

# Variability of languages in time and space

## Typology of syntactic features

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# Word order across languages

One of the primary ways in which languages differ from one another is in the order of constituents, or, as it is most commonly termed, their word order. (Dryer 2007)

Does zoology include people? It includes all the animal ancestors from whom man derived his instincts. That paper deals with the instincts of predators. What you might call the criminal class of the animal world. Lady animals figure very largely as predators. Put on the overhead light if you like. The switch is by the door. If the storm worries you that much, I'll get you something to drink.

Schließt Zoologie auch Menschen ein? Sie schließt alle Tiere ein, von denen der Mensch seine Instinkte hat. In der Abhandlung geht es um Raubtiere. Die Verbrecher der Tierwelt. Weibchen spielen bei Raubtieren eine große Rolle. Schalten Sie ruhig das Oberlicht an. Der Schalter ist neben der Tür. Warum setzen Sie sich nicht? Falls der Sturm Sie sorgt, besorge ich Ihnen etwas zu trinken.

Zahrnuje zoologie i lidi? Zahrnuje všechny živočišné předky, od kterých člověk zdědil své instinkty. Ten článek se zabývá predátory. Zločineckou třídou živočišného světa. Samice živočichů figurují velmi výrazně jako predátoři. Rozsviňte si světlo, jestli chcete. Vypínač je u dveří. Proč se neposadíte? Jestli vás ta bouře tak znervózňuje, přinesu vám něco na pití. (InterCorp via KonText)

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- Word order typology
  - subject, verb, object
- Splitting the triplet
- Correlations between the word order type and other features

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# Word order typology

Joseph H. Greenberg: *Universals of Language*. MIT Press 1963.

the order of 3 sentence elements in indicative sentences: subject S, verb V, object O

- En. (a) *Julia.S saw.V a dog.O in the garden.*  
(b) *In the garden, Julia.S saw.V a dog.O.*  
(c) *A dog.O Julia.S saw.V in the garden.*  
(d) *\*A dog.O saw.V Julia.S in the garden.*  
(e) *\*Julia.S a dog.O saw.V in the garden.*  
(f) *\*Saw.V Julia.S a dog.O in the garden.*  
(g) *\*Saw.V a dog.O Julia.S in the garden.*

- Ger. (a) *Julia sah einen Hund im Garten.*  
(b) *Im Garten sah Julia einen Hund.*  
(c) *Einen Hund Julia sah im Garten.*  
(d) *Einen Hund sah Julia im Garten.*  
(e) *\*Julia einen Hund sah im Garten.*  
(f) *\*Sah Julia einen Hund im Garten.*  
(g) *\*Sah einen Hund Julia im Garten.*

- Cz. (a) *Julie viděla psa na zahradě.*  
(b) *Na zahradě Julie viděla psa.*  
(c) *Psa Julie viděla na zahradě.*  
(d) *Psa viděla Julie na zahradě.*  
(e) *Julie psa viděla na zahradě.*  
(f) *Viděla Julie psa na zahradě.*  
(g) *Viděla psa Julie na zahradě.*

# Basic word order and sentence elements

- more than one word order for at least some pairs of elements in most languages
- comparison focuses on the basic word order of three basic sentence elements
- what is basic word order?
  - has a higher frequency  
En. *Paul, I like vs I like Paul*  
Ger. *des Vaters wegen vs für den Vater*
  - is not restricted in distribution  
En. *a tall woman vs a woman taller (than the man)*
- what are basic sentence elements?
  - subject and object defined semantically
    - subject as Actor with a transitive verb in active voice
    - object as Patient with a transitive verb in active voice
  - En. *The kid draws a picture.*

# Types of basic word order

SVO	English	<i>The dog</i>	<i>chased</i>	<i>the cat.</i>
		The dog	chase. PAST	the cat
		S	V	O
SOV	Basque	Jon	sendagileari	joan zaio.
		Jon	doctor.DAT	go AUX
		S	O	V
		Jon	went	to the doctor.
VSO	Welsh	<i>Gwelodd</i>	<i>Rhiannon</i>	<i>ddraig.</i>
		see.PAST.3S	Rhiannon	dragon
		V	S	O
		Rhiannon	saw	a dragon.
VOS	Tukang Besi	<i>No-'ita-'e</i>	<i>na kene-no</i>	<i>te ana.</i>
		3R-see-3OBJ	NOM friend-3POSS	CORE child.
		V	O	S
		The child	saw	its friend.
OVS	Urarina	<i>obana</i>	<i>itɔfwa-a</i>	<i>katɕa</i>
		collared peccary	shoot-3Ps/A	man
		O	V	S
		The man	shot	the collared peccary.
OSV	Tobati	<i>Syaw mahai</i>	<i>nehu</i>	<i>mo-ikor-i</i>
		paddle big	1SG	CAUS-snap-3SG
		O	S	V
		I	broke	the big paddle

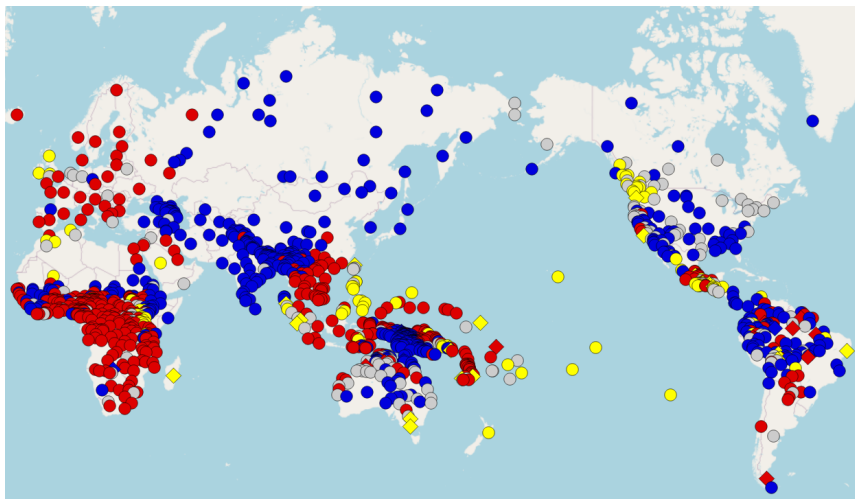


# Order of Subject, Object and Verb in WALS

- Feature 81A: Order of Subject, Object and Verb

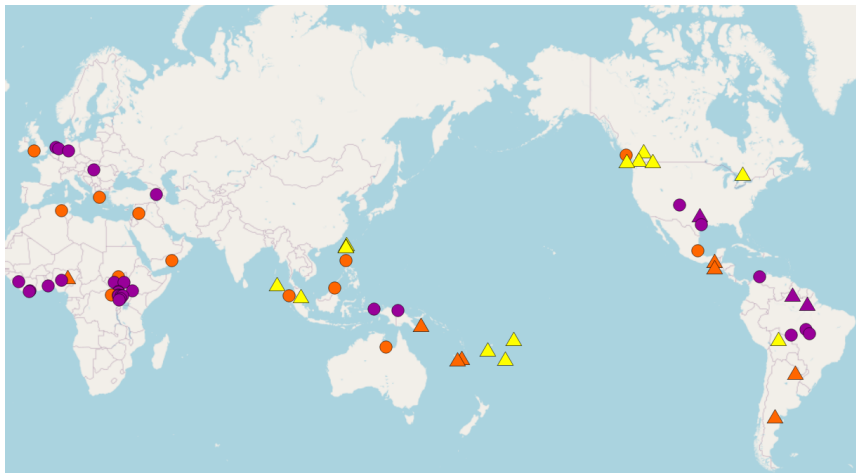
Basic word order	langs in WALS	Percentage	Ex.
SOV Subject Object Verb	564	41%	Japanese, Turkish
SVO Subject Verb Object	488	35%	English, Czech, Indonesian
VSO Verb Subject Object	95	7%	Celtic, Semitic langs
VOS Verb Object Subject	25	2%	Malagasy
OVS Object Verb Subject	11	< 1%	Asuriní
OSV Object Subject Verb	4	< 1%	Nadëb
No dominant word order	189	13%	German
Total	1376	100%	

# Order of Subject, Object, and Verb (WALS Feature 81A)



● Subject-object-verb (SOV)	564	◆ Verb-object-subject (VOS)	25	◆ Object-subject-verb (OSV)	4
● Subject-verb-object (SVO)	488	◆ Object-verb-subject (OVS)	11	● Lacking a dominant word order	189
● Verb-subject-object (VSO)	95				

# Two dominant orders of S, O, and V (WALS Feature 81B)



●	SOV or SVO	29
▲	VSO or VOS	14
●	SVO or VSO	13

▲	SVO or VOS	8
▲	SOV or OVS	3

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# Splitting the triplet

- it is common that at least one of the nominal items (subject, object) is substituted by a pronoun or dropped
  - subjects can be expressed by verbal affixes
  - different word orders
- focus on two of the items
  - whether the language is SV or VS
    - WALS Feature 82A: Order of Subject and Verb
      - SV 1192
      - VS 194
      - no dominant order 110
  - whether it is OV or VO
    - WALS Feature 83A: Order of Object and Verb
      - OV 712
      - VO 705
      - no dominant order 101
- just the verb in focus
  - verb-final (SOV, OSV) vs verb-initial (VSO, VOS) vs SVO (and OVS) languages

# Word order within a noun phrase

- relative order of noun and adjective  
Adj N (*green table*) vs N Adj (*the person concerned*)  
– WALS Feature 87A: Order of Adjective and Noun
- relative order of noun and relative clause  
N Rel (En. *the person (who is) concerned in this investigation*)  
vs Rel N (Turkish)  
– WALS Feature 90A: Order of Relative Clause and Noun
- relative order of possessive/genitive and noun  
N Gen (*the hat of the man*) vs Gen N (*the man's hat*)  
– WALS Feature 86A: Order of Genitive and Noun
- relative order of noun and adposition (preposition vs postpositions)  
Prep N (En. *in London*) vs N Postp (Japanese *Tokyo ni*)  
– WALS Feature 85A: Order of Adposition and Noun Phrase

# Correlations

- individual word order features are mutually correlated
  - position of the verb (verb-final vs verb-initial vs SVO languages) and
    - noun and article, noun and relative clause, noun and genitive, noun and prepositions vs postpositions
    - verb and manner adverb; main verb and auxiliary, copula and predicate
    - comparative constructions
    - question particles
- etc.

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# Correlations between the word order type and other syntactic features: Verb-final languages

- Lezgian

(a Nakh-Dagestanian language spoken in the Caucasus mountains; Haspelmath 1993)

1. also subject precedes the verb (SOV)
2. also manner adverbs precede the verb
3. postpositions after the noun (rather than prepositions preceding it)
4. genitive noun phrases precede the noun
5. standard of comparison (St) followed by the marker of comparison (M) followed by the adjective

- similar features found in Slave (northern Canada; Rice 1989) and in Siroi (Papua New Guinea; Wells 1979)

ex. from Dryer (2007):

1.  
Alfija-di maqna kxe-na.  
Alfija-ERG article write-AORIST  
S O V  
Alfija wrote an article.

2.  
Mirzebeg-a k'ewi-z haraj-na: " ... "  
Mirzebeg-ERG strong-ADV shout-AOR  
Adv V  
'Mirzebeg shouted loudly: " ... "'

3.  
duxtur-rin patariw  
doctor-GEN.PL to  
NP Po  
'She went to doctors.'

4.  
Farid-an wax  
Farid-GEN sister  
G N  
'Farid's sister'

5.  
sad müküda-laj žizwi ask'an-zawa  
one other-SUPEREL a.little low-IMPERF  
St M Adj  
'One is a little shorter than the other one'

# Correlations between the word order type and other syntactic features: Verb-initial languages

- opposite characteristics to those in verb-final languages
- Fijian  
(an Austronesian lang spoken on the island of Fiji in the Pacific Ocean; Dixon 1988)
  1. both subject and object follow the verb (both VOS and VSO common)
  2. manner adverbs follow the verb
  3. prepositions (rather than postpositions)
  4. genitive noun phrases follow the nouns
  5. adjective – marker (M) – standard of comparison (St)
- similar features in Turkana (Kenya) and in Lealao Chinantec (Mexico)

ex. from Dryer (2007):

1.

e	rai-ca	a	gone	a	qase
3SG	see-TRANS	ART	child	ART	old.person
	V		S/O		S/O

'The old person saw the child' or 'The child saw the old person'

2.

bau	'ada	va'a-.totolo	noo
somewhat	run	ADV-quick	ASP
	V	Adv	

'Try and run more quickly'

3.

mai	Wairi'i
from	Wairi'i
Pr	NP

'from Wairi'i'

4.

a	liga-i	Jone
ART	hand-POSS	John
	N	G

'John's hand'

5.

e	vina'a	ca'e	o	Waitabu	mai	Suva
3SG	good	more	ART	Waitabu	from	Suva
	Adj				M	St

'Waitabu is better than Suva.'

# Correlations between the word order type and other syntactic features: SVO languages

- more common than verb-initial, less widespread than verb-final languages
- resemble verb-initial rather than verb-final languages
- e.g. English
  1. verb between S and O
  2. manner adverbs both before and after V
  3. prepositions
  4. both the genitive precedes the noun and the noun precedes the genitive
  5. adjective – marker (M) – standard of comparison (St)
- similar features in Hmong Njua (China; Harriehausen 1990) and in Tetelcingo Nahuatl (Mexico; Tuggy 1977)

ex. from Dryer (2007):

1.

*The woman saw the dog.*

2.

*John slowly walked into the room.  
and John walked into the room  
slowly.*

3.

*on the table*

4.

*the box's cover and the cover of  
the box*

5.

*Nancy is more intelligent. Adj  
than. M Jeff. St*

# Features correlated with the order of O and V (Dryer 2007)

verb-final languages	verb-initial languages
postpositions	prepositions
genitive – noun	noun – genitive
manner adverb – verb	verb – manner adverb
standard – marker	marker – standard
standard – adjective	adjective – standard
final adverbial subordinator	initial adverbial subordinator
adpositional phrase – verb	verb – adpositional phrase
main verb – auxiliary verb	auxiliary verb – main verb
predicate – copula	copula – predicate
final question particle	initial question particle
final complementizer	initial complementizer
noun – article	article – noun
subordinate clause – main clause	main clause – subordinate clause
relative clause – noun	noun – relative clause
noun – plural word	plural word – noun

- SVO languages between verb-final and verb-initial

# Features \*not\* correlated with the order of O and V

- Dryer (2007):
  - adjective and noun
  - demonstrative and noun
  - numeral and noun
  - negative particle and verb
  - tense-aspect particle and verb
  - intensifier and adjective

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