

Nonconfigurationality and Discontinuous Expressions in Panare

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## Nonconfigurationality and Discontinuous Expressions in Panare<sup>1</sup>

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Panare (Cariban, Central Venezuela) displays a variety of word orders, most frequently OVS and VSO. The language also allows discontinuous expressions, even though there is almost no nominal case marking. Hale (1982) suggests that flexible order and discontinuous expressions are common correlates of nonconfigurational languages. Many discussions of nonconfigurationality have centered on the absence of a well defined VP containing both verb and object. In this study I argue that Panare has a well-defined VP, but that it is nonconfigurational in its *nominal* expressions. This structurally permits both the high degree of order flexibility and discontinuous expressions. Panare clearly illustrates that it is incorrect to talk about nonconfigurationality as if it were a feature characteristic of an entire language. Rather, configurationality may vary according to particular constructions within a language.

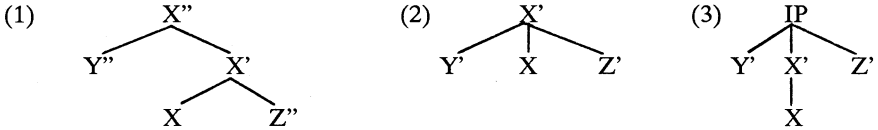
When a language allows discontinuous expressions, the question arises as to what strategies are used for interpreting co-reference between the discontinuous pieces. In nonconfigurational languages of the Warlpiri type, morphological case marking on the discontinuous pieces resolves the problem. In Panare, by contrast, there is essentially no surface case marking. Here, the pragmatics of processing, in concert with certain syntactic constraints, determine what expressions can be discontinuous. The constraints suggest that the word order freedom cannot be "explained" by appealing to some quasi-structuralist free-for-all notion of "scrambling".

The argument is structured as follows: after briefly describing the concept of configurationality and relevant features of Panare clause structure,<sup>2</sup> I present evidence that Panare has a configurational VP. I then present two types of evidence showing that nominal expressions have extremely little constituent structure, though there is some structure in limited situations. Finally, I summarize restrictions on discontinuities and suggest that these restrictions arise from a mixture of syntactic and processing factors.

### 1. The meaning of "configurationality"

In an influential series of papers, Kenneth Hale and Eloise Jelinek have posited a typological divide between "configurational" and "nonconfigurational" languages. Hale (1982) suggested that there may be some correlation between nonconfigurationality, flexible word order, and discontinuous expressions, though these last two features per se do not define or determine a nonconfigurational language. Briefly, a configurational language has hierarchical depth in its phrase structures, illustrated in (1). A nonconfigurational language is "flatter", lacking such hierarchical depth and corresponding more closely to the structures seen in (2) or (3) (linear order irrelevant). Hale (1982, 1990) and Jelinek (1984) do not define configurationality so as to restrict it to whether the VP contains the object

and excludes the subject. In fact, Jelinek (1984:51) describes Warlpiri as “nonconfigurational at the word level”, meaning that there are no constituents of any syntactic category larger than words.



Nevertheless, discussion of configurationality has often focused on whether a VP corresponding to the X' constituent in (1) exists, where X' contains both verb and its nominal complement(s) but crucially excludes one argument of the verb. If such a VP exists, the language is often said to be configurational and asymmetries between Subject (=Y'') and Object (=Z'') can be accounted for structurally. If such a VP does not exist, the language should demonstrate fewer asymmetries between subject and object, with any asymmetries perhaps being limited to semantic ones. Thus, what generally have been focused on as being in a configurational or nonconfigurational arrangement are the major clausal pieces of verb and its arguments, and not so much the structure internal to “smaller” phrasal pieces like NPs or PPs.

Jelinek (1984) argues that in at least some nonconfigurational languages, the arguments of a verb are bound pronominals or clitics, generally expressed in the verb or auxiliary. In the views of Jelinek and Hale (1990), the characteristic order flexibility arises from the fact that nominal lexical expressions are adjuncts rather than arguments; as adjuncts, they display order variation characteristic of adjuncts. Discontinuous expressions result for essentially the same reason. As adjuncts, lexical expressions hold no grammatical relation to the verb nor are they biuniquely related to the true arguments. Thus, there is no constraint on the number of non-contiguous lexical expressions that can be adjoined to an argument.

## 2. Panare basic clause morphosyntax

Before examining constituency in Panare, it will be helpful to give a brief introduction to order and verb morphology. Panare is a solid Verb-Subject language. With the possible exception of contrastive contexts, any lexical or free pronominal subject immediately follows the verb or auxiliary in main clauses. Lexical expressions referring to the object, however, can occur either immediately before the verb (5a-b), or after the verb-subject complex (6). Thus, Panare displays both OVS and VSO orders in main transitive clauses. Both orders are very easy to elicit, though verb-initial (or verb-only) clauses are more common in text material, particularly in main eventive clauses.<sup>3</sup>

- (4) VS Kijtin-yaj kërënpën kuñan.  
 bark-PPERF1 dog yesterday  
 'The dog barked yesterday.'

- (5) OVS a. Kërenëpën y-ëni-yaj ake.  
 dog INV-OI.bite.meat-PPERF1 snake  
 'The snake bit the dog.'
- OVS b. Ake y-ëni-pěj-chaj kërënepën tapúmake  
 snake INV-OI.bite.meat-ITER-PPERF1 dog hard  
 'The dog bit the snake very hard.'
- (6) VSO N-ëni-yaj ake kërënepën.  
 3DIR-bite.meat-PPERF1 snake dog  
 'The snake bit the dog.'

For clarity, in this paper I primarily consider past-perfective clauses, though similar constituency arguments could be advanced on the basis of non-past-perfective clauses. Person prefixes can occur on the verb without any accompanying free pronoun or lexical subject expression. However, the prefixes commonly do co-occur with lexical expressions in both text and elicited materials. The inclusion of co-referential free pronouns need not be contrastive.

In past-perfective intransitive clauses, Panare uses the prefix forms *0/w-* '1sg', *m-* '2sg/pl', and *n-* '3sg/pl, 1pl (inclusive or exclusive)'. In past-perfective transitive clauses, there is an inverse-direct split. This split is governed by the hierarchy:<sup>4</sup>

1sg	≥	2sg/pl	>	3 sg/pl
1pl incl				1pl excl

If action proceeds from a participant on the left to one on the right of this hierarchy, direct prefixes occur on the verb. If action proceeds from right to left, inverse prefixes occur. One result is that if the action involves a 1st or 2nd person singular participant as either subject or object, that participant is explicitly signalled on the verb. The direct forms and selected examples follow:

**Direct Forms** (^ = leftward accent shift on verb)

<i>k-</i>	1->2	<i>^m-</i>	2->1	<i>n-</i>	3/1pl.incl->3
<i>t-</i>	1->3	<i>m-</i>	2->3	<i>anan-</i>	1pl.excl->3

- (7) a. Aye. T-iñi-yaj (chu). b. Mënkën t-iñi-yaj.  
 yes 1SG-OI.see-PPERF1 1SG this.same 1SG-see-PPERF1  
 'Yes. I saw it.' (PST 4.2) 'I saw the same one.'
- (8). T-ika-yaj chu tityasa ka'kam.  
 1SG-skin-PPERF1 1SG one armadillo  
 'I skinned one armadillo.' (MCW 76.3)
- (9) N-an-yaj tawe-yaka.  
 3DIR-get-PPERF1 basket-LOC  
 'They collected them/it [=fruit] in a basket.' (PST 4.12)
- (10) a. Asa' nányaj Toman koyare. b. Toman, nányaj koyare asa'  
 'Tom got/bought two necklaces.' 'Tom got/bought two necklaces.'

- (11) N-ama-yakè                      kën              kana.  
 3DIR-throw.out-PPERF2 AN.DIST fish  
 'He/she threw out the fish.'

In direct clauses with 1st or 2nd person subjects, a nominal object can precede or follow the verb, as illustrated in (7b) and (8). For most verbs, a preverbal lexical object may be accompanied by a leftward accent shift in the verb, as comparison of (7a-b) shows. In direct clauses with third person subject, a nominal object *cannot* immediately precede the verb (9, 10, 11).

The inverse form is used if and only if a nominal object precedes the verb. An important point to underscore is that in past-perfective clauses, variant word order is not just a matter of "scrambling" because the entire constructions are potentially different: when there are two 3rd-persons, OVS order requires the inverse construction, while VSO order requires the direct construction.

In inverse clauses the following prefixes occur on vowel-initial verb stems.<sup>5</sup> The salient features of the inverse are the presence of the *y-* prefix for vowel initial verbs and a leftward accent shift for most verbs; compare (10) with (12), and (11) with (15). When the stem is consonant-initial, the *y-* element does not occur (13).

#### Inverse Forms

ˆ-y-    3->1                      a-y-    3->2                      NP[OBJ] ˆ-y-    3->3

- (12) Koyare    y-án-yaj                      Toman.  
 necklace INV-OI.get-PPERF1 Tom  
 'Tom got/bought a necklace.'
- (13) Asonwa    i'ka              pú'ma-yaj                      ana    mën                      wewa.  
 three    porcupine INV.OI.fall-PPERF1 1EXC INAN.DIST day  
 'We killed three porcupines during the day.' (MCW 75.5)
- (14) Kën              e'ñapa    y-ápo-yaj                      tonkanan.  
 AN.DIST person INV-OI.join-PPERF1 another  
 'Another (person) approached that person.' (MCW 76.5)
- (15) a. Y-áma-yaj                      kën.  
 1SG-OI.throw.out-PPERF1 AN.DIST  
 'He/she threw me out.'
- b. A-y-ama-yaj                      kën.  
 2-INV-throw.out-PPERF1  
 'He/she threw you out.'
- c. Kana    y-áma-yaj                      kën.  
 fish    INV-OI.throw.out-PPERF1 AN.DIST  
 'He/she threw out the fish.'

### 3. Evidence for a VP constituent

As mentioned earlier, order flexibility and discontinuous expressions have sometimes been tied to the absence of a configurational VP. In Panare, the object and verb do form a very tight constituent when in the OV arrangement. Thus, in

this language order flexibility and discontinuities cannot be tied to the absence of a configurational VP. We first document the tight OV bond.

One argument for the claim that object and verb form a constituent comes from four identical behaviors shared by object-verb, genitive-noun, and noun-postposition constructions. These three constructions are historically related, which accounts for the similarities (Gildea 1992). If genitive and head noun form a constituent, and if noun and following postposition form a constituent, then these same behaviors between object and following verb would also appear to indicate constituency.

i. If the head begins with a vowel, a *y-* is prefixed to the head whenever the latter is immediately preceded by a NP or prefix referring to the object of verb, object of postposition, or genitive. If the head begins with a consonant, there is no *y-*. The distribution of *y-/0* is syntactically constrained in that it is not an automatic epenthetic element occurring before just any vowel-initial element. Rather, it is inserted always and only in these three contexts.

- |      |  |   |
|------|--|---|
| (16) | <b>vowel initial head</b><br>Toman <i>y-á</i> rako-e<br>Tom Y-GI.hat-POSS<br>'Tom's hat'<br><br>Achim <i>y-é</i> ñaka<br>Achim Y-GI.for<br>'for Achim'<br><br>Kana <i>y-á</i> ma-yaj kën.<br>fish INV-OI.throw-PPERF1 AN<br>'He threw out the fish.' | <b>consonant initial head</b><br>e'ñapa píya-n<br>Panare GI.shaman-POSS<br>'the Panare's shaman'<br><br>Achim mítyaka<br>Achim GI.more.than<br>'more than Achim'<br><br>Kana pa-yaj kën.<br>fish feed-PPERF1 AN<br>'He fed the fish.' |
|------|--|---|

ii. If the genitive, object of postposition, or object of verb ends in a glottal approximant (either [ʔ] or [h]), and if the head begins with a vowel, the required intervening *y-* is affricativized. Thus, the following correspond to vowel-initial examples in (16):

- |      |  |  |
|------|--|--|
| (17) | mēj ch-áni-0<br>this.anim Y-GI.mother-POSS<br>'this one's mother'<br><br>Choj ch-áma-yaj<br>sweet.potato INV-OI.throw.out-PPERF1<br>'He threw out the sweet potato.' | pataij ch-ako<br>bicycle Y-on<br>'on a bicycle'<br><br>kën.<br>AN.DIST |
|------|--|--|

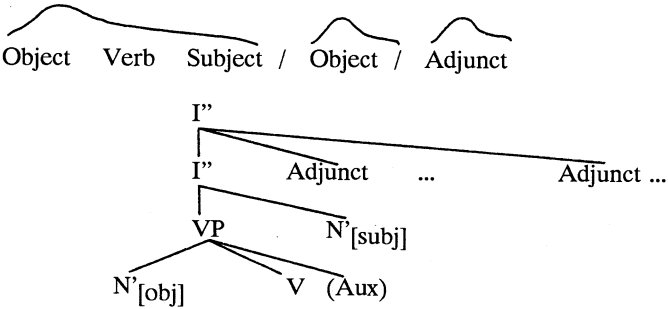
iii. If the head is more than one syllable long and depending on lexical subclass, accent in the head element shifts to the left (indicated in glosses by OI or GI).

iv. Nothing can intervene between genitive and possessed noun, between object of postposition and postposition, or between preverbal object and verb. In the last case, any adverbs that occur are either to the left of the object, or after the subject (cf. 5b).

The non-separability plus phonological affricativization are clear reflections of close syntactic and phonological unity. The leftward accent shift can be taken as another reflection of such constituency. Assuming that the first two constructions in (16-17) form bona fide constituents, identical behaviors in the object-plus-verb arrangement suggest that object-plus-verb similarly form a constituent. T. Payne (1992) goes so far as to discuss whether the OV order does not involve object-incorporation, though he ultimately dismisses this as a strong claim.

Intonation provides a second type of argument for constituency between preverbal object and verb (Dickinson 1993). Although our data from recorded texts are too minimal to draw statistically significant conclusions, OV, VS, and OVS arrangements all clearly fall within single intonation contours in terms of pitch, loudness, and the lack of any pause (unless the speech stream is simply disfluent). In the VSO arrangement, by contrast, there is one loudness and pitch peak over the VS portion, and a second one on the postverbal object expression. The object may or may not be separated from the VS unit by a pause. If an adjunct element (e.g. adverbial or adpositional expression) follows the object, the adjunct also may or may not be distinct from the preceding material in terms of pause and other intonational features. Thus, postverbal objects and adjuncts prosodically pattern together, and differ from preverbal objects and postverbal subjects. The overall intonational picture of the Panare main clause can be sketched as follows, where the slash lines indicate general likelihood of pause. The associated phrase structure tree represents essential features of the syntactic structure of at least past-perfective transitive clauses.

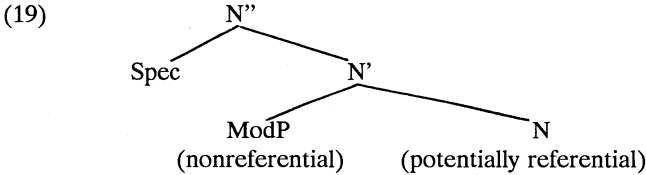
(18)



Subject and object employ the same free pronoun set, and neither controls reference of reflexive or reciprocal forms because there are no reflexive or reciprocal anaphors.<sup>6</sup> Nevertheless, subject and object do show asymmetries in terms of verb prefix phenomena (Section 2), word order, and intonational phrasing. If a nominal subject is before the verb, it does not trigger the inverse construction. Preverbal subject also occurs under a separate intonation contour from the verb. Only when it is post-verbal does the subject occur in a single intonational phrase with the verb.

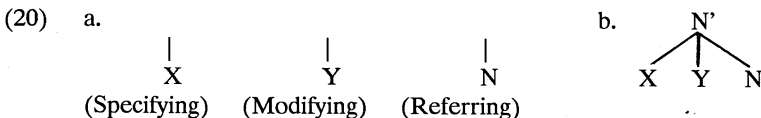
#### 4. Evidence for nonconfigurationality in Panare nominal expressions

The preceding section presented evidence that OV forms a bona fide VP constituent. We now explore whether Panare nominal expressions are also configurational. A configurational NP would typically have a structure along the following lines (order not crucial and recursion allowed):



In the configurational type of NP, a modifying phrase could have an adjectival head, or it could have a syntactically nominal head, as in *university curriculum*. English is an excellent instance of a language with highly configurational nominal expressions. Evidence of hierarchical structure and constituency comes from a variety of tests such as coordination, substitution of pronominal forms, distribution, etc. With the exception of floated quantifiers, discontinuous nominal expressions are almost nonexistent. In many South American languages, by contrast, there are almost no syntactic adjectives, most nominal modification is done by adding qualifying nouns, and headship in noun-noun combinations may be much less clear-cut than in English

In a nonconfigurational nominal expression, elements with specifying, modifying, and referential functions may co-occur and may be contiguous to one another, but by definition they do not occur in a hierarchical configuration with much depth. The possible structures would be more akin to those in (20) (linear order not crucial). Depending on the language, X, Y, and N could all be syntactically nominal. In (20a), the immediately dominating structure for X, Y, N could be a VP (assuming that the language in question has configurational clause structure), or could simply be the clause.



There is evidence from both order flexibility and discontinuity patterns that Panare nominal expressions are of the nonconfigurational varieties sketched in (20a-b). We now examine this evidence.

##### 4.1 Order flexibility

Unlike certain other Native American languages, in Panare it is completely possible to string together a variety of words that all make reference to a single participant. The following, admittedly unusual, elicited example illustrates:

- (21) Mono kěj                      Rosa michi asa' tosen tēpurúken jaripī wa'se.  
 exist AN.PROX Rosa cat two big black bad fierce  
 'Rosa has two big black bad fierce cats.'

However, the possibility of free order variation among elements that co-refer to a participant is the first clue that Panare does not have a highly structured NP. Order variation is particularly common when the nominal expression follows the verb:

- (22) numeral  
 N-uwī-yaj                      ana    arakon    asa' /    asa' arakon.  
 3DIR-kill-PPERF1    1EXC monkey two  
 'We killed two monkeys.'
- (23) other quantifier  
 N-uwī-yaj                      ana    arakon    ta'meñe /    ta'meñe arakon.  
 3DIR-kill-PPERF1    1EXC monkey many  
 'We killed many monkeys.'
- (24) determiner  
 a. Ana-ifi-yaj                      ana    sīj    perikura    ta.  
    1EXC-see-PPERF1    1EXC this    movie    here  
    'We saw this movie here.'
- b. Yu-koka-sa'    mēn                      kamicha sīj.  
    3-wash-PERF IN.COPULA shirt    this  
    'This shirt is/has been washed.'
- (25) nominal descriptive modifier  
 N-ama-yake                      kēn                      ojka kana /    kana ojka.  
 3DIR-thow.out-PPERF2 AN.DIST raw fish  
 'He threw out the raw fish.'
- (26) adjectival descriptive modifier  
 a. Y-ina-ñe                      e'ñapa    ijpi    tosén-pe    atawēn    chíjche.  
    3-clear-NONSPEC.T indian garden big-AD all    COLL  
    'All the people clear the big garden.'
- b. Tosén-pe    warae    asoonwa    i-jta-n                      yo-n  
    big-AD    tapir    three    3-foot-POSS eye-POSS  
  
    mura    pata-n                      yo-n                      kēi.  
    mule    foot-POSS    eye-POSS    like  
    'The big tapir has three nails like a mule's hoof.' (MCW 44.7)

- (27) Relative clause/nominalized clause modifier<sup>7</sup>
- a. Yu-tě-n                      kěj                      arakon    arī-pī-měněj.  
 3-go-NONSPEC.I    AN.PROX    monkey    good-NEG-AN.REL  
 'The monkey that is bad is going to leave.'
- b. Yu-tě-n                      kěj                      arī-pī-měněj                      arakon.  
 3-go-NONSPEC.I    AN.PROX    good-NEG-AN.REL    monkey  
 'The monkey that is bad is going to leave.'

Only one type of modifier cannot vary in order relative to what we might be tempted to call the head noun. This is the genitive expression:

- (28) a. inken    méchuku-n                      b. inken    iyu                      echipipin  
 child    GI.blood-POSS                      child    CL.general    flower  
 'the child's blood'                      'the child's flower'
- \*méchukun inken                      \*iyu echipipin inken

#### 4.2 Discontinuity patterns

A second kind of evidence for the structural looseness of nominal expressions is the ease with which discontinuous expressions occur. Potentially discontinuous items are the same ones that can occur in flexible order; only the genitive expression cannot be discontinuous from the possessed item.

Two discontinuity patterns are possible in Panare. In the first, the two coreferential pieces occur on opposite sides of the verb:  $X_i V...Y_j$ . In the second, the two coreferential pieces both follow the verb:  $V...X_i...Y_j$ .

In the past-perfective, the first pattern occurs with both inverse and direct constructions. Preverbal numeral and AD (adjectival/adverbial) forms trigger the direct construction. We take this as evidence that both numerals and AD-forms are non-nominal; when they occur preverbally they cannot syntactically count as object phrases although they semantically pertain to the object.

- (29) numeral
- a. Asa'    n-ikiti-yaj                      apoj yawana.    b. Yawana yikitiyaj apoj asa'.  
 two    3DIR-cut-PPERF    man iguana                      'The man cut two iguanas.'  
 'The man cut two iguanas.'  
 (\*'Two men cut iguanas.')
- c. Kana    t-ěn-yaj                      chu    tityasa'.  
 fish    1sg-catch-PPERF1    1SG    one  
 'I caught one fish.'
- (30) other quantifier
- a. Ta'meñe    nu-wi-yaj                      ana    arakon.  
 many    3DIR-kill-PPERF1    1EXC    monkey  
 'We killed many monkeys.'



The following show the first discontinuity pattern in intransitive clauses. Because these are intransitive, the prefix alternations here do not reflect an inverse-direct distinction. Rather, *të* 'go' is an irregular verb which simply takes a zero prefix in the third person past-perfective:

- (35) a. **Ari-pi-pe-mënej** n-ë'-yaj **arakon.**  
 good-NEG-AD-REL 3-come-PPERF1 monkey  
 'The monkey that's bad came.'
- b. **Ari-pi-pe-më-nëj** të-yaj **arakon.**  
 good-NEG-AD-NMLZ-REL go-PPERF1 monkey  
 'The monkey that is bad left.'

In the second discontinuity pattern, both co-referential expressions follow the verb: V...X<sub>i</sub>...Y<sub>j</sub>.

- (36) numeral  
 T-apo-yaj chu **akirë** w-at-araamá-nya **tityasa.**  
 1-approach-PPERF1 1SG jaguar 1-DETR-hunt-SIM.PAST one  
 'I encountered one jaguar while hunting.'
- (37) other quantifier (a), nominal descriptive modifier (b)
- a. Y-uw-ë'-muku'ma-sa' wéjcha **e'ñapa** pake **atawën.**  
 3-I-DETR-begin-PPART1 COPULA Panare before all
- b. **Kamána** pana, **i'yan** wë-të-mpëj **yuwachon.**  
 Camana toward shaman INTR-go-COND old.one

'(a) All the Panares started long ago (b) toward Camana when the old shaman left.'

Finally, expressions that pertain to a single referent within the scope of a adposition can occur noncontiguous from each other, as in the following when they occur on either side of a single locative adposition. This appears to be just another reflection of the rather loose nominal expression, rather than anything having to do with adpositional phrases per se:

- (38) relative clause/nominalized clause modifier
- a. T-yeñ-aj chu oj **t-yaka** pata-ya **w-ëpijpë.**<sup>c</sup>  
 1SG-drink-PPERF1 1SG m.beer it-toward place-LOC 1SG-came  
 'I drank manioc beer in the house where I have come from.'
- b. T-yeñ-aj chu oj **t-yaka** w-ëpijpë-ya **pata.**  
 1SG-drink-PPERF1 1SG m.beer it-toward 1SG-came-LOC place  
 'I drank manioc beer in the house where I have come from.'

Again, only the genitive cannot be discontinuous from what it modifies.

- (39) a. \***Inken** t-íñi-yaj                      chu **méchuku-n.**  
 child 1SG-see-PPERF1 1SG blood-POSS  
 'I saw the child's blood.'
- b. \***Mechuku-n** t-íñi-yaj                      chu **inken.**  
 blood-POSS INV-see-PPERF1 1SG child  
 'I saw the child's blood.'

### 4.3 Demonstrative pronoun-Noun co-occurrence restrictions

In addition to the restriction on genitives, another restriction shows up when object nominal expressions precede the verb. This restriction gives us an important clue as to why nonconfigurational nominal expressions might come to exist in the first place. Ex. (40) shows that determiners and nouns cannot co-occur preverbally. There is no such restriction when a nominal expression follows the verb (24a-b above).

- (40) \*sij iye t-áma-yaj                      chu  
 this pole 1SG-cut.down-PPERF1 1SG
- \*iye sij t-áma-yaj chu  
 (I cut down this tree.)

In general, Panare "determiners" are actually demonstrative pronouns and can, quite by themselves, serve as referring pronouns. Thus, they are quite unlike English *a* and *the*, and more like *this*, *that*, and *one*. If, structurally speaking, there is only one object position before the verb, and if demonstrative pronouns and nouns do not form a single constituent but each compete for that single position, it explains the restriction.<sup>10</sup>

Perhaps a typical, though not necessary, correlate of languages replete with discontinuous expressions is that they lack a large, well-defined set of adjectives and sometimes even of determiners that are *syntactically* distinct from nouns. Instead, syntactic nouns typically modify other nouns, and pronouns may specify or determine other nouns when necessary; but crucially, all these functions are carried out by elements that are syntactically nominal. Given that there is more than one noun element comprising the expression, it immediately raises a question as to which one is the head. If there is structural competition over headship, the issue may be resolved by interpreting each syntactic noun as the head of its own phrase. In Nunggubuyu (Heath 1986:378), for example, there is no way to differentiate between 'the big man' and 'the adult male' since the words for 'big/adult' and 'man/male' have all the same morphosyntactic properties and, presumably, the same referring potentialities. This is quite unlike English where, even though one noun may modify another, quite clearly only one of them is the head. Headship is, I suggest, heuristically revealed by which noun has the potential for referential function in that phrase (cf. D. Payne 1990:102-111). In

English, *university curriculum* can refer to the same objectified entity as the noun *curriculum* alone could; while *curriculum university* is only interpretable as referring to some type of university. For at least some noun-noun and determiner/pronoun-noun combinations, Panare appears to be more like Nunggubuyu in having more than one “strong” referring piece, and unlike English. Even though English *this* can function alone as a pronoun (e.g. *I want this. This is hardly an example of a responsible choice*), when it does occur as a determiner in combination with another noun (e.g. *This choice is hardly responsible*), it loses its “strong” referring potential.

### 5. Traces of NP constituency

Much evidence so far presented suggests that Panare has very little NP structure. Nevertheless, there are at least two exceptions to the hypothesis that Panare has no NP constituents above the word level.

First, we have seen that the genitive must always directly precede the head noun and cannot be discontinuous from it. Thus, genitive and head surely form a constituent. Why should there be such a restriction just on genitive modifiers, and not on other types of apparent modifiers such as determiners, numerals, and descriptive elements? From a functional perspective, the answer is surely partly due to the scarcity of case marking in Panare, and the resultant challenge of knowing what elements can be interpreted together.<sup>11</sup> There is nothing other than juxtaposition plus the concomitant stress shift and *y*-phenomena to signal the genitive relation. Disallowing order variation and discontinuity for at least one category reduces the challenge of figuring out coreference relations among remaining possible nominal elements.

There is a second situation which suggests some NP constituency. When a nominal expression precedes the verb, for some modifiers the word order is *not* flexible, even though there is flexibility when those very same elements follow the verb. First, numerals must precede nouns when in the preverbal object position:

(41) Asa' arakon wī-yaj ana.  
two monkey kill-PPERF1 EXC  
'We killed two monkeys'

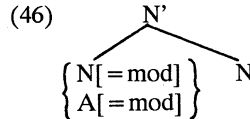
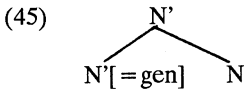
\*arakon asa' wīyaj ana (direct construction)

\*arakon asa' nuwīyaj ana (inverse construction)

Also, when there are two syntactically nominal elements, classes of nouns must be recognized because for some nouns there are definite ordering restrictions, while for others there are not; compare 42 with 43-44 (*ojka*, *piya*, and *karya* are syntactically nominal). Whether the factors accounting for (42) versus (43-44) have to do with *abstract*, *mass* or other similar categories awaits further investigation.

- (42) Ojka kana / \*kana ojka y-áma-yake kën.  
 raw fish INV-OI.throw.out-PPERF2 AN.DIST  
 'He threw out the raw fish.'
- (43) Tikon piya / piya tikon a-te-ñépë'.  
 child big.one NEUT-cry-IMPERF.I  
 'The big children are crying.'
- (44) a. Karya peraka y-ámī-yaj Paco.  
 good house INV-OI.make-PPERF1 Paco  
 'Paco made the good house.'
- b. Peraka karya yámīyaj Paco.  
 c. Karya yámīyaj Paco peraka.

In sum, genitive + N expressions and some preverbal nominal expressions have the configurations given in (45-46). Even these, though, are relatively flat structures, lacking much hierarchical depth. (A = non-nominal modifying element.)



## 6. Functional pressures motivating NP constituency

We have seen that Panare does have a VP, but that nominal expressions have minimal constituency. Since pieces which co-refer to a participant generally do not form a constituent, on sheer structural grounds we might expect that most any discontinuity should be tolerated. However, discontinuities vary with grammatical relations.

Many languages with discontinuous expressions repeat morphological case marking on the noncontiguous elements, thus allowing the role of each piece to be recovered. In Panare there is no case marking on subjects, objects, or genitives. In constructions which necessarily have two participants (e.g. transitive clauses), rampant discontinuities might well present problems as to how the hearer knows which nominal pieces to construe with subject, which with object, etc. In Panare, this processing problem is solved by a hierarchy of grammatical relations which governs relative ease of discontinuities. In particular, discontinuities are restricted to absolutive arguments.

- |      |                       |   |                          |
|------|-----------------------|---|--------------------------|
| (47) | discontinuity allowed |   | discontinuity disallowed |
|      | Object                | > | Intransitive Subject     |
|      |                       | > | *Transitive Subject      |
|      |                       |   | *Genitive                |

As seen in numerous examples above, there appear to be absolutely no restrictions on discontinuities between elements that co-refer to the object, except for genitive modifiers -- but this is an across-the-board restriction on genitives regardless of grammatical relation.

Discontinuous intransitive subjects would not appear to present a processing problem, as there is just the one non-case-marked argument. Nevertheless, there are more restrictions on them than on objects. From elicited examples one could deduce that discontinuities are allowed here as long as a syntactically nominal element immediately follows the VP, in at least some tense/aspects.<sup>12</sup> The examples in (48) from a non-past-perfective paradigm illustrate; although *piya* 'big.one' is syntactically nominal, *-pan* derives a non-nominal modifier.

- (48) a. A-kui-ñëpěj                      kěj                      tikon piya-pan.  
           NEU-bathe-PROG.I AN.PROX child big-AD.purely  
           'The purely/completely big children are bathing.'
- b. **piyapan** akuiñëpěj kěj **tikon**  
           'The big children are bathing.'
- c. \***tikon** akuiñëpěj kěj **piyapan**.  
           (not allowed)

In clauses with two distinct arguments, potential interpretation problems would arise if both arguments could be discontinuous. For transitive subjects, discontinuity is simply not tolerated even if a syntactically nominal subject element directly follows the verb. Any discontinuous element could only be interpreted as referring to an object. In the following, for instance, *wasipan* is a derived non-nominal and thus could not stand as a nominal object. Nevertheless, because of its noncontiguity to the subject *winkij*, it can only be interpreted as referring to some non-subject participant.

- (49) Wasi-pan ni-pa-yaj                      winkij.  
           fierce-AD 3DIR-feed-PPERF1 woman  
           'The woman fed the purely/completely fierce/angry (ones).'  
           \*The purely/completely fierce/angry woman fed (someone).'

Possessed NPs also have two referents--the possessor and the possessed. The constraint against genitive discontinuities is likely reinforced, if not originally motivated by, exactly the same interpretation difficulty which disallows discontinuous transitive subjects, namely, sorting out the pieces that are construed with two distinct referents. In discussing Nunggubuyu, Heath uses such expressions as "weak" phrasal units, "fuzzy" NPs, and "embryonic NP structure" (1984.381), but still states that possessive constructions "would seem a priori to demand tightly knit phrases" (1984.390).

## 7. Conclusions

Panare provides solid evidence that a language can have nonconfigurational nominal expressions, while still having a VP constituent. Here, it is the relative degree of nonconfigurationality in the nominal expression which structurally makes flexible word order and discontinuous expressions possible. However, restrictions on which parts of Panare nominal expressions can be discontinuous give us an instance of where pragmatics -- not semantics -- motivates the surface patterns of language. If semantics were the dominant factor motivating constituency (i.e. if syntax simply arises from grammaticization of what semantically hangs together), we would expect everything that semantically hangs together, to structurally be together -- i.e. we would expect something closer to the English type NP to be universal. But Panare suggests that cognitive processing and interpretation ("pragmatics") are the winning principles. In Panare, only when interpretation problems would arise due to there being more than one nominal referent, are certain discontinuities impossible.

Are these pressures motivating the rise, or preventing the demise, of NP constituents in Panare? There is solid cross-Cariban evidence that OV is diachronically earlier (Gildea 1992), while verb-initial VSO structures in Panare are innovative. Given the greater ordering restrictions within some preverbal object expressions, and the greater freedom of those same pieces when in postverbal position, it suggests that postverbal adjunction of object expressions and the emergence of greater nonconfigurationality go hand in hand. Thus, it would appear that the hierarchy in (47) is a conservative force, holding rein against the total demise of NP constituency. However, the ungrammatical determiner-plus-noun examples in (40), and the order flexibility in some noun-noun preverbal combinations illustrated in (43-44), suggest that the Panare NP was not highly configurational to begin with even in the OV order.

The data examined here suggest that nonconfigurationality in nominal expressions may diachronically lead to nonconfigurationality in overall clause structure. Panare appears to be poised for just such a change in that VSO order is actually more common, than is the historically older configurational OVS order. One study of 423 clauses from 12 different texts (both written and oral material), revealed 63 postverbal Os compared to 41 preverbal Os. Postverbal O is particularly likely in eventive clauses. In descriptive clauses, OV and VO are somewhat more equal in frequency. OV occurs both in pragmatically marked contexts (e.g. contrast, questions, answers to questions), and in certain noncontrastive contexts (T. Payne 1992). The dominance of VO over OV is true in both past-perfective contexts where the inverse-direct opposition is operative, and in non-past-perfective contexts where there is no inverse/direct contrast.

In sum, post-verbal object adjunction is extremely natural and common. Although a pause can demarcate the adjunct, natural text examples do show instances without any intervening pause. If VSO were to solidify consistently under a single intonation contour, it would be appropriate to refer to VSO as a well-planned nonconfigurational clause type.

## Notes

- 1 Data collection was conducted under the school of Anthropology and the Philological Institute "Andrés Bello" of the Universidad Central de Venezuela, and the Universidad Católica of Táchira, Venezuela. The research was partially supported by NSF Grant BNS-8617854, and also by American Philosophical Society and Wenner Gren Foundation grants to Tom Payne. I am indebted to Tom Payne and Spike Gildea for their influence on this particular study, and on the study of Panare grammar generally. I would also like to thank Connie Dickinson, Marie-Clàude Mattei-Muller, and Immanuel Barshi for their input.
- 2 For a more complete presentation of Panare grammar, see Payne, Payne and Gildea (in process).
- 3 Abbreviations in examples are: AD derives a non-nominal word which functions as either adjective or adverb, AN animate, AUX auxiliary, CL noun class, COLL collective, COND conditional, DAT dative, DETR detransitivizer, DIR direct, DIST distal, EXC exclusive, GI genitive initial accent shift, I intransitive, INAN inanimate, INST instrument, INV inverse, ITER iterative, LOC locative, NEG negative, NEUT person-neutral prefix, NMLZ nominalizer, NONSPEC nonspecific aspect, OI object initial accent shift (initial element need not be syntactically nominal), PERF perfect, POSS possessed, PPERF1/2 past-perfective eye-witness evidentials of differing time references, PROX proximate, REL relativizer/relative pronoun, SIM.PAST simultaneous past, T transitive, VISIB visible. Examples from text are indicated by a code following the free translation (e.g. TMO 50.1).
- 4 There are slight variations among dialects in how 1 plurals pattern.
- 5 There is some syncretism between 1sg and 1pl inclusive forms, and between 3sg/pl and 1pl exclusive forms.
- 6 Instead, reflexive, reciprocal, and certain other intransitive meanings are accomplished by using formally intransitive verbs.
- 7 Gildea (1989) provides numerous additional examples of relative clause modifiers and an extensive discussion of their morphosyntax.
- 8 The determiner *muku* 'animate distal visible' apparently cannot occur before the verb, separated from whatever it is modifying. In this respect it appears to differ from all other determiners which also double as pronouns (others can with no problem occur alone before the verb).
- 9 *-Jpě* 'inferential perfect' is historically a nominalizer.
- 10 Examples of S, O V order (rarely) occur, showing that there is more than one structural position before the verb. However, intonational, frequency, and functional evidence all indicate that the S is quite clearly outside the VP.
- 11 There is some oblique case marking (e.g. locative, instrumental). Additionally, some verb endings require that the agent of a transitive stem occur in the dative case; T. Payne (1990) explores whether these are more like transitive ergative or intransitive passive clauses. The past perfective and most other verb forms illustrated in this paper do not belong to this category.

- <sup>12</sup> This restriction needs further investigation and its application may depend on whether the subject person prefixes in various tense/aspect/evidential paradigms constitute arguments or not.

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