [where you can relax __ ]
the reason [why you are here __ ]
```

A (Subj trans)
S (Subj intrans)
Object
Oblique
Adjunct Time
Adjunct Place
Adjunct Reason

We will ignore relativization on genitive NPs within a subject object NP etc. for the moment

Relative clauses

(dependent clause that can specify (relativise on) all grammatical relations (S, O_d , O_i , OBL) except the predicator)

ring participle
He is talking to a girl resembling Jane

-ed participle
The only car being repaired is mine

to infinitives

pronominal relativizer
The man who I talked to

non-finite REL clauses

-ing participle
He is talking to a girl resembling Jane

-ed participle
The only car being repaired is mine

to infinitives
The next train to arrive was from
Berlin

derived constructions

Recall:

```
Subordinate clauses can be of three types:
4. Nominal (typically realizing S or O roles)
5. Adverbial (typically realizing A role)
6. Relative (qualify/modify an NP [] attributive function)
```

Clausal patterns have been described in terms of their relative orderings of functional categories/roles (S,P,O,C,A)

derived constructions

We can consider the pattern described so far as the basic sentence types, from which many other constructions can be derived

derived constructions: a brief interlude

Copula clauses

```
Peter is my friend (SVC)
Peter is lazy (SVC)
It is raining (non-referential it)
There is Peter (locative there)
There is no Coke in the fridge (existential there)
```

Transformation (e.g. movement of a constituent)

INPUT: Basic structure OUTPUT: Derived Structure

INPUT → OUTPUT

Passive-transformation

John put the book on the shelf.
The book was put on the shelf (by John).



topicalisation

I adore cocktails Cocktails, I adore (basic declarative pattern: SPO)
(derived pattern: OSP)

left- and right dislocation

[My car], *it*'s an old chevy. [The BMW], you can get airbags in *them*.

Could *it* be in your frontyard, [your bike]? I don't like *him*, [your new football coach].

extraposition
(subject is postponed to sentence-final position and a *dummy* subject is put into the original position)

[What you say to them] doesn't matter. It doesn't matter [what you say to them]

verb-particle constructions (VPC)
-> intransitive VPC

The ball touched down. Did it fall off?
Mary showed up.
They went away.

transitive VPC

Mary put down the garbage can.
Peter took off his hat.
They picked him up.
Mary send Bill away.

transitive VPCs must be distinguished from transitive clauses including a prepositional object.

Mary put down the garbage bag. Mary put the garbage bag down.

Peter talked about his new book. *Peter talked his new book about.

negative inversion

Not a word would he say.
Never will I make that mistake again.
Rarely had the US suffered so much criticism.
Only on Sunday's do they eat with the children.

locative inversion

In a little white house lived two rabbits. (intransitive) *In a little white house found I two rabbits. (transitive)

cleft sentences_{It/wh-}

It is the best car that I have ever seen. (it-cleft)
It was Tom who caused all the trouble.
What I didn't notice was this hostility. (wh-cleft)
What peter doesn't like is dark beer.

ellipsis

comparative sentences

```
Jane is as beautiful as her sister.
Jane is more beautiful than her sister.
```

```
Standard of comparison: BEAUTY
Basis of comparison (often implicit): her sister
This basis of comparison is often shortened or elliptically omitted:
```

James enjoys the theater more than Susan enjoys the theater James enjoys the theater more than Susan enjoys it. James enjoys the theater more than Susan does. James enjoys the theater more than Susan. James enjoys the theater more.

"In the Chomskian tradition the notions of transitive, intransitive, et., are encoded in distributional frames" (Haegeman 2001:42)

give: V, [___ NP, NP] or V, [___ NP, PP]
(=subcategorization frame)

Hence, *give* subcategorizes for or selects two subsequent NPs (or an NP and a PP)

<u>Subcategorization</u>

obligatory vs. non-obligatory VP-internal constituents (complements vs. adjuncts)

e.g. the ditransitive verb *give* takes two NP-complements

(i) Jon gave $_{NP1}[Mary]_{NP2}[a book]$

Hence, the mental lexicon might encode something like:

give: verb; ditransitive

What motivates a given **subcategorization frame**?

well, it appears to be **predictable from** the type of action/state expressed by the verb, i.e. from **verb meaning**.

--> (obligatory) participants in an activity

One could view syntax as the projection of lexical requirements (cf. 'projection principle').

Theta criterion

- a. Each argument is assigned one and only one theta role b. Each theta role is assigned one and only one argument

We can now determine the number of arguments required by a predicate and envisage to specify the thematic roles associated with these arguments.

Lexical entry: put: NP AGENT NP THEME PP LOCATION

introduction to linguistics II: morphosyntax

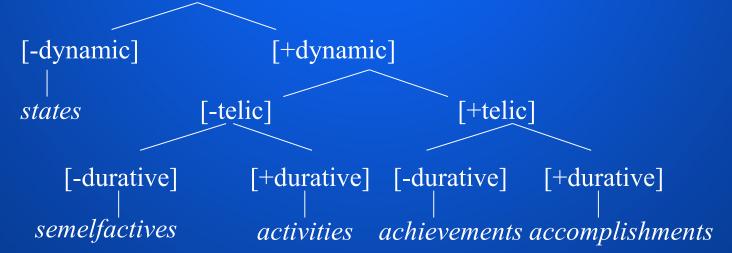
Thank you and "Good Tuck!"

Revisiting parts of speech: More on verbal categories: Aktionsart

Aktionsart: a feature of individual verbs (and interacts with the grammatical marking of aspect)

Verbs

(denote various types of (physically, perceptually, mentally, socially...defined) situations)



Revisiting parts of speech:

Examples:

(i) She hates ice cream (state)

(ii) The gate banged (semelfactive)

(iii) Your cat watched those birds (activity)

(iv) The cease-fire began at noon yesterday (achievement)

(v) Her boss learned Japanese (accomplishment)