95 Relationship between the Order of Object and Verb and the Order of Adposition and Noun Phrase

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1 Defining the values

One of the central activities in linguistic typology is the investigation of relationships between different typological features. Maps 95, 96, and 97 illustrate three sorts of relationship between typological features. If one takes two typological features with two values each, they intersect to define four possible language types. This map, Map 95, illustrates a case where two of these types are very common and two are relatively uncommon. Map 96 illustrates a case where three of these types are very common and one is relatively uncommon. And Map 97 illustrates a case where there is no interaction between the two features, where all four types are very common. Each of these three maps shows the relationship between two features that are shown separately on other maps in this atlas.

This map shows the relationship between two of the values shown in Map 83, OV (object-verb order) and VO (verb-object order), and two of the values shown on Map 85, postpositions versus prepositions. The intersection of these defines the first four types shown in the box. Two of these four types, the first and fourth, are very common, while the other two types, the second and third, are relatively uncommon.

The example in (1) from Nivkh (isolate; Sakhalin Island, Russia) illustrates the first type, with OV order and postpositions; (1a) illustrates the OV order while (1b) illustrates a postposition radial across.

(1) Nivkh (Gruzdeva 1998: 18, 38)

a. n’pty-y fay’ li-u-at
   man wolf kill-FIN
   ‘The man killed a wolf.’

b. n’y fulu ci tulu u-v’
   1sg big river across go-FIN
   ‘We went across a big river.’

This type is very common, representing the typical situation found in OV languages. The examples in (2a) from Persian and in (2b) from Tigre (Semitic, Eritrea) illustrate the second type, OV order with prepositions.

(2) a. Persian (Mahootian 1997: 139)
   pal-o be ma dad
   money go:1sg to 1sg gave
   ‘He gave the money to us.’

b. Tigre (Raz 1983: 108)
   lakaNa yehay mab yom ta mahaza gal
   1sg in that water in-the river something
   ‘I have seen something in the river.’

This type is relatively uncommon; it is atypical for an OV language to have prepositions. The third type, VO with postpositions, is also uncommon; it is atypical for VO languages to have postpositions. The examples in (3) from Koyra Chiini (Songhay; Mali) illustrate this type, (3a) illustrating the VO order and (3b) a postposition.

(3) Koyra Chiini (Heath 1999b: 103, 124)

a. har di o gana moy di
   man DEF impf see woman DEF
   ‘The man sees the woman.’

b. ay too hau di ra
   1sg arrive house DEF loc
   ‘I arrived in the house.’

This type is also illustrated in (4), from Arawak (Arawakan; Suriname), (4a) illustrating the VO order, (4b) a postposition.

(4) Arawak (Pet 1987: 47, 83)

a. li fary-fa aba kabadar
   he kill-FUT one jaguar
   ‘He will kill a jaguar.’

b. da-dykha no hyala dako
   1sg see it bench on
   ‘I saw it on a bench.’

The example in (5), from Chalcatongo Mixtec (Oto-Manguean; Mexico), illustrates the fourth type, VO order and prepositions.

(5) Chalcatongo Mixtec (Macaualy 1996: 117)
   wi-ii’alae’i ci li isu xaku ha. ci’o’ri
   comp-make=1sg one skirt for daughter=1poss
   ‘I made a skirt for my daughter.’

This type is relatively common, the typical situation in VO languages. English is another example of a language of this type.

The fifth type shown on the map is for languages not falling into one of the first four types. Most of these are languages lacking a dominant order of object and verb or a dominant order of adposition and noun phrase. It also includes languages with inpositions and languages lacking adpositions altogether.

2 Geographical distribution

The distribution of the two common types on the map, OV with postpositions and VO with prepositions, is similar to the distribution of OV and VO order on Map 83 and the distribution of postpositions and prepositions on Map 85. OV order with postpositions is especially common in (i) Asia, except in the Middle East and South-East Asia; (ii) New Guinea; and (iii) North America, except in the Pacific North-West and in Mesoamerica. It is also found as the more frequent type in (i) Australia; (ii) South America; and (iii) two areas in Africa, one around Ethiopia, Sudan, and eastern Chad, the other in West Africa around Mali, Burkina Faso, western Côte d’Ivoire, and Liberia. VO order with prepositions is especially common in (i) Europe; (ii) sub-Saharan Africa, except in the two areas noted above; (iii) an area stretching from South-East Asia eastward into the Pacific; (iv) the Pacific North-West; and (v) Mesoamerica.

Apart from sporadic instances, VO order with postpositions is found in (i) an area in West Africa including Benin, Togo, Ghana, and eastern Côte d’Ivoire; (ii) an area in northern Europe centred in Finland; and (iii) scattered languages throughout South America. In fact, among the VO languages of South America, postpositions are as common as prepositions. OV languages with prepositions, the least frequent type, are only found sporadically. The only area

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Apart from sporadic instances, VO order with postpositions is found in (i) an area in West Africa including Benin, Togo, Ghana, and eastern Côte d’Ivoire; (ii) an area in northern Europe centred in Finland; and (iii) scattered languages throughout South America. In fact, among the VO languages of South America, postpositions are as common as prepositions. OV languages with prepositions, the least frequent type, are only found sporadically. The only area
where the map shows repeated instances in the same area is among
Iranian languages in Iraq, Iran, and Tajikistan.

Many instances of languages of the two less common types can
be seen as being located near or between languages of both of the
two more common types. For example, the VO and postpositional
languages in West Africa have OV and postpositional languages to
the west and north-west, and VO and prepositional languages to the
east. The OV and prepositional languages in and around Iran have
OV and postpositional languages to the north and east, and VO and
prepositional languages to the south and west. In other instances,
this is not the case: for example, there are a couple of VO post-
positional languages in northeastern Peru with no VO prepositional
languages nearby.

3 Theoretical issues

The fact that only two of the four types shown on the map are
common shows that these two typological features correlate. The
distribution can be described by a bidirectional implicational
universal: a language tends to be OV if and only if it is postposi-
tional. In other words, if a language is OV then it is usually postposi-
tional, and if a language is postpositional then it is usually OV.
This bidirectional nature contrasts with the pattern illustrated on
Map 96, where the implication is not bidirectional.

The correlation between the order of object and verb and the order
of adposition and noun phrase is only one of many correlations
between the order of object and verb and the order of other pairs
of elements, and there is considerable literature discussing these
correlations and attempting to explain them (including Greenberg 1963,
that have been put forward are (i) the idea that using prepositions
in VO languages and postpositions in OV languages involves con-
sistent ordering of grammatical heads with respect to their depen-
dents or complements; (ii) the idea that the word–order correlations
reflect a tendency to use consistently left–branching structures or
consistently right–branching structures, ultimately motivated by
considerations of case of processing, and (iii) the idea that the cor-
relations reflect the results of grammaticalization: adpositions arise
from verbs, retaining their order with respect to the noun phrase,
or from head nouns in genitive constructions. Significantly, of the
twenty-three VO languages with postpositions for which I have data
on the genitive construction, twenty employ genitive–noun order,
and two allow both orders of genitive and noun with neither order
dominant; only one VO postpositional language has noun–genitive
order. For example, Koyra Chiini, cited in (3) above illustrating a
VO language with postpositions, has genitive–noun order, as in (6).

(6) Koyra Chiini (Heath 1999b: 85)
ap baaba waan[h] haa di
[1SG father POSS] house DEF
‘my father’s house’

This fits the prediction of grammaticalization theory that an
adposition grammaticalizing from a head noun in a genitive con-
struction in a VO language with genitive–noun order will become a
postposition, although it equally well could simply be that VO post-
positional languages are former OV postpositional languages. The
reverse situation obtains with OV languages that have prepositions:
of the nine languages of this type for which I have data on their ge-
nitve construction, seven employ noun–genitive order, and two have
both orders with neither dominant; none of them have genitive–
noun order as the dominant order, even though OV languages
generally place the genitive before the noun. For example, Tigre,
illustrated in (2b) as an example of an OV language with preposi-
tions, places the genitive after the noun, as in (7).

(7) Tigre (Raz 1983: 108)
awalat far waa
daughter Pharaoh
‘the daughter of the Pharaoh’

There are a number of other observations that can be made about
the two less common types shown on this map. First, although both
are uncommon, one of them, VO with postpositions, is somewhat
more common than the other (though the difference may not be signif-
ificant): the map shows thirty-nine instances of VO languages with
postpositions, but only eleven instances of OV languages with
prepositions. Second, when one examines the languages of the
uncommon types in greater detail, one finds that they are often not
typical OV or VO languages. This observation is illustrated by the
number of languages mentioned above where the order of genitive
and noun is unexpected given the order of object and verb in the
language. Similarly, among the ten OV languages with prepositions,
two are OV, a quite unusual word order (see Map 81). Also, six of
them place adpositional phrases after the verb either with as great
a frequency as in preverbal position or at least as a possible option;
OV languages typically place adpositional phrases before the verb
(see Chapter 54 and Dryer 1992: 92). For example, Iraqw (Cushitic,
Tanzania) employs OV order, as in (8a), but prepositional phrases
follow the verb as often as they precede it, as in (8b).

(8) Iraqw (Mous 1993: 238, 226)
a. ta ti7a7 o awree
imper.subj story–F tell 3SG.M
‘They tell a story.’
b. baad bi o sa alin
father 3SUB PERF be.angry.3SG because.of 1SG
‘Father is angry because of me.’

A number of the OV languages with postpositions are also atypical
in that they have prepositions, too, although the postpositions are
deemed the dominant type in the language. For example, Koyra
Chiini, illustrated above in (3) as a VO language with postpositions,
actually has a few prepositions in addition to its more numerous post-
positions. The example in (9) illustrates the preposition hal ‘until’.

(9) Koyra Chiini (Heath 1999b: 108)
yer o nan ga hal aalasir
1SG IMP she.leave 3SG.LOC until afternoon
‘We will leave it until the afternoon (prayer).’

In a number of cases, there is evidence that languages of one of
the uncommon types have undergone a recent historical change in
the order of object and verb and that the adposition type reflects the
earlier word order. For example, Tigre, illustrated as an OV preposi-
tional language in (2b) above, is one of a number of South Semitic
languages in Ethiopia whose original order was clearly VO, based
on comparative evidence, but which have undergone considerable
structural change due to contact with Cushitic languages, which
are OV. South Semitic languages vary as to which of their earlier
word–order characteristics they have retained and which they have
lost; in the case of Tigre, it has retained prepositions, but has
undergone a change from VO to OV. It appears to be the case that
if a language changes the order of one of these two features, it
will almost always be the order of object and verb that changes first.

Object-Verb and Adposition-NP Order

These are the two most common word orders in world lan-
guages. Prepositions tend to occur in OV languages and post-
positions in VO languages. However, there are a number of
languages where the order of object and verb and the order of
adposition and noun phrase is in one of these two types. For
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