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CONSTITUENT ORDER VARIATION IN APURINA

(Arawakan)

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0. Introduction*

The present paper is an attempt to present some descriptive facts about clitics and constituent order variation in Apurinã, with a discussion about whether Apurinã has a configurational or non-configurational constituent structure organization. This leads to discussion of issues related to the properties of configurationality, following mainly the works of Jelinek (1984) and Hale (1990).

The discussion about configurationality focuses on one main property of configurational languages, namely the fixed order of clausal constituents. Other properties generally associated with the configurationality issue (eg. hierarchical vs. flat clausal constituent structure organization, continuous vs. discontinuous expressions, and so on -- cf. Jelinek (1984) and Hale (1990)) will be left aside in this paper.

Section 1 presents the description of grammatical relations

I wish to thank Doris Payne, Spike Gildea and Denny Moore for initial discussions and suggestions on preliminary versions of this paper. I wish also to thank the Inter-American Foundation, the Conselho Nacional de Pesquisas (CNPq/Brazil) and the Museu Paraense Emílio Goeldi for financial support of this research. As part of an ongoing language research project, the syntactic description of the language in focus here is rather preliminary; much of the grammar needs to be known in more detail.

Apurinā belongs to the Maipuran branch of the Arawakan linguistic family (David Payne 1991). It is spoken mainly along the tributaries of the Purus River in the Western Amazonian region of Brazil. There are more than 2,000 Apurinā, and at least 50% still speak the native language (Facundes 1990); however, the Apurinā language has been increasingly replaced by Portuguese. In most of the villages Portuguese is being learned by children as their first language. Dialectal variation can be found in some of the nearly 20 Apurinā villages. The present analysis is intended to cover only the dialect spoken in the Japiim village, along the Paciā River, near Labrea city, in the state of Amazonas.

and all the possible variations of constituent order; section 2 focuses on the syntactic status of the nominal clausal constituents in the various orders, as well as on the syntactic status of the verbal person markers; section 3 suggests a syntactic analysis of the given facts based on the notion of configurationality, and offers a brief discussion of basic constituent order; finally, section 4 is a brief conclusion.

1. Constituent Order

Previous analyses of Apurina constituent order (Pickering 1974, Aberdoor 1985, Derbyshire & Pullum 1981, and Facundes 1992b), have considered all nominal clausal constituents (preverbal and postverbal nominals in OSV, SVO, OVS and VOS orders) as expressing arguments of the verb. Moreover, the person markers which are attached to the verb were considered as verb agreement markers.

Pickering, Derbyshire & Pullum suggest an analysis based on structural facts of the Apurinã syntax to argue for OSV as the basic constituent order of the language. Aberdoor presents a study of frequency counting in which she shows that OSV is very rare in text. A reanalysis of the data may show that the role played by clausal constituent order is correlated with the role played by the person markers on the verb; that such person markers are in complementary distribution with preverbal nominals, but not with postverbal ones; and that clitics can also express verb arguments, while nominals split in argumentative and adjunctive functions depending on whether they are pre- or postverbal.

1.1 Grammatical relations

Before getting into the description of constituent order variation, one would like to understand how the verb argument structure is syntactically marked; that is, how core grammatical relations are marked in Apurina. In a rather simplistic way, it is possible to distinguish at least the grammatical relations subject and object in this language. The distinction between subject and object here is primarily based on morphosyntactic evidence, namely the person markers on the verb (cf. Table 1). As will be seen in

The term 'argument' is used here to refer to the core grammatical relations. 'Core' is defined to mean the grammatical relations which are structurally required by the verb as part of its subcategorization frame. At this point only subject and direct object are clearly core grammatical relations in Apurina (see also fn.3).

The discussion of grammatical relations and constituent order in this paper does not consider clauses with possible trivalent verbs. There are interesting phenomena in Apurina related to the verbs which commonly behave as trivalent verbs across many languages; although they may be important in arguing about grammatical relations and constituent order, their description will be delayed until the results of further research are available.

(1.2), such person markers may be coreferential with certain overt NOMINALS.

PERSON	SUBJECT	OBJECT		
	SG	PL	SG	PL
1 2 3M	ni-/ñi-/n- pi-/pi-/p- i-/i-/o-	a- hi-/h-	-nu - <u>i</u>	-wa -i
3F	u-/ū-	na ⁶ na	-r i -ru	-r i -ru

Table 1. System of Person Markers⁵

Note that the pronominal marker system above allows the identification of person, number and gender of both subject and object. As the same set of subject pronominal markers is used to refer to both intransitive and transitive subjects while the set of object markers is only used to refer to objects, the system of grammatical relations follows the nominative-accusative pattern.

1.2 Constituent Order Variation

There are six logical possibilities for the relative order of subject, verb and object: SOV, SVO, OSV, VSO, OVS and VOS. Of the six logical possibilities only VSO has not been found. Pickering (1974) has stated that the SO sequence is simply ungrammatical; however, at least in elicitation it is possible to collect cases of SOV. An analysis in detail of the discourse-pragmatic functions of the several constituent orders given in this paper is still required and, therefore, is not discussed here.

The sentences in (1-3) show one of the nominals referring to subject or object in preverbal and another one in postverbal position, i.e. OVS and SVO orders. As the ungrammaticality of the sentences in (4-5) indicates, while the postverbal nominals ARE coreferential with the pronominal marker on the verb, preverbal

For the time being, until their status is discussed further, preand postverbal nominal constituents will be simply referred to as NOMINALS.

It appears that all allomorphs of person markers are morphophonologically conditioned. Not all possible allomorphs are listed here; some forms also have a nasal counterpart whose conditioning has not yet been clearly determined.

The plural for the 3rd person masculine or feminine is formed by the prefixation of the subject marker of the 3rd person singular masculine or feminine plus the plural suffix red in the end of the verb.

nominals are NOT.7

- (1) O V S

 iwa u -mapuruka uwa
 it 3SG.FEM.SUBJ-root.up she
 'She rooted it up'
- (2) S V O

 uwa mapuruka-ri iwa

 she root.up -3SG.MASC.OBJ it.MASC

 'She rooted it up'
- (3) S V O

 iwa mapuruka-ru uwa

 he root.up -3SG.FEM.OBJ it.FEM

 'He rooted it up'
- (4) S V O

 *iwa i -mapuruka-ru uwa

 he 3SG.MASC.SUBJ-root.up -3SG.FEM.OBJ it.FEM

 (he rooted it up)⁸
- (5) O V S

 *uwa ± -mapuruka-ru ±wa

 it.FEM 3SG.MASC.SUBJ-root.up -3SG.FEM.OBJ he

 (he rooted it up)

Moreover, the ungrammaticality of the sentence in (6), in contrast with the one in (7), indicates that once both nominals are postverbal the nominal referring to the object must precede the subject; thus, VOS is allowed, but VSO is not.

(6) V S O

*a -mapuruka-ri ata iwa

1PL.SUBJ -root.up -3SG.MASC.OBJ we it.MASC
'We rooted it up'

Free Object S Free Subject 0-Bound Object 8-Bound Subject MASC Masculine FEM Feminine Singular PL Plural High Central Unround Vowel ÷ č Plosive Alveo-Palatal Nasal Palato-Alveolar Fricative

⁷ Abbreviations and special symbols used:

Aberdoor (1985) does mention cases of preverbal nominals expressing grammatical relations which are coreferenced by person markers on the verb. Nevertheless, such examples appear to be extremely rare in her texts. This fact offers some clues about the development of pronominal clitics which, however, are beyond the scope of this paper.

(7) V O S

a -mapuruka-ri iwa ata

1PL.SUBJ-root.up -3SG.MASC.SUBJ it.MASC we
'We rooted it up'

The additional examples below confirm that preverbal nominals referring either to subject or object are not cross-referenced by person markers on the verb. In (8,11) both (OSV, SOV) nominals precede the verb, which bears no person marker. In (9-10 and 12-13) the sentence is not accepted when either of the nominals is cross-referenced on the verb.

- (8) O S V

 iwa ata mapuruka
 it we root.up
 'We rooted it up'
- (9) O S V

 *iwa ata mapuruka-ri
 it.MASC we root.up -3SG.MASC.OBJ
 (we rooted it up)
- (10) 0 S V

 *iwa ata a -mapuruka
 it.MASC we 1PL.SUBJ-root.up
 (we rooted it up)
- (11) S O V

 ata iwa mapuruka

 we it root.up
 'We rooted it up'
- (12) S O V

 *ata iwa mapuruka-ri
 we it.MASC root.up -3SG.MASC.OBJ
 (we rooted it up)
- (13) S O V

 *ata iwa a -mapuruka

 we it 1PL.SUBJ-root.up
 (we rooted it up)

As might be expected, nominals referring to the subjects of intransitive verbs follow the same behavior as those referring to transitive subjects. In (14) the subject precedes the verb and no pronominal marker is attached to the verb; in (15) the presence of the pronominal marker on the verb when the nominal is preverbal leads to an ungrammatical sentence. In (16) the nominal is postverbal and the pronominal marker occurs, whereas in (17) the lack of the pronominal marker with a postverbal nominal causes the sentence to be ungrammatical.

(14) S V iwa pičeka it.MASC grow 'It grew up!

(15) S V

*iwa i -pičeka

it.MASC 3SG.MASC.SUBJ-grow
'It grew up'

(16) V S

-pičeka iwa

3SG.MASC.SUBJ-grow it.MASC
'It grew up'

(17) V S
*pičeka ±wa
grow it.MASC
'It grew up'

Based on the examples given up to now, it is possible to summarize the constituent orders in Apurina as follows:

Table 2: Apurina Core Constituent Orders

Transitive								In	tran	sitiv	e	
o s	s o	V V	o s	v v	s o	V *V	0 S	s o	S	V	v	S

Looking at the table above, one would tend to postulate that Apurina is almost completely "free" constituent order language. In the next section, some arguments against a "free" constituent order language are discussed.

2. The Syntactic Status of Nominals and Person Markers

There is a problem for the interpretation of Table 2 above as presenting indications of a "free" constituent order language. Such an interpretation only works under the assumption that preand postverbal nominals have identical syntactic status. This section presents arguments against that assumption.

2.1 Postverbal Mominals as Adjuncts

In all the examples given above which show at least one postverbal nominal, such a nominal can be missing. For instance, the examples in (18-19), in contrast with those in (1-2), show that postverbal nominals occur optionally in a clause when there is a coreferential person marker on the verb.

- (18) O V

 iwa u -mapuruka
 it.MASC 3SG.FEM.OBJ -root.up
 'She rooted it up'
- (19) S V

 uwa mapuruka-ri

 she root.up -3SG.OBJ.MASC
 'She rooted it up'

Thus, Table 2 above can be revised as follows:

Table 3: Apurina Core Constituent Orders

Transitive							In	trans	sitive		
o s	s o	V V	0 S	V V	(S) (O)	v *v	(0) (S)	(S) (O)	S	V	V (S)

In addition, in (20-21) the sentences show that neither the postverbal nominal referring to object nor the postverbal nominal referring to subject can occur without the coreferential verb person marker. This fact should falsify the claim that the postverbal nominal triggers an 'agreement' marker on the verb. Also, if a clause can 'lose' postverbal nominals without affecting its propositional content, it seems strange to argue that such nominals express arguments of the verb

- S V O
 (20)*uwa mapuruka iwa
 she root.up it.MASC
 (she rooted it up)
- O V S
 (21)*iwa mapuruka uwa
 it root.up she
 (she rooted it up)

The label OPTIONAL is used here to refer to the quality that a nominal may have of OPTIONALLY occurring in a clause when it corefers to a person marker on the verb. Since only postverbal nominals can (and have to) be coreferential with a verbal person marker, a distinction can be drawn between pre- and postverbal nominals: The latter are optional whenever they can occur whereas the former are not. This distinction can be used as an evidence that these pre- and postverbal elements have a different syntactic status. The hypothesis is that while preverbal nominals express core grammatical relations, those which are postverbal are adjuntive elements. Therefore, since postverbal nominals are optional whenever they occur, it is possible to claim that they behave syntactically as oblique elements. Such oblique elements

will be labeled ADJUNCTS.9

2.2 Preverbal Nominals as Core Grammatical Relations

The evidence used here for categorizing postverbal nominals as adjuncts does not apply to the preverbal ones. Preverbal nominals are NOT optional whenever they occur. The optionality of postverbal nominals can be seen in the examples given in (2) and (19) (which are repeated for convenience in (22) and (23)). The non-optionality of preverbal nominals can be seen by contrasting the examples (22) and (23) with the one in (24): ungrammatical because the preverbal nominal referring to the subject is missing. Since preverbal nominals are cross-referenced on the verb, once they are missing there has to be another element to express the argument of the verb (cf. the subject marker in (25)). The fact that the verb person marker shows up in the absence of a preverbal nominal (or vice-versa) is a clue to the role played by the former in a clause, as will be seen in the next subsection.

- S V 0

 (22) uwa mapuruka-ri iwa
 she root.up -3SG.MASC.OBJ it.MASC
 'She rooted it up'
- S V
 (23) uwa mapuruka-ri
 she root.up -3SG.MASC.OBJ
 'She rooted it up'
- (24) V
 *mapuruka-ri
 root.up -3SG.MASC.OBJ
 (she rooted it up)

(25) u -mapuruka-ri
3SG.FEM.SUBJ-root.up -3SG.MASC.OBJ
'She rooted it up'

Therefore, in a certain way it is possible to argue that free-standing nominals may or may not express verb arguments in Apurina depending on whether they precede or follow the verb in a clause.

2.3 Person Markers as Clitic Arguments

Given the evidence that, due to their optionality, postverbal

The syntactic categorization suggested here for postverbal nominals in Apurinā has already been suggested elsewhere (Jelinek (1984) and Hale (1990)) for nominals with similar behavior in other languages.

nominals cannot be the verb arguments, one, then, needs to ask what syntactically represents the verb arguments in sentences with no preverbal nominal. As shown above, preverbal nominals cannot be optional whenever they occur can because they cross-referenced by verb person markers. Thus, preverbal nominals and verb person markers are in complementary distribution. reason to be in complementary distribution is that both accomplish the same syntactic function; that is, they play the same syntactic role in a clause. This role is to express the argument of the verb.

As a syntactic element, rather than simply a morphological affix attached to the verb, the person markers behave as PRONOMINAL CLITICS. To consider person markers as pronominal clitics does not mean simply to find another label for an atypical affix; more than that, it is to try to describe more precisely the syntactic behavior and function of such an element.

As the syntactic elements which express verb arguments, the clitics behave as pronouns which are attached to the verb; that is, clitics seem to function as normal pronouns, except that they are phonologically bound morphemes. Furthermore, the difference, for instance, between a free-standing pronominal and a clitic is that while the former has the typical syntactic distribution of a nominal which can function as subject or object grammatical relation, the latter has a distribution which is morphologically determined. The distribution of the clitics is morphologically determined in that they fill up a fixed slot in a verbal construction formed by morphological rather than syntactic operations.

Nevertheless, although free-standing nominals expressing arguments find themselves identified by means of syntactic rather than morphological rules, their syntactic function are basically the same: Both free-standing nominal arguments and clitic arguments function as the syntactic bearing elements of verb arguments.

3. The Syntactic Analysis

It has been said above that the arguments of the verb can be expressed either as clitics or as free-standing nominals; however, nominals which co-occur with (and are coreferential with) clitics are NOT arguments of the verb but, rather adjuncts. In this section, the discussion is focused on some possible syntactic implications of the stated analysis. Configurationality and constituent order are issues related to the clitic and preverbal arguments plus postverbal nominal adjunction claim.

3.1 The Theoretical Notion of Non-configurationality

As Jelinek (1984) has pointed out, the recent interest on the

non-configurational property of some languages has been motivated principally by Ken Hale's work on Australian and Native American languages. The initial discussion by Hale (1980, 1981, 1982, 1983) aimed to account for some of the characterictics usually found in non-configurational languages. Some of these supposedly common non-configurational properties would be free clausal constituent order variation, syntactically discontinuous expressions and null anaphora. In these works Hale suggested some parameters of configurationality, which have been revised by Jelinek (1984).

For a better understanding of the notion of non-configurationality, it may be helpful to look at one Warlpiri example. "In the following Warlpiri sentence, any word order is possible, with the provision that the AUX clitic sequence occur in the second position.

(26) Ngarrka-ngku ka wawiri panti-rni.
man-ERG AUX kangaroo spear-NONPAST
'The man is spearing the kangaroo'"
(Jelinek 1984:39-40)

Jelinek has claimed that the arguments of verbs in Warlpiri are expressed by the clitics; 10 the nominals which are coreferential with the clitics would be optional and, thus, non-argumental features. Finally, based on these ideas, she has proposed an extended configurationality parameter for languages which share some of the Warlpiri grammar features. This configurationality parameter would be as follows:

- (27) "a. In a configurational language, object nominals are properly governed by the verb.
 - b. In a W-[Warlpiri]type non-configurational language, nominals are not verbal arguments, but are optional adjuncts to the clitic pronouns that serve as verbal arguments."

(Jelinek 1984:73)

This new analysis of the non-configurational properties in Warlpiri has been endorsed in Hale's 1990 Core Structures and Adjunctions in Warlpiri Syntax:

"there might exist languages... whose free word order results simply from the fact that (certain or all) overt phrasal expressions are adjuncts..."

(Hale 1990:36-7).

Considering such a theoretical approach to constituent order variation, it may be interesting to draw some attention again to the Apurina constituent order variation decribed above.

¹⁰ For details and examples, see Jelinek 1984.

3.2 Configurationality in Apurina

The summary of constituent orders given in Table 2 above suggested a system of partially free constituent order variation in Apurinā. Revising Table 2, Table 3 represents the occurrence of postverbal nominals as adjuncts. Under the analysis of pronominal clitics as arguments of the verb and postverbal nominals as adjuncts, Table 3 should be further revised as follows:

Table 4: Apurina Core Constituent Orders

	Transitive						tran	sitive
o s	s 0	v v	o s	s-V V-o	s-V-o	s	V	s-V

Such a revision is due to the fact that if postverbal nominals are adjuncts, they cannot also be core grammatical relations at the same time. With respect to the analysis of the transitive verbs, the result of this revision is a three-way system of syntactic expressions of the verb argument structure: (i) Both the verb arguments can be syntactically realized as free-standing nominals, or (ii) both the arguments can be simultaneously realized as clitics, or yet (iii) one verb argument can be realized as a free-standing nominal while the other is realized as a clitic.

Analogously, in relation to the intransitive verbs, the verb argument can be syntactically expressed as either (i) a free-standing nominal or as (ii) a clitic.

Transitive and Intransitive verb sentences can be grouped into three order types based on the syntactic realization of their arguments in a sentence, as seen in Table 5 below. Type I groups the sentences with only phonologically free-standing syntactic elements expressing arguments; Type II groups only phonologically bound syntactic elements expressing arguments; and Type III groups sentences which mix Types I and II.

Table 5: Grammatical Relations Organization

T	ype :	I	Type II	Type III
o s	o s v s o v		s-V-0	0 s-V S V-o
	S	v	s-V	

For the purpose of analyzing configurationality in the distribution of the syntactic elements expressing arguments in Type I, only sentences with transitive verbs are relevant here. The indications are that OSV and SOV can be used interchangeably as long as their interpretation is not ambiguous. However, when

ambiguity exists, the object is required to precede the subject. For instance, the variation seen in the unambiguous examples in (28-31) cannot occur in ambiguous examples like (32-33). The second interpretation of the sentences in (32-33) is not possible when the context does not disambiguate; when this happens, the position of the syntactic elements is fixed and, therefore, the order of the constituents is configurational.

- (28) O S V
 yuwata nota etama
 knife I see
 'I see the knife'
- (29) O S V
 nota yuwata etama
 knife I see
 'I see the knife'
- (30) O S V

 hākiti kɨkɨ keta

 jaguar man shoot

 'The man shoots the jaguar'
- (31) S O V

 **k*\delta* h\tilde{a}kiti keta*

 man jaguar shoot

 'The man shoots the jaguar'
- (32) O S V

 anāpa kɨkɨ etama

 dog man see
 'The man sees the dog'
 *'The dog sees the man'
- (33) O S V
 Pedro Paulo keta
 shoot
 'Paulo shoots Pedro'
 *'Pedro shoots Paulo'

Contrasting Type I with Types II and III, and following Jelinek's configurationality parameter given in (25), the tendency would be to argue for a partial configurationality in Apurinã. This tendency follows from the configurationality parameter because preverbal nominals (as in OSV, Os-V and SV-o) ARE arguments of the verb, whereas postverbal nominals (as in SV-o(O), Os-V(S) and s-Vo(O)(S)) are NOT verbal arguments, but rather optional adjuncts to the clitic pronouns which are the verbal arguments. Therefore, while Type I would be configurational, since the clausal constituent order is syntactically relevant, and Type II would be non-configurational, since postverbal nominals are adjuncts and clitics are arguments, Type III would be both.

However, if we adopt a notion of grammatical relations which

is not necessarily defined only in terms of hierarchical structures of clausal constituents (e.g. NPs, VPs or N"s, V"s), but mainly in terms of how a nominal element can syntactically interact with the verb element in a clause, there may be an alternative way to analyse the Apurina system summarized in Table 5.

The syntactic realization of verb arguments in Type II sentences, which consists only of clitics attached to the verb, has a fixed order. The order of the clitics is morphologically determined by the position class they occupy in the verbal construction. However, syntactically these clitics are in free-standing complementary distribution grammatical with relations; and lexically, as portmanteau morphemes, they bear grammatical information as case roles (nominative-accusative, cf. Table 1), person, and gender (feminine and masculine). Therefore, considering the syntactic behavior of the clitics, the Type II does not necessarily poses a problem to a notion of configurationality based on the functional features of the clausal constituents. That is, the only additional feature is that the arguments are phonologically realized as bound morphemes.

Finally, Type III which is constituted of a mixture of types falls out from the description of Types I and II. In a language that allows the syntactic expression of verb arguments by means of free-standing as well as bound morphemes, a hybrid kind of argument expression both the Types I and II should be expected to occur. Rather than posing a problem, Type III reinforces the analysis suggested for the first two types.

3.3 Basic Constituent Order

The criteria usually used to determine the basic constituent order of languages can be grouped into three sets: Descriptive simplicity, statistical frequency, and pragmatic neutrality (following Mithum 1992). It is beyond the scope of this paper to present a study on pragmatic values of clausal constituent orders. What will be mostly considered here is the descriptive simplicity criterion and a very preliminary study on statistical frequency.

As has been mentioned earlier in this paper, in previous analyses of Apurinã constituent order (Pickering 1974, Derbyshire & Pullum 1985, and Facundes 1992b), the suggested basic constituent order was based on the descriptive simplicity criterion: Having assumed that pronominal markers on the verb were agreement triggered by the postverbal subject and object, all the constituent order patterns found could be derived from an unmarked one, namely osv.¹¹

Aberdoor (1985) also did some work on Apurinā which included statistical frequency and discouse-pragmatic functions; however, her analysis is based on the assumption that pronominal markers are verb agreement markers and that missing nominals are result of zero anaphora.

The descriptive simplicity criterion permits one to say that OSV is more basic than SOV, since the occurrence of the latter is predictable. SOV can occur only when there is no ambiguity in a clause. Another indication in favor of OSV would be that, at least in texts, the adjuncts which are coreferential with the clitics can only occur in the sequence OS.

The decision of whether or not to consider order types like Os-V and s-V-o in the analysis of constituent order is usually related to pre-established theoretical assumptions. For instance, one assumption could be to consider as pertinent for the analysis of constituent order only the occurrence of the free-standing grammatical relations; another one could be to postulate that free-standing elements tend to be more neutral than bound morphemes.

Based on the description of the system of grammatical relations suggested here, one would tend to consider bound clitics as relevant in analysing Apurina constituent order. If clitics behave as normal subjects and objects, except that they are phonologically bound, their role on constituent order might be as important as that of any other subject or object.

On the other hand, one of the possible consequences of the phonological attachment of clitics to verbs is that the clitics, then, follow the rules of the morphology and no longer of the syntax. What this might mean is that additional syntactic or morphological tests are required to establish the relevance of argument clitics for an analysis of basic constituent order which is based only on the descriptive simplicity criterion.

The statistical frequency criterion would lead one to choose OSV as more neutral than SOV, since SOV does not seem to occur in text but only in elicited data (cf. Facundes 1993) or in quotative clauses (cf. Aberdoor 1985). However, OSV is extremely rare in frequency (0.9%).

Os-V and s-V-o occur with equal frequency (33%) and are the most frequent order types, which makes either of them good candidates for basic order and reinforces the idea that bound grammatical relations are (statistically) relevant in defining basic constituent order. SV-o, however, occurs with low frequency (2.5%).

Based on a structural analysis including formal rules, an alternative syntactic analysis of constituent order would postulate a right-dislocation to generate postverbal nominals followed by the attachment of the person markers on the verb. If clitics are not considered, the result of this analysis would be that OSV would be the basic order of the language. This approach to the data, however, would require further details (i.e. deletion of postverbal nominals) in order to account for the optionality of such nominals. No motivation for right-dislocation has been found up to now, and, besides, the evidence that postverbal nominals are adjuncts rather

than core grammatical roles also poses problems to such an analysis.

Also based on formal rules, another alternative syntactic analysis of constituent order would be to postulate a left-deslocation of postverbal nominal(s) and person marker(s) deletion. By this analysis the basic constituent order would be VOS. Such an approach, however, only would account for the occurrence of preverbal nominal in a formal description, but would not say anything about their syntactic function, or their syntactic status in contrast with the status of the postverbal nominals.

There is no definitive hypothesis to be presented at this point in relation to a basic constituent order. Additional information about the grammar of this language might provide better clues. Nevertheless, it seems pretty clear that a synchronic description of aspects of the Apurina syntax must involve a certain degree of complexity.

4. Conclusion

The ideas about the grammar of Apurinā described here were intended to show how the verb argument structure is syntactically expressed and how it corelates with constituent order. Such ideas are bound into the synchronic internal evidence of the language. Historical considerations and discourse-pragmatic functions were delayed until the results of further research are available.

The initial appearance of "free" constituent order is not actually confirmed when the grammar of the language is studied more carefully. Constituent order is relevant for Apurinā syntax, which motivates the attempt to describe its unmarked, most frequent or most neutral realization. However, this last task requires additional research; any hypothesis about basic constituent order would be more theoretically dependent than motivated by the internal language structure. Nevertheless, the preliminary description of Apurinā shows a corelation which may exist between pronominal clitics, argument roles and configurationality.

5. References

- Aberdoor, K. 1985. Referential Devices in Apurina Discourse. In Porto Velho Working Papers, ed. David Fortune. SIL, Brasília, pp.43-91.
- Derbyshire, C. Desmond and Pullum Geoffrey K. 1981. Object Initial Languages. IJAL, vol. 47, nr. 3, July, pp. 192-214.
- Facundes, Sidney da S. 1990. Levantamento Linguístico do Rio Purus. Relatório de pesquisa para o Conselho Nacional de

- Pesquisas, Brazil.
- ---- 1992a. Split Case-Marking in Apurina (Arawakan, Maipuran) (ms.)
- ----. 1992b. Apurinā (Arawakan) Word Order (ms.)
- ---- 1993. Apurina Word Formation (ms.)
- Hale, Ken. 1980. Remarks on Japanese Phrase Structure: Comments on the papers on Japanese Syntax, in Y. Otsu and A. Farmer (eds.), MIT Working Papers in Linguistics, Vol. 2.
- Base. Indiana University Linguistics Club, Bloomington.
- In J. Pustejovsky and P. Sells (eds.) NELS 12, 86-96.
- ---- 1983. Warlpiri and the Grammar of Non-Configurational Languages. Natural Language & Linguistic Theory 1:3-45.
- ---- 1990. Core Structures and Adjunctions in Warlpiri Syntam. Proceedings of the Tilburg Scrambling Conference, October 1990.
- Jelinek, Eloise. 1984. Empty Categories, Case, and Configurationality. Natural Language and Linguistic Theory 2, 39 76. D. Reidel Publishing Company.
- Mithun, Marianne. 1992. Is basic Word Order Universal? In Pragmatics of Word Order Flexibility. Ed. Doris L. Payne, pp.15-61.
- Payne, David. 1991. A Classification of Maipuran (Arawakan)
 Languages Based on Shared Lexical Retentions. In Handbook of
 Amazonian Languages. Vol. 3, pp.355-517.
- Pickering, Wilbur. 1974. Gapping and Constituent Order in Apurinā. Arquivo Linguístico No. 006. Brasília, D.F. SIL.

REPORT 8

SURVEY OF CALIFORNIA AND OTHER INDIAN LANGUAGES



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July 2-4, 1993
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This volume is dedicated to JAMES E. REDDEN

on the occasion of his retirement
for his enduring commitment to the publication
of the results of research on Yuman, Hokan, Penutian and
other American Indian languages
and also

for his contributions to the documentation of the Hualapai language

INTRODUCTION

This volume includes a number of papers presented in conjunction with the 1993 Linguistic Institute at Ohio State University in Columbus, Ohio, at two conferences on American Indian Languages: the meeting of the Society for the Study of the Indigenous languages of the Americas, held July 2-4, 1993, and the meeting of the Hokan-Penutian Workshop, held on the morning of July 3, 1993.

This continues a tradition initiated during the Linguistic Institute at the University of Arizona in 1988, of offering conferences on American Indian languages during the summer Linguistic Institute of the Linguistic Society of America, which is held every two years on the campus of the host institution. The interaction thus afforded between students and faculty of the Institute and specialists in American Indian languages has proved mutually profitable.

We gratefully acknowledge the dedication of Catherine Callaghan in making these meetings thoroughly enjoyable, as well as the hospitality of Ohio State University.

The Hokan-Penutian Conference has a tradition of meetings dating as far back as 1970, when the first Hokan Conference was hosted by Margaret Langdon at UCSD. Since 1976, the Hokan (and later Hokan-Penutian) Conference proceedings were published most years by James Redden, as part of the series Occasional Papers on Linguistics, out of the department of Linguistics at Southern Illinois University at Carbondale. Beginning this year, with James Redden's retirement, the reports of these conferences are being published as part of the Survey Reports out of the Survey of California and Other Indian Languages at the University of California at Berkeley.

Margaret Langdon Volume Editor Leanne Hinton Series Editor

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