SPAU 133

Syntax

What is syntax?

- It is the field of linguistics that studies how sentences and other phrases can be constructed out of smaller phrases and words.

Linguistic expressions

- These are a piece of language that has its own form, meaning, and syntactic properties.

Grammaticality Judgment

- Aya ate an apple.
- Ate Aya an apple.

- If the linguistic expressions are well-formed = grammatical.
- If the linguistic expressions are ill-formed = ungrammatical.

Syntactic Properties

- Word order: how expressions are allowed to be ordered with respect to one another.
- Co-occurence: if some expressions occur in a sentence, what other expressions can or must occur with it in that sentence.

Word ordering

(1) a. Sally walked.
b. *Walked Sally.

(2) a. Sally ate an apple.
b. *Sally an apple ate.
c. *Ate Sally an apple.
d. *Ate an apple Sally.

Malagasy, VOS language

(3)	Manasa	lamba	amin'ny	savony	ny	lehilahy.
	washes	*clothes*	*with the*	*soap*	*the*	*man*

'The man washes clothes with the soap.'

Different patterns: German!

(4) a. Karl kocht die Suppe.
Karl cooks the soup
'Karl is cooking the soup.'

b. Magda ist froh, daß Karl die Suppe kocht.
Magda is happy that Karl the soup cooks
'Magda is happy that Karl is cooking the soup.'

Word order/determiners

(6) a. Sally still hasn't read these books.
b. *Sally still hasn't read books these.

(7) a. buku-buku ini
books these
'these books'
b. *ini buku-buku

Word Order/ ‘with’

(8) a. Sally finally met with that person.
b. *Sally finally met that person with.

(9) a. kono kodomo to
this child with
‘with this child’

b. *to kono kodomo

Co-occurance

- The word that you choose may allow or require certain expressions to co-occur with it.

Arguments

a. Arguments. Many expressions have co-occurrence requirements. That is, if they show up in a sentence, certain other expressions are required to occur in that sentence as well. Recall our earlier observation concerning *devoured*:

(10) a. Sally devoured an apple.
b. *Sally devoured.

Having different word order doesn't’t affect the necessity of an argument.

(12) a. Marija voli muziku.
Marija likes music
‘Marija likes music.’

b. Marija muziku voli.
c. Voli muziku Marija.
d. Voli Marija muziku.
e. Muziku voli Marija.
f. Muziku Marija voli.

(13) a. *Marija voli.
b. *Voli Marija.

Compliments examples

(14) a. Sally told Polly she's leaving.
[*Polly* and *she's leaving* are both complements of *told*]

b. Sally put the book on the desk.
[*the book* and *on the desk* are both complements of *put*]

c. Sally persuaded Bob to go on vacation.
[*Bob* and *to go on vacation* are both complements of *persuaded*]

Italian and the difference requirement for arguments

(15) a. Ho comprato un libro.
have-1sg bought a book
'I bought a book.'

b. Io ho comprato un libro.
I have-1sg bought a book
'I bought a book.'

An example of how multiple determiners can co-occur (Serbio-Croation language)

(20)	Marija	sad	ima	tog	mog	psa.
	Marija	*now*	*has*	*this*	*my*	*dog*

'Marija now has that dog of mine.'

Adjuncts

b. Adjuncts. While there have to be exactly the right number and type of arguments for each expression in a sentence, there are certain kinds of expressions whose occurrence in a sentence is purely optional. These kinds of expressions are called **adjuncts.** Not only are they optional, but it is also possible to add as many of them as you like without winding up with a non-sentence. Let's consider some examples from English.

(21) a. Sally likes dogs.
b. Sally likes small dogs.
c. Sally likes small fluffy dogs.
d. Sally likes small fluffy brown dogs.

(22) a. Sally likes Bob.
b. *Sally likes fluffy Bob.

(23) a. Sally runs.
b. *Sally runs small.

The same expression can be an adjunct or an argument

(25) a.	Sally urged Bob to study French.	[argument of *urged*]
b.	Sally went to France to study French.	[adjunct]
(26) a.	Sally put the book on the desk.	[argument of *put*]
b.	Sally's cat was sleeping on the desk.	[adjunct]
(27) a.	Sally's cat seemed cute.	[argument of *seemed*]
b.	Sally has a cute cat.	[adjunct]
(28) a.	Sally behaved very carelessly.	[argument of *behaved*]
b.	Sally did her homework very carelessly.	[adjunct]

(29) Distinguishing arguments and adjuncts

Arguments	Adjuncts
Obligatory:	***Optional:***
Sally seemed happy. *Sally seemed.	The cat was sleeping on the table.
	The cat was sleeping.
Sally seemed happy. *seemed happy.	The fluffy cat was sleeping.
	The cat was sleeping.
Cannot have more than required:	***Can have as many as you like:***
Sally seemed cute. *Sally seemed cute happy.	The cat was sleeping. The gray cat was sleeping. The fluffy gray cat was sleeping.
Sally seemed cute. *Sally Bob seemed cute.	Sally left. Sally left yesterday. Sally left yesterday around 3 P.M.
Cannot be freely ordered with respect to one another:	***Can be freely ordered with respect to one another:***
Sally put the book on the table.	The fluffy gray cat was sleeping.
*Sally put on the table the book.	The gray fluffy cat was sleeping.
Sally persuaded Bob to study French.	Sally left yesterday around 3 P.M.
*Sally persuaded to study French Bob.	Sally left around 3 P.M. yesterday.

Agreement

(30) a. Sandy likes Bob.
b. *{I/you/we/they} likes Bob.[2]
c. *Sandy like Bob.
d. {I/you/we/they} like Bob.

The inflectional form of an expression can convey information about number, person, gender, and other so-called grammatical features, or some combination of them (e.g., the *-s* in *likes* simultaneously marks person (third) and number (singular)). Distinct expressions in a sentence may be required to have the same value for some grammatical feature, in which case we say that they agree with respect to that feature. Such features are called agreement features, and this phenomenon is called **agreement.** For example, we could say that *likes* agrees with *Sandy* in person and number: they are both third-person singular.

With respect to number in English, demonstratives also show agreement patterns: they have to agree with nouns in number, as shown in (31).

(31) a. This girl came.
b. *This girls came.
c. *These girl came.
d. These girls came.

Syntactic categories

(21) Major syntactic categories in English and their properties

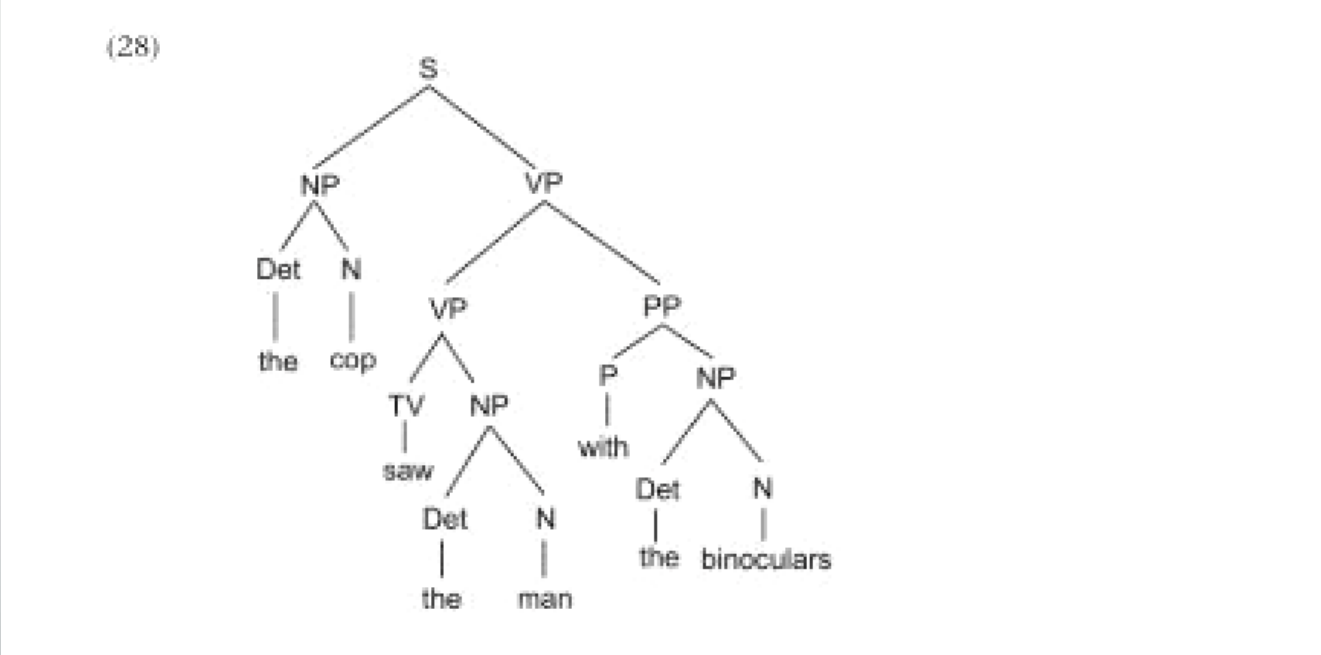
Syntactic Category	Relevant Properties	Example
S (sentence)	can occur in *Sally thinks that* _____	Fluffy is cute
NP (noun phrase)	has the same distribution as a personal pronoun or a proper name	she Sally the cat this cute dog that cat under the bed
N (noun)	needs a determiner to its left to form an NP	cat cute dog cat under the bed
Det (determiner)	occurs to the left of the noun to form an NP	the every this
Adj (adjective)	occurs in between a determiner and a noun; can be a noun adjunct, that is, combines with a noun to its right which results in an expression that is also of category N	cute fluffy gray

	category N	
VP (verb phrase)	consists minimally of a verb and all its complements; combines with an NP to its left which results in a sentence; has the same distribution as *slept* or *did so*	slept wrote the letter quickly liked Bob walked believed she liked that man
TV (transitive verb)	needs an NP complement to form a VP	liked devoured
DTV (ditransitive verb)	needs two NP complements to form a VP	gave sent
SV (sentential complement verb)	needs a sentential complement to form a VP	believed said
Adv (adverb)	can be a VP adjunct, that is, combines with a VP to its left which results in an expression that is also of category VP	fast quickly tomorrow
P (preposition)	combines with an NP to form a PP	at for with
PP (prepositional phrase)	can be a VP or an N adjunct; consists of a preposition and its NP complement	at the table for Sally under the bed

(14) Phrase structure rules

Phrase Structure Rule	Function
S → NP VP	allows VPs to combine with their subject NP to form a sentence
NP → Det N	allows determiners to combine with a noun to form an NP
N → Adj N	allows attributive adjectives to be noun adjuncts
VP → VP Adv	allows adverbs to be VP adjuncts
VP → TV NP	allows transitive verbs to combine with their object NP to form a VP
VP → DTV NP NP	allows ditransitive verbs to combine with their object NPs to form a VP
VP → SV S	allows sentential complement verbs to combine with their complement S to form a VP
PP → P NP	allows prepositions to combine with their complement NP to form a PP
N → N PP	allows PPs to be noun adjuncts
VP → VP PP	allows PPs to be VP adjuncts

Structural Ambiguity
EX: The cop saw the man with the binoculars.



On the other hand, if we use the rule in (27a), which allows PPs to combine with nouns, we get the sentence that means that the man who the cop saw was the one who had the binoculars, as shown in (29).

(29)