Constructing Languages

Day 4: Grammar and Syntax



Word Order

- When we start talking about grammar, the main questions we are interested in is how words are put together in a sentence.
- Sentences have many words so which words should we talk about at the beginning?
- Basic words order: relative order of Subject (S), Verb
 (V), and Object (O)

Some Statistics

- Word order in the clause (Subject, Verb, Object):
 - 6 possible word orders: SOV, SVO, VSO, VOS, OSV,OVS
- Matthew Dryer 2005, study of 1228 languages:

	SOV	SVO	VSO	vos	ovs	OSV	neither
total	497	435	85	26	9	4	172
%	47	41	8	2.5	8.0	0.4	

* SOV: Japanese, Korean, Turkish, Georgian

Hasan öküz-ü aldı (Turkish)

Hasan ox-accusative bought

'Hasan bought the ox'

* SVO: English, Russian, Vietnamese

Devushka kupila kvartiru (Russian)

girl bought apartment

'A girl bought an apartment'

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    VSO: Welsh, Irish
    Lladdodd y ddraig y dyn
    killed the dragon the man
    'The dragon killed the man'
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VOS: MalagasyNahita ny mpianatra ny vehyvavy (Malagasy)

saw the student the woman

'The woman saw the student'

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* OVS: Hixkaryana

Toto yahosiye kamara (Hixkaryana)

man it-grabbed-him jaguar

'The jaguar grabbed the man'
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* OSV: Apuriña

Anana nota apa. (Apuriña)

pineapple I fetch

'I fetch a pineapple'

Problems with Word Order

- Some times determining the basic word order is not so easy
 - ◆ Scrambling: free word order
- * Russian any word order is possible, even though some are rare:

Ivan	ljubit	Mašu.	(SVO)
Ivan.nom	loves	Maša.acc	
'Ivan loves	s Masha	a'	

Ivan	Mašu	ljubit.	(SOV)
Mašu	Ivan	ljubit.	(OSV)
Mašu	ljubit	Ivan.	(OVS)
Ljubit	Ivan	Mašu.	(VSO)
Ljubit	Mašu	Ivan.	(VOS)

Problems with Word Order

Word order might depend on whether you are talking about main clause or embedded clause.

* German

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Der Mann sah den Jungen. (SOV)
the man saw the boy
'The man saw the boy'
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Ich weiß daß der Mann den Jungen sah. (SVO)
I know that the man the boy saw
'I know that the man saw the boy'
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Prepositions and Postpositions

- In English, prepositions such as in, at, on, etc. come before noun phrases
 - → in the store
 - on the beach
- In other languages, they come after noun phrases and in this case, we call them postpositions
 - ◆ adam-için (Turkish) man-for
 'for the man'

Possessors and Nouns

Possessor/Noun order can also vary:

'woman's chicken'

'the man's hat'

* the man's hat English PN

* kadın-ın çavuğ-u Turkish: PN woman-gen chicken-her

Ia plume de ma tante the pen of my aunt 'the pen of my aunt'
French NP

het y dyn hat the man
Welsh NP

Adjectives and Nouns

English AN

* Adjective/Noun order can also vary:

* the green table

* büyük şekir Turkish AN

large city 'large city'

Ie tapis vert
French NA

the carpet green 'the green carpet'

* Ilyfr bach
Welsh NA

book little 'a little book'

SOV Correlations

SOV languages usually have the following properties:

- Manner adverbs precede the verb:
 - badly run
- Postpositions:
 - house in
- Possessors precede nouns:
 - father's jacket
- In comparatives, the standard of comparison precedes the marker of comparison:
 - my house [your house]_{standard} of comparison [than]_{marker} of comparison bigger
- * "because", "when" occur after the clause:
 - **♦ [he wants beer]**clause because
 - ◆ [I am tired]_{clause} when

VSO/VOS Correlations

VSO/VOS languages usually have the following properties:

- Manner adverbs follow the verb:
 - run badly
- Prepositions:
 - in house
- Possessors follow nouns:
 - jacket father's
- In comparatives, the standard of comparison follows the marker of comparison:
 - my house [than]_{marker of comparison} [your house]_{standard of comparison} bigger
- "because", "when" occur before the clause:
 - because [he wants beer]_{clause}
 - when [I am tired]clause

SVO Correlations

SVO languages usually have the following properties:

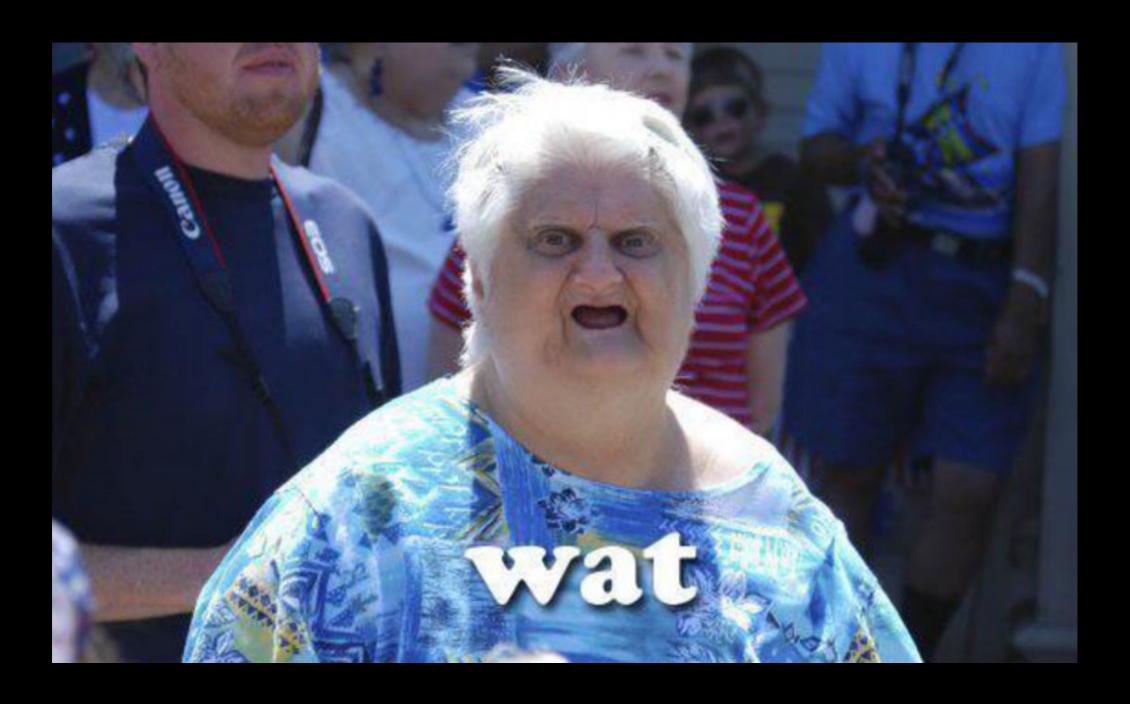
- Manner adverbs normally follow the verb, but sometimes precede:
 - John runs quickly / John slowly walked into the room
- Prepositions:
 - in house
- Possessors can follow nouns:
 - father's jacket / jacket of the father
- In comparatives, the standard of comparison follows the marker of comparison:
 - my house is bigger [than]_{marker of comparison} [your house]_{standard} of comparison
- "because", "when" occur before the clause:
 - because [he wants beer]clause
 - when [I am tired]clause

Summary

SOV	SVO	V-initial	
Adverb Verb	Verb Adverb	Verb Adverb	
Noun P	P Noun	P Noun	
Possessor Noun	Possessor Noun <i>or</i> Noun Possessor	Noun Possessor	
StandardOfComp Marker	Marker StandardOfComp	Marker StandardOfComp	
Clause because/when	because/when Clause	because/when Clause	

Directionality

- ❖ V is the most important thing in the predicate a phrase describing what's happening to the subject: V is a head of the predicate.
 - VO languages are called head-initial
 - ◆ OV languages are called head-final
- Head-Initial languages tend to have:
 - ◆ V-O, N-Adj, N-Poss, P-N
- Head-Final languages tend to have:
 - ♦ O-V, Adj-N, Poss-N, N-P



Questions

Yes/No-Questions

- Yes/No-Questions or Polar Questions: Questions that call for an answer of "yes" or "no", usually.
- Ways of forming yes/no-questions:
 - Question Particle
 - Verb Form
 - **→ Both**
 - Intonation
 - Word Order Change

Particle

Chinese -ma:

- Nǐ xǐhuan kāfēi. you like coffee'
 'You like coffee'
- * Nǐ xǐhuan kāfēi ma? you like coffee Q 'Doo you like coffee?'

Intonation

- Spanish
- Mi mamá me llamó ayer. my mom me called yesterday 'My mom called me yesterday.'
- * ¿Mi mamá me llamó ayer? my mom me called yesterday 'Did my mom call me yesterday?'

Word Order Change

* German

- Ich mag Apfelkuchen?
 I like apple pie.
- Mag ich Apfelkuchen? like I apple pie 'Do I like apple pie?'

Wh-Questions

- Wh-Questions: Questions that have a question word (even if it's not from English, and there are no whsequence)
- Two major positions for wh-phrases
 - Beginning of the sentence
 - ◆ In the original position (in situ)

Wh-Questions

- English:Wh-phrase at the beginning of the sentence
 - ◆ I talked to Bill.
 - Who did you talk to __?
- Japanese: Wh-phrase in situ
 - → John-ga Mary-ni nani-o ageta no? J.-NOM M.-DAT what-ACC gave Q 'What did John give to Mary?'

Relative Clauses

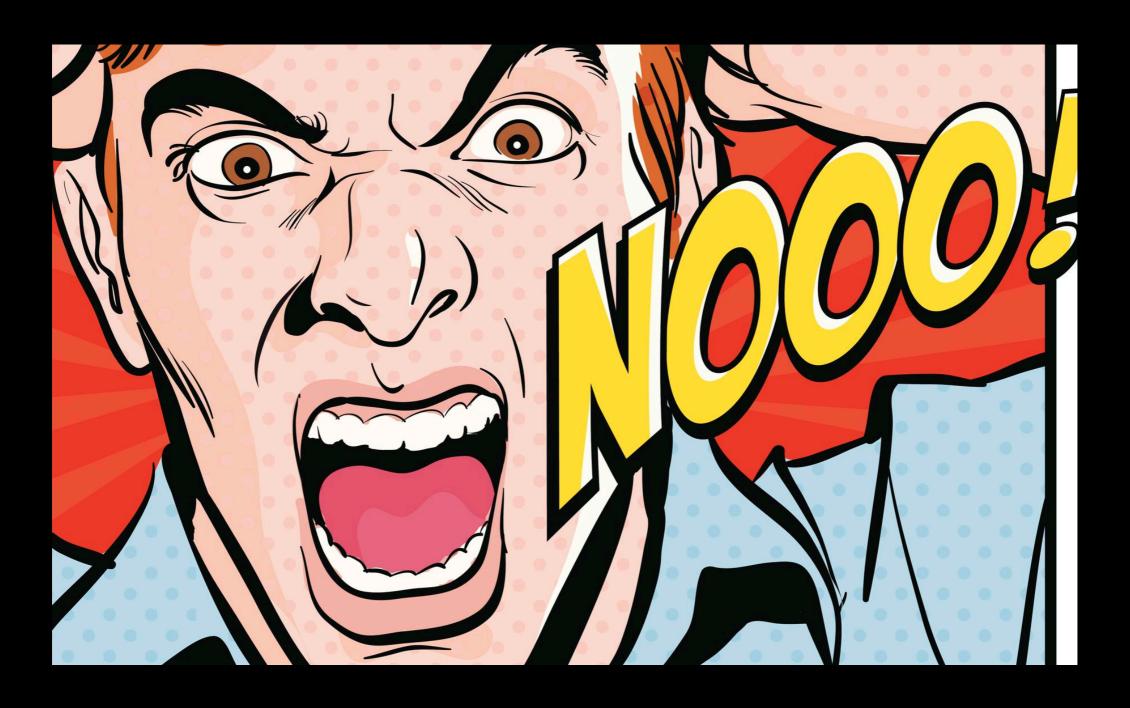
- Relative Clause: A full sentence whose function is to describe another noun
 - ◆ The book that I bought is very boring!
 - John read the book that I bought.
- Three strategies:
 - + Gap
 - Resumptive pronoun
 - Internal head

Relative Clauses

- Gap strategy: like English
 - The book [that I bought ___]
 - ◆ Underscore refers to the book it is an object of the verb bought
- * Resumptive Pronoun:
 - The book [that I bought it]
 - It refers to the book, and it's an object of bought
- Internal head:
 - [I bought the book]
 - John read [I bought the book].
 - ◆ [I bought the book] is boring.

Relative Clauses

- The relative clause can appear before or after the noun.
 - the book [that I bought __] is boring.
 - ◆ [that I bought __] the book is boring.
- Also, it's possible to use either that or a wh-phrase:
 - the man [who I met __]
 - → the man [that I met __]



- Every language needs a way to form negative sentences.
 - Strategy 1: add a particle before or after a verb (or even both, as in French):
 - Spanish: no duermo "I don't sleep"
 - French: Je ne sais pas "I don't know"

- Every language needs a way to form negative sentences.
 - Strategy 2: use a negative form of the verb
 - Swahili:
 - Ninasoma Kiswahili. "I am studying Swahili."
 - Tunasoma Kiswahili. "We are studying Swahili."
 - Sisomi Kiswahili. "I am not studying Swahili."
 - Hatusomi Kiswahili. "We aren't studying Swahili."

- Every language needs a way to form negative sentences.
 - ◆ Strategy 3: use a particle at the beginning or at the end of the sentence
 - Quechua: particle mana is used, but it also requires a suffix chu on the verb. (notice nice evidentials!)
 - Wañu-nqa-paq-mi. "(I assert that) it will die."
 - Wañu-nqa-paq-shi. "(I was told that) it will die"
 - Wañu-nqa-paq-chi. "(Perhaps) it will die"
 - Mana wañu-nqa-paq-chu. "It will not die"