

OBJECT-INITIAL LANGUAGES¹

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0. Most languages, perhaps all, clearly have what can be called a “basic order” of sentence constituents. This is the order most typically found in simple declarative transitive clauses where no stylistic or discourse-conditioned permutation is in

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evidence. The existence of languages having a basic order in which the direct object NP is initial has been widely denied in the literature of syntactic typology. For example, Venneman (1973:27) states: “Greenberg observes that of the six possible arrangements (SVO, SOV, VSO, VOS, OSV and OVS) only three occur as the only or dominant pattern of declarative clauses, viz. those in which S precedes O: VSO, SVO and SOV (universal 1). This is readily explained.” Venneman’s reference slightly misrepresents Greenberg, who in fact said (1963:61): “Logically there are six possible orders: SVO, SOV, VSO, VOS, OSV and OVS. Of these six, however, only three normally occur as dominant orders. The three which do not occur at all, or at least are excessively rare, are VOS, OSV, and OVS.” Greenberg’s qualifications are rather important; Venneman (1973) has silently elevated Greenberg’s hedged claim into an absolute one.

Pullum (1977) makes a more explicit attempt to extract a lawlike universal from Greenberg’s statistical claim. He states (1977:269), after reviewing the available literature on languages for which O-before-S orders had been claimed as basic: “Four basic word orders, not three, are found: SVO, SOV, VSO and VOS. The other two logically possible orders, OSV and OVS, do not occur at all, contra various allusions in the literature on syntactic typology.” He proceeds to construct a scheme such that OSV and OVS cannot be assigned as basic orders at all and thus are predicted to show up as surface orders only as the result of processes of stylistic permutation in specific discourse contexts.

Recently, some facts have come to our attention concerning a number of Amerindian languages which we think do exhibit object-initial basic orders.² The languages belong to South American Indian groups who have suffered a more or less catastrophic decline in numbers due to the onslaught of European settlement in the New World over the past 500 years (see Hemming 1978). We believe that linguists should consider the possibility that the historical accident of European colonial expansionism may have played a large role in shaping alleged universals of constituent ordering and consequent claims that certain basic orders are rare or "marked." The geographically widespread character of SVO order, for example, may be more directly related to population expansion by speakers of those languages (English, French, Spanish, Portuguese, Dutch, Russian, Bantu, etc.) than to the "inherent naturalness" of SVO order. It seems unwise to draw timeless laws or tendencies of linguistic structure from the essentially demographic facts of the distribution of languages in the modern world. As Chomsky and Halle (1968:4) remark: "Certain apparent universals may be the result merely of historical accident. For example, if only inhabitants of Tasmania survive a future war, it might be a property of all then existing languages that pitch is not used to differentiate lexical items. Accidental universals of this sort are of no importance for general linguistics, which attempts rather to characterize the range of possible human languages." It may be that similar remarks are in order

² The first seven languages discussed are all of the Carib family. For an introductory guide to the literature on some of the most relevant languages of this family (those spoken in the Guiana area of Venezuela, Guyana, Surinam, and Brazil), see Derbyshire and Pullum (1979).

for the set of attested languages in South America, where wholesale extinctions of peoples and languages have been brought about by conquests beginning in 1500.

1. The list of OVS languages given here is probably not exhaustive, for we expect further research, particularly on the languages of the northern Amazonian area, to yield more. On the other hand, not all of the languages on the list are totally secure cases of basic OVS: some show signs of SOV and OVS orders being equally favored. Such cases are mentioned here because they exhibit enough signs of possible OVS dominance to make further investigation advisable, and because they are known to be related to clearer cases of OVS languages. We shall discuss Hixkaryana (1.1), Apalaí (1.2), Makushi (1.3), Hianacoto-Umaua (1.4), Arekuna Taulipang (1.5), Panare (1.6), Bacairí (1.7), and Asuriní (1.8). Only the first of these has received adequate documentation in print.

1.1. Hixkaryana is a member of the Carib family and is spoken by about 350 people in groups located on the rivers Nhamundá and Mapuera in northern Brazil, halfway between Guyana's southern border and the Amazon. The group on the Mapuera is often referred to as the Sherew (Shedeu) tribe; those on the Nhamundá are now generally designated Hixkaryana. Both are included in the more general grouping of Carib-speaking tribes usually referred to in the literature as Parukoto-Charuma. The Hixkaryana language is classified by Durbin (1977) as Southern Carib (Southern Guiana).

The first reference to word order in Hixkaryana is a brief one in Derbyshire (1961): "... when goal and actor tagmemes

occur in the same sentence, the goal always precedes, and the actor usually follows, the predicate tagmeme." Derbyshire (1977) is a more explicit and detailed description of Hixkaryana word order specifically directed toward refuting Pullum's (1977) claim, quoted above. Both syntactic and statistical evidence supports Derbyshire's own reactions as a fluent speaker of the language.

The following examples show the typical order of constituents.

- (1a) *kana yanimno biryekomo*
fish he-caught-it boy
'The boy caught a fish'.
- (1b) *kana yanimpira nahko biryekomo*
fish not-catching he-was boy
'The boy did not catch (any) fish'.
- (1c) *manhotxowi hawana komo*
they-danced visitor coll.
'The visitors danced'.
- (1d) *itohra exko Waraka yakoro keknano*
rohetxe rowya
not-going be Waraka with she-said-
it my-wife to-me
'"Don't go with Waraka," my wife
said to me'.

The negative sentence (1b) is one example of the typical copular construction, in which the copular complement (the equivalent of the direct object in a transitive sentence) precedes the copula *-exe-* 'be', which in turn is followed by the subject. (1c) illustrates the normal order of the nuclear constituents in an intransitive sentence (VS), thus confirming the postverbal position of subject as the basic one, and at the same time refuting a possible alternative explanation that the direct object in a transitive sentence should be analyzed as the "syntactic subject," along the lines proposed by some for the absolutive case in ergative languages. Example (1d) reflects the rigid order of the O and V constituents of the quotative sentence, in

which the embedded direct speech (equivalent of the direct object) always precedes the main verb *-ka-* 'say'; in ordinary transitive sentences the OV order is not quite so rigid, but still unquestionably typical.

The statistical evidence for OVS as the basic order is that the native texts published in Derbyshire (1965) show twice as many postverbal subjects as sentence-initial subjects (including cases of intransitive clauses, where the commonest order is VS) and show preverbal position for objects to be vastly more frequent than the very occasional occurrences in postverbal position (VO).

Further work³ has since shown strong confirmation of these claims. We have conducted a count on a larger sample of sentences taken from Derbyshire (1976), which is a translation of the New Testament from modern English into Hixkaryana, made in close collaboration with native speakers while Derbyshire was residing among the tribe between 1959 and 1975 (and published in Brazil before the linguistic issue of word-order typology had been brought to Derbyshire's attention). The sample used for the count was basically the entire stock of transitive clauses in the Gospel according to St. Matthew, minus any that seemed stylistically inverted in the modern English original and any that were paraphrased as nontransitives in the Hixkaryana version. Declarative clauses with nominal subject and object that show OVS order constitute 91 percent of the corpus. If one assumes only that over large amounts of text a grammatically basic order will tend to be statistically frequent as an occurring surface order (as stylistic preposings and postposings average each other out), this figure suggests very strongly that OVS is descriptively basic for the language, and

³ See Pullum (1978) for a slightly fuller discussion.

that Hixkaryana is comparatively rigid with regard to word order—about as rigid as English.

The syntactic arguments in Derbyshire (1977) relate to the rules that permit the only significant variant order, SOV. There is an obligatory rule which moves all question words to sentence-initial position whatever grammatical relation they bear in the sentence. Only one other rule is then needed to account for the fronting of the subject; this relates to discourse-conditioning factors pertaining to emphasis, focus, and highlighting of a constituent. Both rules apply to indirect objects and oblique objects (adverbials, locatives, etc.) as well as to subjects. These more peripheral elements normally occur sentence-finally, following the subject (OVSI, etc.), but they can be moved to initial position by application of either of the fronting rules. There is, however, a constraint against the fronting of more than one constituent, so that if a subject is fronted there will not also be a fronting of a peripheral element, and vice versa. If SOV were treated as the descriptively basic order, there would be no explanation for the nonoccurrence of sentences of the form X-S-O-V, where X is some oblique or adverbial constituent.

Discourse-initial sentences, which are generally (but wrongly) regarded as virtually free of contextual influences, follow a similar pattern. Here, the highlighting rule that fronts the subject applies more often than elsewhere, since the subject frequently refers to a newly introduced participant who is important to the discourse that follows. Even so, OVS still tends to be the preferred order. In the thirty texts published in Derbyshire (1965) the facts relating to the initial sentences of the texts are: (i) a subject nominal occurs in twenty-two of the thirty sentences, and (ii) in twelve of them it is in final position

((O)VS), and in ten of them it is in initial position (S(O)V).

We see no alternative but to recognize OVS order as descriptively basic for Hixkaryana. For a full description of Hixkaryana syntax, Derbyshire (1979a) may be consulted, and for further discussion of the implications of Hixkaryana for syntactic typology, see Derbyshire (1979b).

1.2. Apalaí is a Carib language with 150-75 speakers in groups who live on the upper reaches of the Maicuru, Parú, and Jarí rivers, northern tributaries of the Amazon in the state of Pará, Brazil. They have in recent years integrated with another Carib-speaking tribe, the Wayana, but the two languages are said to be distinct, with a high degree of bilingualism (Koehn 1974). In Durbin's (1977) classification, "Wayana-Aparai" appears in Northern Carib (East-West Guiana).

Our source of information is data supplied by Ed and Sally Koehn. In general, subject and direct object nominals in Apalaí discourse are even less frequent than in other Carib languages, anaphoric reference by deletion or person-marking affixes being the norm in most sentences. There is also frequent use of nonfinite verb forms, in what seems to be basically a copular construction, but with the (finite) copula form often deleted (as in (2d) below; when the copula occurs it is usually in sentence-final position). The only data we have found with transitive main clauses that contain subject and direct object nominals are in Koehn (1974), and they show a slight preference for the OVS order of constituents (seventeen examples) over the SOV order (twelve). The preferred order is seen in:

(2a) *u- tupi akoty-ase aimo*
 my field cut rec.past boy
 'The boy cut my field'.

- (2b) *pake ahtao arimi wo-se pyrou-ke toto*
 long ago monkey killed arrow with they
 'Long ago they used to kill monkeys with arrows'.
- (2c) *aimo nyh- ma- po- no jeny ty- paxiry- a*
 boy sleep trans. caus. imm. past mother her sister poss. by
 'The mother caused the sister to put the boy to sleep'.
- (2d) *joromu puhturu ahno-~ko mũpo*
 squash seed eating continuative rat
 'The rat is eating squash seeds'.

In (2d), the verb has a gerundive form, which normally occurs as the complement of a finite form of the copula. The copula is often deleted, as in the example, but when it does occur it is nearly always in sentence-final position; the subject then occurs either between the gerundive form and the copula, in which case it can still be considered to be in final position (OVS) in an embedded subordinate clause, or in sentence-initial position (S-Comp-Cop).

In transitive clauses where the only nominal that occurs is the subject, that subject always precedes the verb (four examples); the same order (SV) is the most frequent one in intransitive clauses (nineteen examples, compared with eight VS).

In subordinate transitive clauses the OVS order is strongly favored (nine examples, against only two where the subject is in initial position), and here the subject is marked by the suffix *-a*. The same suffix marks the intermediate agent (causee) in causative constructions (see (2c)), in which the surface subject is the initiating agent (causer); this subject is normally marked, as in other transitive clauses, but there are two examples of causative transitive clauses in which the subject (causer, not causee) is marked by the suffix *-a* (Koehn's examples 214a and 215b—she explains

this in terms of underlying semantic role, but, according to her glosses and by comparison with other transitive clauses, the grammatical relation is clearly that of subject of a transitive verb). This marking of subject in subordinate and (some) causative clauses is a restricted form of the ergative marking found in Makushi (1.3) and Arekuna-Taulipang (1.5).

Statistical evidence alone can be misleading, and in this case it is based on a very small sample. Such as it is, however, it slightly favors OVS as the basic order of constituents for Apalaí.

1.3. The Makushi tribe lives in villages which extend from the Rupununi River in Guyana, across the northern part of the Territory of Roraima in Brazil, and into Venezuela. Current estimates of their number are 10,000 (Abbott 1977) and 16,000 (Hudson 1974). We suspect that these figures may include Arekuna/Taulipang speakers (see 1.5). The Makushi language is classified by Durbin (1977) as Northern Carib (East-West Guiana), along with closely related Pemong (Arekuna-Taulipang and Akawaio; see 1.5).

There are three sources for our information about the order of sentence constituents: Williams (1932), C. A. Hodsdon (1974), and Abbott (1977). The two who make explicit statements support a preferred SOV order, but their statements leave open the possibility that OVS is more basic; the data from all three sources are slightly in favor of OVS, thus contradicting the descriptive statements.

The clearest statement is in Abbott (1977:235-36): "A ordem preferida . . . é: sujeito, objeto, predicado . . . Este sujeito livre pode ocorrer após o predicado. Quando não se dá a forma livre do sujeito, o sujeito é manifestado por um sufixo pronominal no verbo, seguido do marcador de sujeito *-ya*." [The preferred order

. . . is: subject, object, predicate. . . . This free subject can occur after the predicate. When there is no free subject form, the subject is manifested by a pronominal suffix in the verb, followed by the subject marker *-ya*.] According to this statement, the postponing of subject appears to be optional and less frequently used, but later, in his discussion on intransitive clauses, Abbott implies that it is more normal to place the subject after the verb in a transitive clause: “A manifestação do sujeito em orações intransitivas de ação difere da das transitivas no fato de ocorrer antes do predicado e sem o marcador de sujeito *-ya*.” [The manifestation of the subject in action intransitive clauses differs from that in transitive clauses by the fact that it occurs before the predicate and without the subject marker *-ya*.]

In support of these (and other) statements, there are thirty-three examples of transitive clauses in the first section of the paper (three repetitions and one copular clause yield the total of thirty-seven examples). Fourteen have a subject nominal (free form), of which eight occur after the verb ((O)VS) and six occur sentence-initially (S(O)V). When there is an object nominal it always occurs immediately before the verb (no examples are cited here since they do not differ in any significant way from those given below from the other sources).

The statement which Williams makes about constituent order is in the context of what he terms “incorporation” of subject and object pronominal elements in the verb, so that “the sentence, complete with subject, object, and verb, can often be written in one word.” He continues (1932: 50): “The order in the sentence of subject, object, and verb is not invariable; when an emphatic subject is expressed it usually stands first in the sentence and is followed by object and verb. When the subject is an

incorporated pronoun, the usual order is, object, verb, subject.” This is the only statement we find in Williams (1932) on the order of constituents, and it relates to ordering under two conditions, that is, emphasis and incorporation, which would not normally be regarded as of primary importance in determining basic order. In particular, he does not account for the examples he later gives, where a (nonincorporated) subject nominal occurs following the verb, as in (3a), taken from (1932:104), which contrasts with the SOV order in (3b), from (1932:54):

(3a) *máin̄ z-ai-póŋ-tə-bə Joe-za Osenégu-pə*

message sent Joe-SM Osenegu-by
‘Joe sent the message by Osenegu’.

(3b) *John se en-zá-ne-zá tu-róŋ wə-sá*
John self lazy SM bird shoot-aorist
‘John, the lazy man, killed the bird’.

Hodsdon (1976) does not make any statement about constituent order, but she supplies numerous examples of transitive clauses, from which the following are taken:

(4a) *yei ya'ti-'pí anna-ya*

tree cut dist.past we SM
‘We cut the tree’.

(4b) *u- yun yapi'si-'pí João-ya yei ya'ti-to'pe u- yun ya*

my father get dist.past John SM tree cut CAUS. my father SM
‘John got my father to cut the tree’.

(4c) *mîrîrî ye'nen tuna ekaranmapo-'pí uurî-ya*

that because water ask dist.past I SM
‘That’s why I asked for water’.

(4d) *mîrkîrî-ya wîtî koima-'pí tí- san yarakkîrî*

she SM house clean DP her mother with

‘She cleaned the house with her mother’.

(4e) *João-ya yei ya'ti-'pí wa'ka ke*

John SM tree cut DP ax with
'John cut the tree with the ax'.

The first three of these examples are OVS and the last two are SOV; this reflects the ratio in all of the transitive clauses having a free-form subject in Hodsdon's paper: fourteen (O)VS and ten S(O)V. The last three examples all have nonnuclear constituents and their position may be significant in determining basic order of nuclear constituents. In (4c), the nonnuclear constituent occurs in sentence-initial and the subject in final position, whereas in (4d) and (4e), the positions are reversed, with the subject in initial position and the nonnuclear constituent occurring sentence-finally.

If this is the regular pattern, it would accord with a hypothesis that OVS is the basic order, that sentence-final position is the normal one for nonnuclear constituents, after the subject, and that there is a constraint against fronting more than one constituent in any sentence (this assumes that for the purpose of emphasis a constituent is more likely to be moved from its normal position to sentence-initial rather than to sentence-final position; cf. Derbyshire 1977 for such a rule in Hixkaryana). In Hodsdon's data, object nominals precede the verb, except in one case where the subject is first person and the object follows the verb (again cf. Derbyshire 1977 for a similar exception in Hixkaryana to the rule that the object precedes the verb).

Makushi and Arekuna-Taulipang (see 1.5) are unique among the Carib languages for which we have relevant information in having morphological ergative marking in main declarative clauses (there is a trace of it in Apalaí and in Hixkaryana subordinate clauses). What we have assumed to be the subject of a transitive clause (following Abbott and Williams—Hodsdon uses semantic function labels) is normally marked by the suffix *-ya* (*-za* in Williams), which is

glossed as SUBJECT MARKER (SM) in the examples cited. Where the subject is overtly expressed only as a suffix in the verb, it is followed by the same marker *-ya* (*-za*), occurring now as a verb suffix. (Hodsdon states that the subject marker always occurs with what she calls the agent nominal, but example 1 in Abbott's paper seems to be an exception [the only one we have noted]; cf. Koch-Grünberg's statement about Taulipang referred to in 1.5). Other ergative features are: the subject in intransitive clauses (see the second quotation from Abbott earlier in this section) and the object in transitive clauses are unmarked, and both normally occur immediately preceding the verb; when the subject and object occur as bound affixes in the verb, the same linear sequence is maintained, that is, intransitive subject and transitive object are prefixes, while transitive subject is a suffix (Abbott 1977: 235-36, 242). This rigid order of object-stem-subject in the verb, although not conclusive in itself, would appear to lend support to an OVS basic-order hypothesis.

In view of Koch-Grünberg's statement on Taulipang subject nominals (see 1.5), it is noteworthy that in Makushi there is a similar pattern (but perhaps not quite as strong) of preferring to place a pronoun subject after the verb and a full NP subject in initial position. In Abbott's examples there is only one case of a subject nominal other than a pronoun following the verb, compared with eight subject pronouns in that position, but in Hodsdon there is an equal number of pronouns and other nominals (seven of each). In clause-initial position, on the other hand, Abbott has four examples of each, while Hodsdon has two with pronouns and eight with other nominals. Since unmarked pronouns are less likely to be emphatic than other nominals, this would appear to be further support for the OVS hypothesis outlined

earlier in relation to a fronting rule for the purpose of emphasis.

The Makushi ordering patterns for clauses other than the simple declarative transitive show some differences from those in Hixkaryana, which we consider to be the clearest case of OVS. Thus, as noted already, in Makushi intransitive clauses, the subject precedes the verb (we noted no exceptions at all in the data inspected), whereas in Hixkaryana, the preferred order is VS. In Makushi copular clauses, the preferred position for the subject is between the complement and the copular verb (Comp-S-Cop) (Abbott 1977: 246, and this appears to be generally supported by the examples we have seen in all three sources—there are less-used variant orders, but none in which S follows the copula); in Hixkaryana the most frequent orders are Comp-Cop-S (preferred, and equivalent to OVS) and S-Comp-Cop, and it is rare to find the subject occurring between the other two constituents.

Makushi quotative sentences are similar to those in Hixkaryana in that they always have a main verb 'say' with an embedded clause the direct object (the quoted speech) of that verb, but they differ in that the 'say' verb can either precede or follow (or both) the direct object speech (in Hixkaryana it always follows); where it precedes, the subject precedes that verb, with a resulting SVO order, and where it follows, the subject follows the verb (OVS) (Abbott 1977:251-52; Hodsdon 1932:28-29). The subject does not have the subject-marking suffix in copular clauses (like intransitives), but it does in quotative clauses (like transitives).

In spite of the statements in two of the sources that SOV is the preferred order for Makushi, it appears to us that OVS may be the more basic order. First, insofar as we may take the scattered examples avail-

able to us to be a random sample of Makushi sentences, where subject and object nominals occur, the statistical evidence is slightly in favor of OVS. Second, where only clitic pronouns on the verb express subject and object, the order is rigidly OVS. Williams's statement that an emphatic subject occurs in initial position is fully consistent with the other facts we have noted about sentence-initial constituents, and with a simple fronting rule that can be applied to the basic order (OVS) to produce the only other order to occur with any frequency (SOV). These facts, and especially the conditioning factors relating to the fronting rule, need to be tested against a much larger body of data, preferably in a nonelicited, natural discourse context. It would be particularly useful to have texts from less "acculturated" groups of Makushi, and especially from women, who traditionally participate less in trading and other contacts with speakers of European languages.

1.4. Hianacoto-Umaua is a member of the Southeastern Colombia Carib group in Durbin's classification and represents a Carib subgroup who migrated southeastward from the Guiana area perhaps 3,000-4,000 years ago (Durbin 1977). Durbin and Seijas (1973:22) cite references from the demographic literature to the existence of a small community of speakers still living in the vicinity of the Yari, Apaporis, and Vaupés rivers, but we have no linguistic data from any source other than Koch-Grünberg (1908). Fortunately, Koch-Grünberg's work is careful, detailed, and very explicit on matters of syntax. He states (1908:958): "Das Akkusativ-Objekt wird gewöhnlich an die Spitze des einfachen Satzes gestellt." [The direct object is generally placed at the head of the simple sentence.] He then gives eighteen examples

of simple object-initial sentences and phrases, among them:⁴

- (5a) *túna kaláma-uanaj (d)yí(d)ya*
 water give NEG he
 'He gives me no water'.
- (5b) *tēnyileke majihuli nehēnehe dotólo*
 one tapir killed doctor
 'The doctor killed a tapir'.
- (5c) *ikúja ehóli-uanaj kalihóna*
 fish caught NEG people
 'The people haven't caught any fish'.
- (5d) *úmē kalihóna hēnehe elákudxa*
 many people killed Colombians
 'The Colombians killed many people'.

The examples in (5) show typical Carib OVS syntax. Negatives are suffixed to lexical verbs, as in Hixkaryana (though there appears to be no use of a copular auxiliary; compare (5a) and (5c) with (1b)). The form *túna* 'water' will be recognized from (4c) and occurs in several other Carib languages as well. Evidently the Hianacoto-Umaua had enough contact with European colonists and travelers to have borrowed a word like *dotólo* 'doctor' and to have a term for the non-Indian Colombians that they met (*elákudxa*).

It may be that further work can still be done in the field on Hianacoto-Umaua and on the closely related and still extant language Carijona (which may or may not turn out to have similar word order). Until it is, the admirable work of Koch-Grünberg indicates clearly that Hianacoto-Umaua must be recorded as an OVS language.

1.5. We follow Koch-Grünberg in re-

⁴ Where we use / in these examples, Koch-Grünberg uses a symbol composed of an *l* and an *r* superimposed, for which his articulatory description suggests an *l*-like retroflex roll or flap. Otherwise we reproduce his transcription, which he explains on pp. 89-90, except that we show the morpheme breaks in Verb+Negative forms, discussed by Koch-Grünberg on p. 981.

garding Arekuna and Taulipang as one and the same language (Williams 1932:4). The term *Pemon*, used by Armellada (1943) and others to refer to this language, appears to be a general word for 'people', used by speakers of the language to refer to themselves (a variant form, *Pemong*, is common in the literature). Edwards (1977:6) notes that Akawaio is also included in Armellada's "lengua Pemon," linked with Arekuna as the Roraima subgroup of Pemon. Edwards seems to regard Akawaio and Arekuna as distinct, although "closely related and generally mutually intelligible" (1977:2). We have not included Akawaio as a possible object-initial language, since the few relevant examples we find in Edwards (our only source) point to its being consistently SOV. Durbin's classification places Pemong (Taulipang), Akawaio, and Makushi all in the same subgroup of the East-West Guiana branch of Northern Carib. Edwards estimates that there are over 500 Arekuna in Guyana and says that they are "a small group of the large Arekuna tribe of Venezuela" (1977:4, 6). Other population estimates are confusing: Basso (1977: 10) gives 2,600-7,000 for Pemong, but includes in this group Makushi and Kamaracoto, as well as Arekuna; Abbott (1977) and Hodsdon (1976), on the other hand, give much larger estimates for Makushi alone (see 1.3).

Our sources of information about word order in Arekuna-Taulipang are Koch-Grünberg (1924; 1928), Armellada (1943), and Edwards (1977). An apparently explicit statement that on closer examination seems somewhat less than clear comes from Armellada (1943:220), in a section headed *Observaciones sobre la oración simple* [Observations on the simple sentence]: "La construcción en el idioma Pemón es generalmente a la inversa, descendente o figurada, es decir, aquella,

cuyo orden es el siguiente: término circunstancial, término directo, verbo y sujeto. Esto puede comprobarse con cualquier frase escogida al azar.” [The construction in the Pemon language is generally inverted, descending or figured (?), that is to say, that whose order is the following: circumstantial term, direct term, verb and subject. This can be verified with any sentence chosen at random.]

Armellada supplies two glossed examples at this point, but gives a free translation only for the first: “se-te pai yei mayi-te nak-kere kuima-da neke sane—este lugar desde, árbol aquel hasta limpio no ciertamente, por ciertamente no limpio desde este lugar hasta aquel árbol” [this place from, tree that as-far-as clean not certainly, certainly not clean from this place as far as that tree]. “aten-te nak aute-kon, konok-pe tise-re? cual lugar a, vos-vais-otros, lluvia como (lluvioso) estando? [what place to, you-go-others (i.e., you-go-COLLECTIVE—DCD/GKP) rain as (rainy) being?]. Plainly, Armellada’s examples do not make clear the intent of his statement, with its rather curious reference to “inverted, descending or figured” construction. He seems to be asserting that an order like Locative-Object-Verb-Subject would be typical, but he does not illustrate this adequately.

Fortunately, other sources clarify matters somewhat. Koch-Grünberg, whose fieldwork dates back to the first decade of this century, states that in transitive sentences the normal position for subject is after the verb when it is a free-form pronoun (OVs) and sentence-initial when it is any other kind of nominal (SOV), and that in both cases subjects are marked by the suffix *-za* (1928:173). The great majority of the sentences in the texts which he gives (1924:155-255; 1928:189-233) confirm this, but there are exceptions, when either a pronoun subject occurs sentence-

initially or when a (nonpronoun) nominal subject occurs after the verb; one exception is (1924:155):

- (6) *Ayalleg éna(x)pə ekú Konewó-za*
Tucumá Nuß aß Konewó
‘Konewo aß eine Tucuma-Nuß’
[Konewo ate a tucuma nut].

Koch-Grünberg calls the suffix *-za* a “passive” marker (1928:173), which we equate with the ergative marking found in closely related Makushi (see 1.3). Edwards gives more specific information about this suffix in Arekuna that identifies it even more closely with the Makushi suffix (1977:44): “The nominal in a non-progressive transitive sentence which is the ‘doer’ of the action is marked by the suffix *ya*. . . . Personal pronouns performing the function of subject in transitive sentences are also marked by the suffix *ya*. In cases where the subject pronoun is optionally not expressed (1st person singular) the *ya* is attached to the verb form which has the subject in the underlying structure.” Edwards shows elsewhere that the expression of progressive aspect requires a copula-complement type of construction (1977:39-40), so in view of the Makushi evidence it is not surprising that the subject in such sentences is not marked by the suffix *-ya*; in Makushi, such copular sentences are more like intransitives in their word-order patterning and the absence of the subject-marking suffix (see 1.3).

Edwards is more cautious in his statements about word order in Arekuna, saying only that it is freer than in English, and he refers to the function markers which “help in showing the relationships among parts of the sentence” (1977:45). He adds that “the verb can and very frequently does occur as the final element in the sentence.” He gives one example of SOV, (7a) below, and there are two or three others in the short text (1977:50-51). There are no OVS sentences in the text, but in

his list of useful expressions, the only examples we found of simple declarative transitive sentences are both OVS (1977: 95-96), the first, (7b) below, with a (non-pronoun) nominal subject and the other (7c) with a pronoun subject:

- (7a) *peero-ya nong akapö*
dog SM earth dug
'The dog dug the earth'.
- (7b) *yeei yeepeeruu tongkee mireetong ya tiicha reepakpö*
tree fruit gave child-PLUR SM teacher
(?)
'The pupils gave the teacher some fruits'.
- (7c) *moorok yamök tuumi tokyä mö*
fish PLUR poison they-SM FUT(?)
'They will poison fish'.

There is less information available at present for Arekuna-Taulipang than for Makushi, but what there is suggests that we are dealing with either an OVS language or a language vacillating between SOV and OVS, very much as described above for Makushi. There is the encouraging prospect that for both of these languages (and for some others in the Carib family) it will soon be possible to arrive at more definitive conclusions, as a result of the ongoing Amerindian Languages Project directed by Walter Edwards.

1.6. The Panare tribe lives in a region to the south of Caicara on the Orinoco River in Bolivar State, Venezuela. The Panare language is classified by Durbin as Northern Carib (Western Guiana), closely related to Mapoyo and Yabarana (for which we know of no materials containing syntactic information).

The only source we have been able to find concerning the syntax of Panare is Cauty (1974). Cauty is as specific as anyone could wish regarding the order of constituents in the sentence where ambiguity is not prevented inflectionally. We

quote from his section headed "El orden de las palabras" (1974:41-42): "Cuando la función gramatical no se expresa por medio de un sufijo flexional, el orden de las palabras es importante. Por ejemplo, las funciones de sujeto y de objeto (directo), así como la mayoría de las formas de determinación se expresan sin sufijo, por medio de la importancia que tenga el orden de las palabras en la oración. El orden más común de la oración simple es el siguiente: Objeto, Verbo, Sujeto." [When grammatical function is not expressed by means of an inflectional suffix, the order of words is important. For example, the functions of subject and (direct) object, like the majority of forms of determination are expressed without a suffix, by means of the importance that the order of words has in speech. The most common order in simple speech is the following: Object, Verb, Subject.]

Cauty then provides the data given in (8):

- (8a) *pi? kokampö unki?*
child washes woman
'The woman washes the child'.
- (8b) *unki? kokampö pi?*
woman washes child
'The child washes the woman'.

Cauty adds the interesting observation that the most cohesive unit ("el nexo más firme") in the OVS sequence is VS. (In Hixkaryana, as noted in 1.1, it is unquestionably the OV sequence that comes closest to being syntactically inseparable.) Cauty's claim runs counter to the traditional view that object and verb always form a unit (the VP or Predicate) to which the subject does not belong.⁵ To illustrate

⁵ This claim would have to be relaxed anyway to allow for VSO languages, of course; and OSV languages (see 2) would apparently also have to lack a phrase-structure constituent consisting of verb and object alone.

his point (though not, we think, in any compelling way), Cauty cites the possibility of postposing the object past the verb-subject unit, affixing the prefix *yi-* to the verb:

(9a) *marankayo römu: mane yu*
orange wash Future⁶ I

(9b) *yirömu: mane yu marankayo*
yi-wash Future I orange
'I am going to wash the orange'.

Conceivably this is, as Cauty suggests, evidence that the VS nexus is fairly tight and noninterruptible. More interesting for our purposes, (9b) suggests that VSO is a marked order in Panare, with the prefix *yi-* indicating that the object has been dislocated to the right. This supports the claim that (9a) represents a more basic order of constituents.

From Cauty's account, then, we must take Panare to be an OVS language with VSO as one of its permitted nonbasic alternant orders.

1.7. Bacairí (Bakaïri) is another language of the Carib family, but is located far south of the postulated Carib homeland in the Guianas. The approximately 250 Bacairí live in the Xingu Basin, 600 miles south of the Amazon. Their language is placed by Durbin with Nahukwa in Southern Carib (Xingu Basin). On Nahukwa, which includes Kuikuru and Kalapalo, there are ethnographic data (see references by Basso, Carneiro, and Dole in the introduction to Basso 1977), but there is no linguistic material known to us.

According to Wheatley (1973:110), Bacairí has OVS order as basic in transitive clauses: "The order of Bacairí clauses with unmarked theme is generally SUBJECT-PREDICATE for intransitives, OBJECT-PREDICATE-(SUBJECT) for transitives, and ITEM-COMPLEMENT for statives: *udodo*

idale 'jaguar (theme) goes (subject-predicate, intransitive, subject as unmarked theme)', *anguela aieniembra gala maura* 'I don't create *anyone* (theme) (object-predicate-subject, transitive, object as unmarked theme)', *xina taroiri ne-caunada* 'we harvested our own rice (subject-object-predicate, transitive, subject as unmarked theme)', *piaji maca* 'he is a shaman (item-complement, stative, complement as unmarked theme)'."

There is much that is unclear to us about what Wheatley means by his terminology ("theme," "thematic/at thematic," "focal," "unmarked"), and even the morpheme glossing of the data in his article is not given but has to be deduced by the reader through a process of comparison and deduction. However, we find at least the following additional examples:

(10a) *taroiri nodoque maca*
his rice left he/THEMATIC/FOCAL
'He left his rice'.

(10b) *agueuane modo neuan para maunca*
speaker COLLECTIVE believe NEG
he/ATHEMATIC/FOCAL
'He does not believe the speakers'.

Earlier work on Bacairí disagrees with the statement Wheatley makes. Von den Steinen (1892) makes no general claim about word order, but in the texts he gives, for every OVS clause there are two OSV, two or three SVO, and five SOV clauses. De Abreu (1895) confirms the impression one might gather from this, stating that Bacairí normally has SOV order, other possibilities being permitted "quando logicamente não existe confusão possível" [when logically there exists no possible confusion]. He gives examples of OVS, SVO, and SOV forms, and a 53-sentence text. In the text there are only seven clauses where both subject and object are full NPs. Of these, three are SOV and four are OSV, two of the OSV ones

⁶ The gloss here is an assumption on our part.

being sentences in which the O is a direct quotation.

None of this makes it entirely clear which order of constituents should be thought of as basic for Bacairí. In view of the membership of Bacairí in the Carib family, however, we believe that Wheatley's statement should not be overlooked. Bacairí is either an OVS language or, like Makushi and Arekuna-Taulipang, at least exhibits in its syntax enough tendencies toward OVS order to illustrate one way in which OVS basic order might arise diachronically from earlier SOV (cf. 3).

1.8. Asuriní is the only OVS language known to us that does not belong to the Carib family. Like OSV Urubú (see 2.3), it is a Tupian language. It is spoken in the region of the lower Tocantins River, southwest of Belém and not far from the mouth of the Amazon. There are probably fewer than 100 speakers left today.

Our sources are Harrison (1970; 1976) and Solly (1964; 1965). We are indebted to both Carl Harrison and Robin Solly for their help and cooperation. There are very few examples of actual sentences of the language in Harrison's work, but it does include (11a); (11b) and (11c) are taken from the more abundant supply of data in Solly (1964):

- (11a) *Cánee cenerecáŋta á?ee*
us 3S10-see-future he
'He will see us'.
(11b) *Kanoa oeraha kacowaŋawa-ŋoa*
pane kacoheri pe
canoe 3S-took Kaju's men sadly
rapids to
'Unfortunately, Kaju's men took
the canoe to the rapids'.
(11c) *Cerewi?a oeraha kamara-piciŋa*
tokorohi pe
Cerewia 3S-took Kamara-Picinga
Tucurui to

'Kamara-Picinga took Cerewia to Tucurui'.

Harrison (1970:6) distinguishes two dominant word-order patterns, corresponding to two different groups of Asuriní speakers (which he refers to as group A and group B): "...the Portuguese phrase order, subject-transitive verb-object, seems to be having some effect on Asuriní phrase order. Speakers of group B, with less contact [with Portuguese speakers], show a more pronounced preference for the order: object-transitive verb-subject, at least in the lead sentences of discourses."

These two orders, SVO and OVS, occur most often, and with about equal frequency, in the much larger sampling of language data that Solly (1964) provides. OVS is more frequent text-initially than SVO, and in most of the SVO examples it appears that the subject occurs in initial position to mark some kind of special discourse prominence, such as contrastive focus, emphasis, or topic highlighting (Solly 1965:6, 30). This marked order is often reinforced by the addition of one of a small set of particlelike morphemes which signify some kind of emphasis (cf. Solly 1965:52). The two other orders which occasionally occur, SOV and OSV, also seem to be at least partially accounted for by such a fronting hypothesis (in the case of OSV it is the object which receives emphasis). There is verb agreement with the person of both subject and object in transitive clauses (Solly 1965:38, 46); this accounts for the many clauses in the texts which do not have subject and object nominals (cf. the Carib OVS languages discussed above).

Harrison's observations concerning the two distinct groups of Asuriní speakers strongly suggest that OVS is the basic word order in Asuriní, with Portuguese influence accounting for the increasing

frequency of SVO. Solly's notes, and his data, supply the additional evidence that, independently of the pressure from Portuguese, SVO and, to a lesser extent, SOV occur as marked orders for the purpose of highlighting the subject constituent.

2. In this section, we briefly discuss four languages of Brazil: Apurinã (2.1), Urubú (2.2), Nadëb (2.3), and Xavante (2.4). To begin with, however, we comment on those non-Brazilian languages known to us for which OSV has been claimed or hinted to be the descriptively basic order.

About Dyirbal, Hurrian, Greenlandic Eskimo, and Aleut, we shall add nothing to what is said in Pullum (1977:259-65).⁷ None of them could be regarded as clear cases of object-initial basic word order, and all of them have ergative NP morphology, which raises the difficulty of deciding whether the word-order principles are sensitive to the subject/object distinction or the ergative/absolute one, and of how the question of object-initiality is to be reformulated if the latter is the case. None of the languages discussed in the following sections has ergative NP morphology, so the question of whether the terms "subject" and "object" are being correctly applied to them should not be difficult to answer.

Occasional references to alleged OSV languages continue to appear in the literature from time to time. Steele (1977a:556) cites Huichol (Uto-Aztecan) as OSV through a fairly understandable error in interpreting Grimes (1964). Grimes, unconcerned with questions of constituent order, happened to choose (1964:48) two object-initial sentences to illustrate transitive clauses. The sentences read, literally,

⁷ See Pullum (1978) for an additional comment on Hurrian.

'Us, the chanters speak-to' (OSV) and 'Those wolves, associate-with you humans' (OVS). He also notes (1964:69) that OSV is a commoner order than SOV. But, of course, OSV is commoner than SOV in English too (*That I like* versus **I that like*). Everything in Grimes (1964) is compatible with Huichol being an SVO language; and in Grimes (1975:172) we find it confirmed that SVO order "represents normal or unmarked thematization, with agent as subject coming first." The two illustrative transitive clauses cited in the earlier work are unrepresentative in this regard.

By a coincidence, Steele appears to claim OSV order as basic for another Uto-Aztecan language, Luiseño, in another paper of the same year (1977b:604). But here, OSV is just a printer's error for SOV, as shown by all the examples in the paper, and the list of SOV languages in Steele (1975:208).⁸

According to Bright and Bright (1965:256), the Athapaskan language of Smith River, California (known also as Tolowa), "has rigid syntactic ordering . . . the basic sentence order is Indirect Object, Direct Object, Subject, Verb, and none other." This statement is based on research carried out by the late Jane Bright, and the evidence for it cannot now be checked (William Bright, personal communication), but we have learned a number of facts that cast considerable doubt on the likelihood of this language being an OSV language: the single Tolowa text made available to us shows several different word orders, but no sign of OSV; the language has a rich morphology that is not consonant with a rigid word order; the normal order of agreement affixes on Athapaskan verbs is IO-O-S-V, which might account for the statement cited above without reflecting

⁸ Thanks to Susan Steele for confirming this point and the last.

actual word order; and the structure of closely related languages such as Hupa and Tututni make an OSV order extremely unlikely (our thanks to Victor Golla for supplying us with the text and for very pertinent comments).

Finally, Ruhlen (1977:152) cites Mamvu, a Central Sudanic language, as having OSV basic order. His source, he has kindly informed us, was Tucker and Bryan (1965:55), who report two dominant orders for Mamvu, OSV and OVS, depending on aspect in the sentence. They do not, however, offer any relevant evidence, there being no cases of full NP subjects in their examples, and in many of the examples no subject at all. Moreover, after stating that "the word order O+S+V is preferable to S+V+O," they add "this variation, however, seems to be a matter of emphasis," thus introducing the type of condition that we believe vitiates against this being the basic order. Vorbichler (1969-70) is the only source known to us for the direct study of Mamvu word order from texts, and the evidence there seems clear enough that Mamvu is basically a subject-initial (SVO or SOV) language.⁹

We know of eight languages, then, that one might take to be OSV if one relied uncritically on assertions in the literature without reexamining the primary data. In all these eight cases the attribution proves to be mistaken. Only in one instance have we encountered facts about a language from outside South America for which an object-initial classification could turn out to be tenable. These concern Haida, an unaffiliated language spoken in the Queen Charlotte Islands off western Canada and in southwest Alaska. Eastman (1979) and Edwards (1979) do not, in fact, make any

⁹ We are grateful to Neil Smith and Regina Blass for their help in working out from Vorbichler's texts (which are translated but not morpheme-glossed) what the commonest word orders are.

claim that Haida is OSV, preferring to argue that surface orders in Haida can all be explained by discourse factors. The data and facts they report, however, suggest that OSV could possibly be the descriptively basic order. At the moment, we do not have sufficient evidence to feel justified in making any claim in this direction, in view of the conclusions arrived at by Eastman and Edwards. If Haida proves to be not a clear instance of basic OSV order, there are no known OSV languages anywhere outside the Brazilian Amazon area.

We turn now to a discussion of the four languages we know of that seem genuinely to be OSV.

2.1. Apurinã (Ipuriná) is a member of the Arawakan language family. There are currently about 1,000 speakers, scattered along 1,500 kilometers of the Purus River in the state of Amazonas in Brazil (Pickering 1974a).

Our sources are two unpublished papers by Pickering (1974a; 1974b), which make clear statements, supported by data, that OSV is the basic order in Apurinã. (Our attention was drawn to Pickering's work by a brief reference in Longacre 1976:273.) Examples (12a)-(12f) are from the (1974a) paper, and (12g) and (12h) are from (1974b):

- (12a) *anana nota apa* [OSV]
pineapple I fetch
- (12b) *anana n-apa* [OV]
pineapple I-fetch
- (12c) *anana n-apa nota* [OVS]
pineapple I-fetch I
- (12d) *nota apa - ry anana* [SVO]
I fetch it pineapple
- (12e) *n-apa - ry anana* [VO]
I fetch it pineapple
- (12f) *n-apa - ry anana nota* [VOS]
I fetch it pineapple I
'I fetch pineapple'.

- (12g) *kimi Pedro no - nika* [OSV]
corn Pedro NEG ate
'Pedro didn't eat corn'.
(12h) *anana nota syka-i (pite)* [OSV]
pineapple I give you (you)
'I give you pineapple'.

This set of examples illustrates all of the relevant considerations with respect to constituent order, as noted by Pickering (1974b:3-5). Pickering states: "The only surface order that has no bound pronouns is OSV." This can be seen by comparing (12a) and (12g) with (12b)-(12f). He continues: "Of special interest is the surface order for di-transitive sentences, OSV-o, which is obligatory. . .the two objects [O = free form nominal, o = bound form—DCD/GKP] are not coreferential—the bound object pronoun (and the optionally following coreferential free form) represents the *indirect object*. Thus, the di-transitive structure furnishes strong evidence that OSV is the basic order." For examples, see (12g) and (12h). Pickering also says: "If both free forms either precede or follow V their order must be OS"—this is seen in (12a), (12f), (12g), and (12h). "Surface orders. . .might be said to support VOS [and] OVS, but the fact that the Subject (in some form) almost invariably precedes V argues against these possibilities [and] there is no motivation for positing them"; and, "Both motivation and evidence point to OSV [as the basic order]."

We should perhaps note that Pickering, in a personal communication, indicates that he is now of the opinion that there is no single "underlying" configuration of constituents in Apurinã, but that the order "is dictated by discourse factors." He appears to mean by this that each discourse genre has its own preferred order of constituents (with the possibility also of other marked orders occurring in each different genre). We have not seen any evidence

that would support such a "multiple basic orders" hypothesis for this or any other language; indeed, the facts and data which Pickering reports, as outlined above, appear to us to constitute a strong confirmation of a single basic order—OSV—for Apurinã.

2.2. The Urubú language belongs to the Tupí family. There are about 500 speakers in the northeast region of Brazil. Our only source of information is Kakumasu, who makes a clear statement concerning word order (1976:171): "A presente análise se baseia no modelo gerativo-transformacional. . . Trata exclusivamente da sintaxe 'predileta' da língua Urubú, ou seja OSV." [The present analysis is based on the generative-transformational model. . . It treats exclusively the "preferred" syntax of the Urubú language, that is, OSV.]¹⁰ In a footnote, the following statement is also made (1976:195): "No caso das outras disposições, parece haver menos frequência de uso e nenhuma mudança de significado. Devem ocorrer as seguintes: SOV, VS, VO. Estas podem ser derivadas através de transformações da disposição 'predileta', OSV." [In the case of other orderings, there appears to be less frequent usage and no change of meaning. The following can occur: SOV, VS, VO. These can be derived by means of transformations from the "preferred" order, OSV.]

In accordance with his declared intention to restrict the description to the syntax of the preferred order, Kakumasu cites only transitive sentences with the OSV order, from which the following are taken

¹⁰ Kakumasu's paper was written in English (forming part of an M.A. thesis at the University of Hawaii) and was translated into Portuguese for publication. We give here a translation of our own from the Portuguese, since we have not had access to an English version of his work.

(with our English translations of his Portuguese glosses):

- (13a) *jakare- ke Kaitã japi u'am*
alligator-focus Kaitã he shot with
shotgun he was
'Kaitã was shooting an alligator
with the shotgun'.
- (13b) *jape'a-ke jande jamondok jaho*
wood-focus we we cut we went
'We went to cut wood'.
- (13c) *pako xuã u'u*
banana João he ate
'John ate bananas'.
- (13d) *koĩ sepetu-pe jurukã Nexĩ mái*
muji-ta
tomorrow spit-on ribs Nexĩ mother
she will roast
'Nexĩ's mother will roast the ribs
on the spit tomorrow'.

The precise function of the "focus" marker *-ke* is not clear to us. According to Kakumasu (1976:186), it occurs only with the object nominal in transitive clauses, but it is not obligatory (cf. (13a), (13b) and (13c), (13d)). It can also occur with the subject in intransitive clauses (and possibly in transitive clauses if there is no object nominal), and with the nominal in a postpositional phrase, apparently in any type of clause. After asserting that it is not an object marker, Kakumasu goes on to say that it can be used to resolve possible ambiguities about whether a given nominal is subject or object. This presumably means that the marker occurs in both OSV and SOV clauses and suggests that one of its functions is, in fact, that of object marker. Neither subject nor object nominals are obligatory, although only the subject appears to be marked in the verb (1976:175).

Kakumasu attaches significance to the verb-final aspect of the linear sequence in explaining the occurrence of SOV as the principal variant of the dominant OSV order (1976:171-72). The relative order of S and O is considered of relatively minor

importance, and he concludes that the syntax of Urubú is basically that of an SOV language (but see Derbyshire 1979b: 197 for some aspects of Kakumasu's treatment that are inconsistent with his conclusion at this point).

From Kakumasu's account, we must conclude that Urubú is clearly a language with dominant OSV ordering, and that this is probably also the "basic order" in the sense in which we are using that notion. Our only reservation arising from Kakumasu's description concerns the necessity for a clearer understanding of the function of the "focus" or "object" marker.

2.3. Nadëb is generally listed with the Macuan subfamily of Puinavean, though fieldworkers deny that this is a proven affiliation. Today, there are about 200 speakers, who live on or near tributaries of the river Negro, to the northwest of Manaus, in northern Brazil.

So far as we know, nothing has been published on Nadëb syntax, and our information comes by way of personal communications from Helen Weir, who has done some preliminary fieldwork on the language. She tells us that the two most frequently occurring orders are OSV and OVS (with the proviso, common to all the languages discussed in this article, that many sentences do not have full nominal subjects and objects as a result of the verb agreement patterns). Her current hypothesis is that "the preferred word order is OSV." The data which she supplies include the following simple transitive clauses, all of them OSV except (14e), which is OVS:¹¹

¹¹ The Nadëb data are in a working orthography which is neither definitive nor phonetically transparent; *q*, for example, is a glottal stop, and accents indicate different vowel qualities in a rather complex vowel system.

- (14a) *txùù^gη nũũ qī qi-taaq*
 tapir head I gather
 'I'm going to gather "tapir-head"
 [name of a fruit]'.
 (14b) *yiyèq hùùy - hãq qī qawxii biq-*
sõõys
 there forest in me snake nearly bit
 'There in the forest a snake nearly
 bit me'.
 (14c) *samũũy yi qa-wùh*
 howler-monkey people eat
 'People eat howler monkeys'.
 (14d) *bo^gη maqyoqyool qi-wùh*
 horsefly [insect name] eat
 'The "maqyoqyool" eats horseflies'.
 (14e) *bo^gη tiq-wùh maqyoqyool - hãq*
 horsefly it eat [insect name] CLAR-
 IFICATION MARKER
 'The "maqyoqyool" eats horseflies'.

Where S follows V, as in (14e) (and also in the less common orders VSO and VOS), it usually has following it the cliticlike morpheme *-hãq*, which signals that the full noun phrase is added to clarify the referent of the pronoun in the verb. This pronoun (*tiq-* in (14e)) is obligatory whenever the subject follows the verb. The combination of this pronominal element in the verb and the clarifier morpheme following the subject is fairly strong evidence that all three orders in which S follows V are marked orders. The other possible order is SVO, but this is less common, and Weir surmises that this is another case of a full noun phrase (here the object) being added after the main predication for clarification purposes (the evidence for this is not so strong as in the case of the subject NP, however, since the realization, if any, of the object person marker in the verb is often zero; the clitic *-hãq* does, however, often follow the object NP when it is in this postverbal position, just as it does with subject NPs).

Weir believes that more work needs to be done before she can arrive at a definitive conclusion about basic word order.

The evidence, therefore, is not yet nearly as strong as it is for Apurinã or Urubú, but what she has reported to date clearly points to OSV as the most likely basic order of constituents.¹²

2.4. Xavante belongs to the Gê family and is spoken by approximately 3,000 people, located in several scattered villages in the northeastern part of the state of Mato Grosso in Brazil. In at least one of these locations they have previously had close contact with a group of Bacairí.

Our first source of data on Xavante is Burgess (1976), which is directed to showing that the order of constituents in Xavante is determined by pragmatic considerations revolving around "information structure" and "topical structure." Burgess affirms that there is no basic word order in terms of the grammatical relations of subject and object (1976:3):

When both subject and object are identified by noun phrases, there is no overt distinction as to which is which either by affixation or by word order. If one noun phrase refers to an animate object and the other to an inanimate, the animate one is usually the subject, and the inanimate the object. If both are animate, or both inanimate, only context will disambiguate them. Their order relative to each other is determined by information or topical structure and not by surface structure. The verb is most frequently the final element in the clause. . . . It is rare to find the verb as the first constituent of the clause unless it is the only constituent.

Notwithstanding Burgess's statement to the effect that there is no basic order of constituents, her data show a strong preference for OSV. There is only one main clause with two noun phrases, a text-initial sentence with the NPs in OS order,

¹² Weir (now at the University of Campinas) has provided further evidence and arguments since we submitted this article for publication, in an unpublished paper, "Nadëb: An OSV Language" (1980). At present, we do not know if a published version of her paper is planned or in process.

(15a)—though note that there is additionally a resumptive subject pronoun and an object agreement affix on the verb. Pronouns like *mate* in (15a) are an almost obligatory feature of Xavante sentence structure. Otherwise, the transitive clauses in Burgess (1976) have only pronominal subjects. For what it is worth, the order that shows up in most cases is still OSV, as shown by (15b)-(15d):

- (15a) *Toptö wahi mate ti-tsa*
Toptö snake it her-bite
'A snake bit Toptö'.
(15b) *aro tê tsub-dza'ra*
rice they winnow PLURAL
'They are winnowing rice'.
(15c) *ubure dza têtê a'â rom-dzuri*
everything FUT they there thing-
plant
'They will plant everything'.
(15d) *upa dzama dza têtê dzuri*
manioc also FUT they plant
'They will also plant manioc'.

There are two examples of SOV, where S is pronominal. There is a single occurrence of the order SVO in a main clause, but in this case the O is a right-dislocated noun phrase containing a clitic-particle, one of whose functions is that of CLARIFIER (its form *-hã* is similar to that which occurs in Nadëb with the same function—see 2.2). This postverbal noun phrase clarifies the referent of the third-person prefix in the verb.

In dependent transitive clauses, the same three orders are found (OSV, SOV, and SVO), and here OSV seems to be even more predominant, including one example (16a) containing two full noun phrases:

- (16a) *ĩ-to datê ta-ma 'wa'ri-dâ, . . .*
her-eye someone her-for operate-
in order to, . . .
' . . . in order for someone to operate
on her eye'.
(16b) . . . , *wêdê têtê pahöri-mono-da*
. . . , trees they cut-PURPOSE
' . . . , to cut down the trees'.

- (16c) *powawẽ têtê 'rê 'madö'ö-mono-da*
cattle he CONT watch-PURPOSE
'in order to look after the cattle'.

The data in McLeod and Mitchell (1977) generally support the predominance of OSV, but here all the examples of transitive clauses seem to be ones with pronominal subjects. McLeod (personal communication) has supplied data from four texts in support of her intuition that if there is any single basic order, it is OSV (she has a fluent knowledge of Xavante resulting from several years of fieldwork including a considerable amount of translation work with native speakers). The data include the following clauses with subject and object noun phrases:

- (17a) *tawamhã 'ridi hã, ma-tô pi'õ hã*
siwi 'masã
then locust EMPH, 3S-COMPL wom-
an EMPH self-among some-
spot
'Then the women spot the locusts'.
(17b) *wêtê'rãti te we pi'õ 'wasa*
[fruit-name] 3S this-way woman
carry
'The women are bringing home
fruit'.
(17c) *eu'ãa hã ina têtê 're predum ja'ra*
QUERY turtle it-is its-mother 3S
CONT raise PLUR
'Does the mother bring up the
turtles?'
(17d) *u'ã hã ina hã ãwa 're sapa'a*
ja'ra mono õ di
turtle it-is its-mother it-is at(-it)
CONT stay PLUR CONT NEG STA-
TIVE
'The mother(s) do(es) not stay with
the turtles'.

The data alone would lead us to a fairly strong tentative conclusion that the basic order of constituents in Xavante is OSV, which McLeod's intuitions appear to support. We cannot, however, ignore the arguments Burgess presents for treating

word order as being influenced to a considerable degree by pragmatic factors. There is clearly a need for a closer look at a larger amount of text material and further investigation of the clitic *-hã*, which, from McLeod's data, occurs in preverbal, as well as postverbal, phrases. (Burgess 1976:22 suggests that one of its functions is topic marking and summarizes other functions, described more fully in McLeod 1974, as "participant highlighting, marking change of agent, and as a device for building up suspense in a narrative.") Xavante must be regarded in the meantime as a likely OSV language, but perhaps not an established one.

3. It is hardly appropriate to draw conclusions from the very limited amount of work we have reported on in this article. We have scarcely done more as yet than to point out that languages with OVS and OSV as their typical clause patterns do exist and to map out an area within which we hope and intend that further work will be done. Nevertheless, we feel it is appropriate to mention here a few points that might be kept in mind as further work is undertaken on object-initial languages.

One interesting question is where object-initial languages come from diachronically. We know too little about OSV languages to say anything about this, but a hypothesis suggests itself. As observed in note 2, seven of the eight languages discussed in 1 are from the Carib family. That family contains today several languages with SOV basic order (for example, Galibi, known as Carib, and Waiwai, closely related to Hixkaryana and in sporadic contact with it). Thus there are OVS languages in a family that could originally have been SOV (notice that the reconstruction of original settlement and migration patterns in Durbin 1977 suggests that a number of the OVS Carib languages

are breakaway groups from an original Carib concentration in the Guianas). Consider in this connection the remarks of Schwartz (1971:160) concerning an alleged asymmetry between verb-initial and verb-final language types:

VSO [languages] are almost always prepositional; SOV are almost always postpositional. VSO almost always have the relative clause after the head noun; SOV almost always have the clause before the head noun. And so on. But in the midst of this appealing symmetry, there is an element of discord: VSO languages almost always allow an SVO alternative; but "true" SOV languages do not allow OVS.

Schwartz is appealing here to a notion of "true SOV" (as opposed to false SOV? garden variety SOV?) that we believe should be rejected. Schwartz's asymmetry does not exist: there are languages with SOV as their basic constituent order that sometimes postpose the subject NP to give OVS as an alternant possibility. Wichita is one example (discussed in Pullum 1977: 268-69). And Galibi ("Carib") is another. If the Carib languages that have OVS as basic order are assumed to have grammaticalized a previously stylistic but frequently used option of subject postposing, a reasonably plausible scenario for the diachronic development of a class of OVS languages emerges. (This idea, suggested to us by Simon Dik, is discussed in more detail in Derbyshire, forthcoming.)

A second point that should be mentioned is the areal clustering of the languages discussed in this article. As we have stated, there seems to be no clear evidence for the basicness of object-initial order in languages from continents other than South America. The known object-initial languages are in fact all spoken within a tightly circumscribed geographical region, essentially coextensive with the area that drains into the Amazon. A circle drawn with Belém on its circumference and Manaus as its center would include the location of every object-initial language

that we know of, living or extinct. Yet this is not demonstrably due to either genetic relatedness of the languages concerned or contact between the speakers of the languages. The languages discussed above fall into five different families (Carib, Tupian, Arawakan, Gê, and whatever Nadëb belongs to) and are not even regarded as all falling within the same phylum (Apurinã and Nadëb are said to be in the "Andean-Equatorial" phylum, the others in an alleged "Gê-Pano-Carib" phylum). And despite the remarkable migrations up and down the rivers of Brazil that have occurred within recent historical times (see Hemming 1978), there is no evidence of contact between, say, the Panare and the Asuriní or the Apurinã and the Urubú. A hypothesis of extended contact between such widely separated groups would be the idlest speculation. The low population density in the vast tropical rain forest areas that Brazilian Indians inhabit guarantees that intergroup contacts could have little to do with convergent linguistic tendencies. And where there is contact, it does not by any means always ensure convergence; the Hixkaryana, for example, have long been in contact with the Waiwai, whose closely related Carib language is still solidly SOV. If there is an areal tendency toward the object-initial pattern in the Amazon area (and there is of course only the slenderest evidence for this as yet), it is quite unclear what the explanation for it would be.

Finally, we return to the demographic point made in the introduction. Brazilian Indians were very numerous in 1500; some of their settlements along the Amazon were huge, as many travelers reported, and estimates of the total population of Brazil in 1500 are generally in the millions. (Hemming 1978 reviews the literature and the data and decides on a population estimate, more conservative than some, of

2.43 million.) Yet today, when the population of the world as a whole has approximately multiplied by ten, there may be as few as 50,000 Brazilian Indians left alive. Among the dwindling population are some groups who have only very recently been contacted, and some, almost certainly, who still have not come into stable contact with outsiders. There are few linguistic descriptions of any Brazilian indigenous languages (and the majority will never be described, since they are already extinct). We know of absolutely nothing on the languages of the Kren-Akorore or Panara (contacted in 1973 and reduced since then by about 50 percent through disease and societal trauma; probably of the Gê family like Xavante), or of the Suruí (recently contacted; reportedly Tupian like Asuriní and Urubú), or of the Waimirí-Atroari (still not "pacified" despite the construction of a highway through part of their former territory; Carib family). Any work whatever that is done on the languages of these and similar peoples is likely to cast at least some light on questions of the prevalence of the object-initial type of basic sentence structure that is represented in the languages we have discussed. If the remaining Brazilian Indian languages are not described in the short time still available, linguists will find themselves even closer than they are at present to having insufficiently diverse types of language represented in their sample and to being, as a consequence, ill equipped to determine which are the essential and which the accidental properties of human language.

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