A DIACHRONIC EXPLANATION FOR THE ORIGIN OF OVS

IN SOME CARIB LANGUAGES

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0. Derbyshire and Pullum (1979, this volume) report on the evidence they have accumulated during the past two years showing the likely existence of twelve languages with object-initial basic order (OVS or OSV). Such languages are contrary to what had been generally predicted in the literature on word order typology until 1977. All twelve languages are found in what might broadly be termed the Amazon basin of South America. Seven of the eight OVS languages belong to the Carib family.¹

This paper suggests a possible diachronic explanation for the emergence of OVS as a basic order in Carib languages. It takes account of, and modifies, two hypotheses recently proposed as an explanation of word order change (Hyman 1975 and Vennemann, 1975). It also makes a comparison with a totally unrelated language from a different part of the world, viz. Fijian for which a similar diachronic explanation of word order change has been suggested. The Carib languages from which I draw evidence in support of the explanation are the OVS languages Hixkaryana² and Makusi,³ and the SOV language Carib (of Surinam).

1. Data from the Carib Languages

1.1 Hixkaryana and Makusi Data. The statements in the literature on the word order of Makusi (and Arekuna/Taulipang) reflect a large degree of uncertainty, some favoring OVS and some SOV. The data I have seen suggests a slight preference for OVS (see Derbyshire and Pullum, this volume) for
arguments in support of OVS as the basic order). There are several points at which the syntactic patterns of Hixkaryana and Makusi are sharply different, and these are described below, following this sampling of data from the two languages. The Makusi examples are from Hodsdon, 1976.

(1) Makusi (OVS)

a. Jaime era'ma-’pī João-ya  
   James saw- dist.past John-SM  
   John saw James.

b. mîrîrî ye'nen tuna ekaranmapo-’pī uurî-ya  
   that because water ask- d.p. I-SM  
   That’s why I asked for water.

c. João-ya yei ya'tî-’pî wa'ka ke  
   John-SM tree cut- d.p. axe with  
   John cut the tree with the axe.

d. Brasil pona pemonkon-ya'mî wîtî-’pî  
   Brazil to man- plur. go- d.p.  
   The men went to Brazil.

e. moro u-komamî-’pî seurîwî'ne wei kaisarî  
   there I-stay- d.p. three day total  
   I stayed there for three days.

f. paapa- ya u- panama- ’pî  
   father-SM me-counsel-d.p.  
   Father counseled me.

g. wei pona i- tîrî-’pî- i- ya  
   sun in it-put- d.p.-he-SM  
   He put it in the sun.

(2) Hixkaryana (OVS)

a. kanawa y- aka- ye Tuhkoro  
   canoe 3S30 make-d.p. Tuhkoro  
   Tuhkoro made a canoe.
b. Tuhkoro wy a kanawa y-aka-txhe, n- a- txownî totokomo
   Tuhkoro SM canoe 3-make-after, 3S30-take-d.p.coll. people
   After Tuhkoro made the canoe, the people took it away.

c. tî- wy a kanawa y-aka-txhe, n- amryek-ye Tuhkoro
   3refl.-SM canoe 3-make-after, 3S-hunt- d.p. Tuhkoro
   After he made the canoe, Tuhkoro went hunting.

d. we we y-ama- xe ni- nyah-txowî, noro, horykomo, owto yohî
   tree 3-fell-purp, 3S30-send-d.p.coll., he, imp.-man, village chief
   The chief [already referred to] has sent them to fell trees.

The two dominant patterns in Makúsi can most easily be seen by comparing
(1a) OVS with (1c) SOV, where Jo a o is the subject NP in both cases. Both
orders also occur in Hixkaryana, but OVS is much more dominant; see (2a)
for one example.

Where the subject is a pronoun it most commonly occurs in postverbal
position in Makúsi (see (1b)). Some descriptions of Makúsi (e.g. Abbott,
1976 and Williams, 1932) suggest that there are two predominant patterns:
OVS if the subject is a pronoun, and SOV if it is any other kind of
nominal. This definitely appears to be the pattern in Arekyna/Taulipang
(Koch-Grünberg, 1924, 1928). But in Hodsdon's data for Makúsi, all kinds
of nominals - pronouns, proper names, common nouns and noun phrases -
occur both initially and postverbally, with a statistical preference for
the postverbal position.

There is a suffix -ya which marks transitive subject, whatever its position
and whatever the form of nominal; see (1a), (1b), (1c), (1f). Hixkaryana
does not have such a marker in main clauses (2a), but it does in subordinate
clauses (2b), in the form of a postposition wy a that also marks indirect
object in main clauses.

In Makúsi clauses where there is no subject nominal, the same suffix -ya
is postposed to the subject person-marking suffix in transitive clauses;
see (1g). There is nothing comparable to this in Hixkaryana.

The morphological ergativity suggested by this transitive subject marker
in Makúsi shows up more generally: (i) intransitive subject and transitive
object are both unmarked and occur immediately before the verb, cf. (1c)
and (1d); and (ii) when the subject and object occur as bound affixes in
the verb, that is, in the absence of S and O nominals, the same linear
sequence is maintained; that is, intransitive S and transitive O are
prefixes, while transitive S is a suffix, cf. (1e), (1f), (1g). Hixkaryana
is notably different: intransitive S normally occurs after the verb, just
like transitive S; there is no case-marking in main clauses; and while both
S and O occur as bound forms in the verb, they do so as prefixal port-
manteau forms and are obligatory in all finite verb forms, whether or not
there are also S and O nominals in the clause (see (2c) for an intransitive with postverbal subject nominal, and all the (2) examples for the finite verb prefixes).

In Makúsi, in all non-transitive clauses Subject precedes Verb. This seems to be absolutely rigid, and applies to copular as well as to intransitive clauses. In Hixkaryana, the normal position for S is after the verb in all types of clauses.

1.2 Carib (Surinam). There are some languages in the Carib family for which SOV is claimed to be the basic order. One is Waiwai, a language spoken in Guyana and Brazil that is the most closely related language to Hixkaryana. Another is the Carib language of Surinam. Hoff has published a major work (1968) on the phonology and morphology of the language, and recent presented a paper at the University of Leiden on word order in Carib (Hoff, 1978). Briefly, his conclusions are that SOV is the basic order, but that OVS is the next most frequent order. The statistically-based ratio is about five SOV to two OVS (5:2=SOV:OVS). The following data, taken from Hoff's works, reflect these facts: (3a) and (3b) are SOV, while (3c) is OVS.

(3) Carib (SOV)

a. au moxko pe:ru se:nei
   I the dog I-have-seen-it
   I have seen the dog.

b. irombo moxko kuru:pf mo:ro we:ve mif:ti wo:yaŋ
   then he Kuru:pi the tree root-of he-hit-it
   Then Kuru:pi hit the root of the tree.

c. paːpa woi kariʔná, itoːto
   father him-have-killed Indians, the-enemy
   The enemy Indians have killed my father.

Hoff's 1978 paper is of particular interest in that he relates the facts of Carib to some generalizations proposed by Vennemann (1975) to explain why there is diachronic change in certain basic word order patterns. Hoff summarizes his findings in this regard as follows:

The neutral position of the Carib (subject) is before (object) and verb. Yet if Vennemann's universal holds good, it will have to drift toward the place after V.

2. The Vennemann Hypothesis. Vennemann (1975) proposes a number of generalizations, two of which are relevant here. They take off from Greenberg's Universal 41:
If in a language the verb follows both the nominal subject and nominal object as the dominant order, the language almost always has a case system.

(Greenberg, 1966)

Vennemann's first generalization elaborates this in order to pave the way for his second:

1. (3) Languages with uniform, conspicuous, and dependable Subject-Object marking of a substantive nature (i.e. with a device which makes it clear for every sentence containing both S and O which one is which, independently of the order in which they appear) tend to be OV languages; languages without such an S-O morphology tend to be VO languages.

2. (4) If an OV language loses its substantive S-O marking system (of the kind characterized in (3)), it changes to VO.

(Vennemann 1975, 288-9)

He then applies these generalizations to explain why a language like English should have changed from SOV to SVO. There are two main stages: first, phonological change (neutralization and reduction) leads to erosion of the case-marking system; then, loss of case-markers results in the change from SOV to SVO, so as clearly to disambiguate the nominals.

Vennemann's explanation of drift has come under criticism from various sources (including Hyman, 1975 and Li and Thompson, 1974, to both of which I refer below). But first, note that, even assuming his basic premises, he ignored one live option: the change he talked about could have gone from SOV to OVS, rather than SVO. His lack of any reference to this possibility is not surprising, however, since he had already (in his 1973 paper) ruled out the possibility of O preceding S as the dominant pattern in any language.

But Hoff (1978) points out that for Carib (Surinam) the change from SOV to OVS is much more likely than from SOV to SVO, because of the close-knit nature of the OV sequence. The fact is that the OV sequence is a very rigid one for all the Carib languages for which I have seen any evidence. In SOV Carib, as in OVS Hixkaryana, the sequence VO is extremely rare, and the orders in which O is further removed from V (VSO and OSV) are virtually nonexistent.

With this one modification then, that the change from SOV might be in the direction of either SVO or OVS, Vennemann's hypothesis might be considered to account satisfactorily for the Hixkaryana facts. That is, assuming earlier SOV in line with other Carib languages, and a case-marking system that once applied generally (as in Makusi) but is now found only in subordinate clauses, there has been a process of phonological change leading to loss of the case-markers and the drift of S to postverbal position to separate it from the other nominal (O). There are, however, snags in this
hypothesis as soon as we look at other languages in the Carib family, such as Carib (Surinam) and Makúsi (also Arekuna/Taulipang). First, Carib is SOV but it doesn't have case markers (it does have subject and object marking in the verb, but this doesn't always serve to distinguish the nominals, and it is not what Vennemann had in mind in regard to case markers). Second, Makúsi (and Arekuna/Taulipang) still do have case marking (of Subject), even though the word order change from SOV to OVS seems already fairly well-developed.

Here it is worth noting the more general critique of the Vennemann hypothesis by Li and Thompson (1974). Two of the points they make appear to be relevant to the facts of Carib languages, and especially to Makúsi. First, they note that many languages change from SOV to SVO without losing case markings and cite Russian as an example. Second, they claim that phonological reduction is more likely to be a result rather than a cause of the degeneration of case systems, arguing that there must be some independent force within the syntactic system itself to induce a change in word order; specifically, they argue for a change from complex to noncomplex sentences (see below for my argument concerning sequences of complex paratactic constructions in Hixkaryana and Makúsi).

3. The Hyman Hypothesis.

3.1. Grammaticalization of Afterthought Patterns. We must look for other factors at work in the historical development in Carib languages of OVS. Hyman (1975) has suggested another explanation for diachronic change in word order: the grammaticalization of afterthought patterns. Vennemann takes up this suggestion and elaborates on it. Much of both Hyman's and Vennemann's discussions relate to the pragmatic conditions under which afterthought or clarification patterns occur. I question some of these, but the patterns themselves are a major feature of Hixkaryana and this does seem to provide the most likely explanation of how the Hixkaryana basic word order has come to change. What is more, the few available relevant facts about Makúsi and Carib seem to support the hypothesis. (See 3.3. below.)

3.2. The Hypothesis Applied to Fijian. I begin by leaving Carib to look at another language where this particular mechanism of change may have been at work. I am grateful to Simon Dik for drawing my attention to the case of Fijian, and for suggesting that something similar may have happened with Hixkaryana. In his book (Dik, 1978, 176-7) Dik speculates on possible explanations for the VOS order in languages like Malagasy and Fijian, and he refers to evidence that in Fijian it "may have arisen through grammaticalisation of a construction with the Subj in right dislocated position".

The evidence is mainly in Foley's work on Austronesian syntax (Foley, 1976) from which I take the facts and data in (4), (5), and (6):
(4) **Proto-Eastern Oceanic** sentence structure

(subject NP) - subject marker - verb (trans suffix) - object marker - (object NP)

(5) Nguna

pila- na e saru e suugoro 
mother-3sg.poss. SM wash OM clothes

*His mother is washing clothes.*

(6) Fijian

a. e ā gunu- va na yagona na tūraga 
Cl past drink-TR art.kava art. chief

*The chief drank the kava.*

b. au a rai-ca iratou na gone 
lsg. past see-TR 3pc art.child

*I saw the few children.*

All the evidence points to early Eastern Oceanic word order being SVO, as seen in (4), with subject and object markers in the verbal phrase, and optional S and O NPs. This is reflected in at least one present-day language in the family, Nguna (5). This order also occurs in present-day Fijian, when the Subject is a first or second person pronoun (6b). For all other Subject NPs now, however, the order has changed to VOS (see (6a)). (The initial e is historically derived from the third person subject marker, cf. (5), but has lost the characteristics of the third person category and has become a general clause introducer.)

In the light of this historical and comparative evidence, Dik's hypothesis seems a plausible one: the presence of the third person marker as the initial element in the verbal phrase led to the shift of the subject NP from clause-initial to clause-final position, at first no doubt as a right-dislocated afterthought phrase added to clarify the referent in the nominal element. This NP was eventually incorporated into the main clause intonational group, and the third person pronominal form became largely redundant and was either dropped or retained as a clause introducer.

3.3. The Hypothesis Applied to Hixkaryana. In Hixkaryana, postverbal subject NPs are frequently right dislocated, and sometimes there is a series of dislocated phrases forming a complex subject constituent (see (2d)). Such NP sequences constitute the principle means of expressing nominal modification; there are no adjectives or relative clause constructions of the usual kind, only nominalizations derived from verb and other stems by means of derivational suffixes. This is true of Carib languages generally.
This pattern also appears to be developing in both Makúsi and Carib (Surinam), and suggests a historical process of word order change parallel to that proposed for Fijian.

For Makúsi, there is not much relevant data in Hodsdon's paper. There is, however, something of interest in James Williams' Makuchi Grammar, published in 1932, but based on field work that goes back to the first decade of this century. The data includes sentences with SOV order, but with three or four noun phrases occurring in a sequence before the verb phrase: two NPs forming a complex subject (the subject marker follows the second or last of the sequence), then one or two NPs follow and form the object. It is not difficult to see how pressure would grow to shift one of the constituents to the postverbal position, and there are a few examples in the sources of complex subject NPs following the verb, and thus becoming separated from the object NP. This is supporting evidence for Li and Thompson's contention that the principle cause of word order change is the pressure to reduce complexity in sentences. In Makúsi, the change is not so well developed as in Hixkaryana, where paratactic sequences of NPs are nearly always sentence-final.

The same explanation would seem to hold for what is happening in Carib (Surinam), although here it is even less well-developed than in Makúsi. We can see one example (3c) where there is a sentence-final subject constituent (the less preferred order), and it is a paratactic sequence of two NPs.

As in Fijian, Hixkaryana has a pronominal subject marker in the verb, and here it is more tightly bound to the verb itself than is the case in Fijian. It is, therefore, less likely to lose its status in the way the Fijian pronoun has. Hixkaryana is also like Fijian in that first and second person free-form pronouns occur as subject in the preverbal, sentence-initial position -- but optionally. The grammaticalization of the afterthought subject NPs is fairly well developed in Hixkaryana, though not to the same extent as in Fijian. The postverbal NP is often part of the main clause intonation group, but it is also frequently still dislocated.

4. Conclusion. This application of afterthought grammaticalization patterns to explain diachronic change in the position of subject requires some modifications to the Hyman and Vennemann hypotheses.

First, neither Hyman nor Vennemann seem to envisage the possibility of subject being a candidate for such a process. Hyman considers adverbial phrases and oblique objects as the first most likely candidates, followed later in the historical process by direct objects. Vennemann considered that only objects and verbal complements could undergo the change.

Second, Hyman suggests that the most natural candidates for afterthought placement and subsequent grammaticalization are constituents that convey new information. The very opposite is the case in Fijian and Hixkaryana. The subject NPs that came to be placed after the verb were specifically
those which expressed given information, i.e., the type of information that could be expressed by a pronominal element because it is recoverable from the context.

Third, and finally, the facts that I have presented here suggest that Vennemann's prediction that loss of case-markers is a primary cause of diachronic change in word order is much too strong. It may well have happened this way in Hixkaryana, although at present I do not have the evidence to judge whether case markers were a part of early Carib syntax and whether they were likely to have been a part of Hixkaryana. But it has not yet happened in Makusi and Arekuna/Taulipang. The case markers are still very much a part of the system, although the shift from SOV to OVS is already fairly well developed.

FOOTNOTES

1 The Carib family of languages is generally regarded as part of the Gê-Pano Carib phylum. The most recent classification of the linguistic subdivisions of the Carib family is in Durbin, 1977. Based on comparative phonological studies, Durbin posits two main divisions: Northern Carib and Southern Carib. All the Northern, and some of the Southern group languages, are found in what he calls the "Guiana land mass", which is the area lying north of the Amazon, and including Guyana, Surinam, French Guiana, Venezuela, and the extreme north of Brazil. The Carib languages discussed in detail in this paper are all in that area.

2 Hixkaryana is a member of the Carib linguistic family and is spoken by groups located on the Nhamundá and Mapuera rivers in north Brazil. There are currently about 350 Speakers.

Data were collected on various field trips between 1959 and 1975 as a member of the Summer Institute of Linguistics, and under a contract between that Institute and the Fundação Nacional do Índio. The phonemes are: e, i, u: low vowels a, o; consonants p, t, tx (alveopalatal affricate) k, b, d, dy (alveopalatal stop), r (bilabial fricative), s, x (alveopalatal fricative), m, n, ny (alveopalatal nasal), r (alveolar flap), rx (alveopalatal flap with lateral release), w, y, h.

A complete description of the language is available in Derbyshire, 1979a, and its significance for typological studies is fully discussed in Derbyshire, 1979b.

3 Makusi is closely related to Arekuna/Taulipang (which are probably best regarded as a single language, though in the literature they are sometimes distinguished as two languages), and so far as the present paper is concerned evidence could have been taken from either Makusi or Arekuna/Taulipang. The evidence for OVS as the basic order in Makusi and Arekuna/Taulipang is not so strong as it is for Hixkaryana, since SOV is almost
equally dominant. That fact makes these two languages of particular interest in the search for an explanation of the origin of OVS.

4 My information on Waiwai comes from Robert Hawkins by personal communication.

5 In the citations and discussion that follow I change Hoof's 'patient' to 'object' and his 'agent to 'subject'; also Vennemann's 'X' ("verb complement") is changed to 'O', to refer to object. This information comes from personal communication from Hoff.
REFERENCES


