

## Linguistic Typology: Word Order

Word order / constituent order concerns different structural levels. On the sentence level, we can ask about the relative positions of subject, object, verb, adverbials, etc. On the phrasal level, we can ask about the relative positions of noun and adposition, noun and determiner, noun and adjective, noun and genitive, verb and auxiliary, etc.

What interests typologists about word order is mainly the question to what extent you can predict one order (e.g. noun + postposition) from another (e.g. object + verb).

A word of warning: modern linguistic typology began with Greenberg's seminal study on word order (1963, see reading list), and the largest percentage of typological studies concerns word order. Nevertheless, word order is also the field in which you will find the smallest number of exceptionless universals, whether implicational or not.

### Subject, object, verb

Most statements concerning the order of subject, object, and verb have to be taken with an pinch of salt. There can be enormous variation in a single language due to factors such as the following:

- Is the NP a noun or a pronoun? Compare:

(1) *John saw the book.*

(2) *John saw it.*

(3) *Jean a vu le livre.*

Jean has seen the book

'Jean saw the book.'

(4) *Jean l'a vu.*

Jean it has seen

'Jean saw it.'

In English the order does not change, whether the object is a noun or a pronoun. In French an object follows the verb if it is a noun, but precedes it if it is a pronoun.

- Is there special emphasis on any constituent?

(5) *I like pizza.*

(6) *Pizza I like, but spaghetti I can't stand.*

Note the fronting of contrastively stressed constituents.

- Is the clause a statement, a question, or a command? Compare:

(7) *You are from England.*

(8) *Where are you from?*

(9) *Néih haih Yīng-gwok-yàhn.*

you be English-country-person

‘You are from England.’

(10) *Néih haih bīndouh-yàhn-a?*

you be where.from-person-QU

‘Where are you from?’

In English, question words are in clause-initial position. In Cantonese, question words occupy the same place as corresponding constituents in statements; note also the clause-final question particle.

- Are we dealing with a main clause or a subordinate clause?

(11) *John likes fish.*

(12) *I know that John likes fish.*

(13) *Hans mag Fisch.*

Hans likes fish

‘Hans likes fish.’

(14) *Ich weiß, daß Hans Fisch mag.*

I know SUBORD Hans fish likes

‘I know that Hans likes fish.’

In English the word order is the same in main and subordinate clauses. In German the finite verb comes in second position in main clauses, but in final position in subordinate clauses.

Most typological studies oversimplify constituent order by focusing on neutral main clause statements with subjects and objects that are nouns.

A few lessons can be learnt from the examples above:

1. Unstressed pronouns and other unstressed elements are clitics in a number of unrelated languages. Their position in the clause may be very different from that of full noun phrases. There is also a cross-linguistic tendency to place clitics in second position (Wackernagel’s law for older Indo-European languages; Tobler-Moussafia rule for Romance languages; similar rules apply to many Australian languages).

2. There are often special positions in the clause for certain pragmatic functions (new topic, focus etc). In English focal elements are often fronted (*Pizza I like*). Fronting of question words seems to be grammaticalized focus — question words are intrinsically focal.

3. There are a number of universal word order principles operative in every language, but languages differ as to which of these principles are given priority over which others. Example: it makes sense to keep the same basic order across clause types, but it also makes sense to front focal constituents. Cantonese privileges the tendency to keep the same order across clause types, hence question words remain *in situ*. English privileges the tendency to front focal words, hence what is commonly known as *wh*-movement.

Let us now look at neutral main clause statements with subjects and objects that are nouns. There are some clear patterns (Whaley Ch. 5): if you look at a large number of languages, you find the following frequencies of constituent orders: SVO = 42%, SOV = 45%, VSO = 9%, VOS = 3%, OVS = 1%, OSV = ?

Why should this be the case? Recall that the subject is the vantage point from which you look at an event, so it makes sense to mention this vantage point before the object (though not necessarily the verb, since you also have to know what kind of event you are looking at). Object and verb form the verb phrase (VP), and this phrasal category is easier to understand if it is not separated by intervening constituents.

	S before O	V and O contiguous	frequency
SVO	yes	yes	42%
SOV	yes	yes	45%
VSO	yes	no	9%
VOS	no	yes	3%
OVS	no	yes	1%
OSV	no	no	?

From the percentages it seems that ‘S before O’ is more important than ‘V and O contiguous’.

### VO and OV languages?

Greenberg looked at the relative order of S, V, and O and tried to make predictions concerning the position of adpositions etc. These are unilateral predictions, e.g.:

VSO → preposition + noun.

Obviously, it does not work the other way round: English has prepositions, but not VSO order.

W. P. Lehmann, Vennemann and others have tried to come up with bilateral predictions. V and O form the verb phrase. V is its head, O its dependent. Adpositions and nouns form adpositional phrases. The adposition is the head, the noun is the dependent. According to these authors, languages tend to have ‘cross-categorial harmony’, i.e. there is a tendency for heads to either always follow their dependents or always precede them. Thus you can predict prepositions rather than postpositions from VO order, just as you can predict

VO order from the presence of prepositions. And VO order implies the orders noun – adjective, noun – genitive, and noun – relative clause.

This simplification looks good because it also provides us with a functional explanation: languages tend to have consistency in word order across categories. However, the simplification has one big disadvantage: we are now only dealing with tendencies.

Let us look at English. English is clearly VO:

(15) *John hates books.*

We correctly predict the existence of prepositions:

(16) *to John, from John, by John.*

We correctly predict that relative clauses follow their heads:

(17) *John, who has always hated books, is fond of TV.*

We expect genitives to follow their heads, but this is only partly correct:

(18) *the roof of the house,*

but:

(19) *John's house.*

We wrongly predict adjectives to follow their head nouns:

(20) *a useless book, an impossible task, a thankless job.*

The pattern *the faithful departed* (noun – adjective) is restricted to certain French-influenced registers. On the whole, however, English follows the pattern ‘head – dependent’ reasonably well.

Let us now look at Kru languages. The Kru family is part of a larger family, the Niger-Congo language family (the biggest language family in Africa). Kru languages are spoken in Liberia and Ivory Coast. All of them share phonological, morphological and syntactic features, partly because of a common proto-language and partly because of contact. All Kru languages have the basic order SVO. Cf. Ex. 21 from Grebo (Western Kru):

(21)  $\text{ɔ}$  *ple-da*      *yu ni*  
she wash-PAST child water  
‘She washed the child with water.’

We can now try to make a prediction. Kru languages ought to have prepositions, and genitives ought to follow their heads. Now compare Ex. 22, also from Grebo:

(22)  $\text{ɔ}$  *hini kē lu*  
he go chief over  
‘He goes over the chief’s head (i.e. he acts without consulting the chief).’

Here we can see SVO order combined with a postposition. No Kru language, in fact, has prepositions. Let us now look at two more examples from Grebo:

(23) *kē a pēē*  
king GEN place  
‘(in) the king’s place’

(24) *kē pēē*  
king POSTPOS  
‘instead of the king’

Ex. 23 shows that genitives precede their heads. This is again in conflict with SVO order, but in harmony with postpositions. Ex. 24 actually shows a postposition derived from a head noun.

The situation is essentially the same in Dida (Eastern Kru):

(25) *ōflúá kō sákj-á kó.*  
book.DEF COP bag-DEF on  
‘The book is on the bag.’

Here we can see that the verb immediately follows the subject, but there is a postposition. Again, genitives precede their head nouns:

(26) *s-í-á ōflúá*  
tree-PL-GEN book  
‘a book about trees’

Finally, let us look at a complex noun phrase from Godie (Eastern Kru):

(27) *ḡiti kádì nì só*  
houses big DEM two  
‘these two big houses’

Adjectives, demonstratives, and numerals follow their head nouns.

On the whole, it is insufficient to speak of VO- and OV-languages. Perhaps the best correlation between OV and VO on the one hand and smaller constituents on the other concerns adpositional phrases. Dryer examined 603 languages and found that SOV languages have postpositions in 96% of the cases, SVO languages have prepositions in 86% of the cases, and VSO languages have prepositions in 91% of the cases.

We have now looked at S, V, and O in isolation and at the influence V and O have on smaller constituents. We can now turn to smaller constituents in isolation.

## Noun phrases

In *the house* I take *house* rather than *the* as the head. In other words, I follow the old NP analysis, not the more recent DP analysis. Perhaps the latter is more appropriate syntactically, but semantically the noun is clearly the most important element and thus should be the head.

In English, adjectives normally precede nouns and relative clauses normally follow:

(28) *a good man who owns a house in the country.*

This is by no means the only pattern we find across languages. In German, adjectives precede nouns, but relative clauses are more complicated: those which are finite and which are introduced by relative pronouns follow the nouns, and the less complex, non-finite ones containing participles precede the head nouns:

(29) *ein guter Mann, der ein Haus kauft*  
IND.ART good-NOM man who-NOM IND.ART house buy-3SG  
'a good man who is buying a house'

(30) *ein guter, ein Haus kaufender Mann*  
IND.ART good-NOM IND.ART house buy-PART.NOM man  
'a good man buying a house'

Ex. 29 shows the order adjective – noun – finite relative clause; Ex. 30 shows the order adjective – non-finite relative clause – noun. Note that adjectives and non-finite relative clauses are sandwiched between the article and the head noun.

In French some adjectives precede and some follow their head nouns, and relative clauses follow the head nouns:

(31) *une jeune fille*  
a.FEM young girl  
'a young girl'

(32) *une soif terrible*  
a.FEM thirst terrible  
'terrible thirst'

(33) *Jean, qui sait danser*  
Jean who know.3SG dance-INF  
'Jean, who can dance'

Ex. 31 shows the order adjective – noun, Ex. 32 noun – adjective, and Ex. 33 noun – relative clause.

Languages like Japanese only have pre-head adjectives and relative clauses, and languages like Hebrew only have post-head adjectives and relative clauses.

What is not found anywhere is a language that has pre-head relative clauses and post-head adjectives. Why not?

Relative clauses are 'heavier' than adjectives, and all things being equal, heavy constituents are not placed before light ones.

Heaviness:

Relative clauses > genitives > adjectives > demonstratives and numerals,

where  $x > y$  means that  $x$  is heavier.

## How free is free word order?

In some — certainly not all — inflecting languages, where syntactic and semantic functions are indicated by nominal and verbal morphology, subject, verb, and object can change positions relatively easily. In a subset of these languages, noun phrases need not even be continuous. This phenomenon is also known from ancient Indo-European languages, where it is commonly called hyperbaton.

Many Australian languages have the same kind of ‘free’ word order. I give some examples from Jiwari (data by courtesy of Peter Austin):

- (34) *Pulhapayara-lu kanya-nyja pirru ngunha.*  
Pulhapayara-ERG carry-PAST meat.ACC that.ACC  
‘Pulhapayara carried that meat.’
- (35) *Piji-nha mantharta-nha wanka-rla-rninyja*  
many-ACC man-ACC live-make-PAST  
*ngulu-pa martaru-lu.*  
that.ERG-SPEC gum-ERG  
‘That gum has cured many people.’
- (36) *Yinha nhurra parlura-rni-nma payipa nganaju.*  
this.ACC 2SG.ERG full-CAUS-IMPER pipe.ACC 1SG.DAT.ACC  
‘You fill up this pipe of mine!’

Ex. 34 has the order subject – verb – object. In Ex. 35 it is object – verb – subject. Ex. 34 also shows the order noun – demonstrative, while Ex. 35 has the order demonstrative – noun. Ex. 36 shows a discontinuous object noun phrase.

These variations are not random. Inflectional morphology allows word order to fulfil functions other than syntactic marking. ‘Free’ word order is really pragmatically driven word order. In Jiwari, connectors, time and place adverbials (scene setters, as it were), new topics, and focal elements tend to come in first position.