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from  
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CORE STRUCTURES AND ADJUNCTIONS IN WARLPIRI SYNTAX

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1. The configurational and nonconfigurational structures of Warlpiri.

The configurational nature of basic and derived syntactic structures in some free word order languages is quickly detected. In fact, for some languages, e.g., Papago (Hale and Selkirk, 1987; Hale, to appear), the configurational nature of syntactic structures is evident at s-structure in virtually every well-formed sentence of the language, being reflected in intonation in an entirely consistent manner and, in addition, in the distribution of certain allomorphic variants. Papago also shows certain expected effects of extraction processes.

The surface form of Warlpiri sentences contrasts with this picture rather sharply. To be sure, in Warlpiri, as in all languages, initial syntactic projections defined by the lexicon exhibit the configurational organization typically reflected by binding processes which are sensitive to c-command asymmetries -- e.g., anaphora and control. But these aspects of Warlpiri are overtly reflected in the morphology of the verb, the auxiliary, and the case and bound auxiliary systems. The surface representation at which actual words appear in sequence -- what I will call the overt phrase structure (OPS) -- does not directly and consistently reflect, in word order or constituent structure, the configurational organization determined by the projection of argument structure from the lexicon. In the study of Warlpiri overt phrase structure, no truly convincing case has been made for a basic order of constituents, nor has any convincing evidence been forthcoming in favor of a

movement analysis to account for the variety of word order arrangements observed.<sup>1</sup>

The primary focus of the ensuing discussion will be the characteristics of Warlpiri OPS representations. First, however, I will present some elementary data revealing the configurational nature of what I will call the "core argument structure" of Warlpiri clauses -- that is to say, the structural organization of a predicator and its argument(s) as that is determined in the projection of syntax from the lexicon. The core argument structure is "abstract", so to speak, and its very real existence is discernible primarily through its effects alone. In this respect it contrasts with overt phrase structure. The latter, but not the former, corresponds to an audible string of words. The central issue in much work on so-called non-configurational languages is the problem of determining the nature of the relation between these two structures (cf. Hale, 1979, 1983; Jelinek, 1984; Baker, 1990).

#### 1.1. The configurational projection of argument structure.

In Warlpiri finite clauses, the grammatical arguments of the verb are represented overtly by agreement morphology in the auxiliary. Provisionally, we may consider subject agreement in finite clauses to be regularly pronominal (in the sense of the Binding Theory, cf. Chomsky, 1981; but see section 4 below), and it may or may not be associated with a nominal expression in OPS. Object agreement may be pronominal or anaphoric. If pronominal, it may or may not be associated with a nominal in OPS. In any event, a pronominal object is free in its governing category. If the object agreement is anaphoric, it is -----

1. I delay temporarily a discussion of the placement of the auxiliary, a local movement. See section 4 below.

bound in its governing category, as required by the Binding Theory. And if it is associated directly with an overt nominal in OPS, that nominal is a secondary predicate, not a referential expression.

Sentences (1) and (3) exemplify pronominal objects, while (2) and (4) exemplify anaphoric objects. These exemplify precisely the asymmetry expected in the core structural projection of the arguments of a clause. If an object is anaphoric, it is bound by the subject; if it is pronominal, it is free in the domain of the subject.

- (1) Ngarrka-jarra-rlu ka-pala-jana lungkarda-patu paka-rni.  
 man-DUAL-ERG PRES-3ds-3po bluetongue-PAUCAL strike-NPST  
 'The (two) men are striking (killing) the bluetongues (skinks).'
- (2) Ngarrka-jarra-rlu ka-pala-nyanu paka-rni.  
 man-DUAL-ERG PRES-3ds-REFL strike-NPST  
 'The (two) men are striking themselves/each other.'
- (3) Karnta-jarra-rlu ka-pala-jana miyi yi-nyi kurdu-patu-ku.  
 woman-DUAL-ERG PRES-3ds-3po food give-NPST child-PAUCAL-DAT  
 'The (two) women are giving the (several) children food.'
- (4) Karnta-jarra-rlu ka-pala-nyanu miyi yi-nyi.  
 woman-DUAL-ERG PRES-3ds-REFL food give-NPST  
 'The (two) women are giving each other food.'

If a subject is anaphoric, of course, it is bound from without, i.e, from the matrix, as expected given that it asymmetrically c-commands the other arguments of its own clause. This is the situation in Warlpiri control constructions of the type exemplified by (5):

- (5) Kurdu-patu-rlu ka-lu-ngalpa nya-nyi kuyu purra-nja-kurra.  
 child-PL-ERG PRES-3ps-12po see-NPST meat cook-INF-OBJCOMP  
 'The children see us (plural inclusive) cooking meat.'

It is clear from the study of anaphora in Warlpiri that the subject and object are in an asymmetric relation to each other. This would follow, of course, if we assumed (as I will here) that Warlpiri core argument structure

contains a constituent, the verb phrase, which includes the verb and its object while excluding the subject.

The overt phrase structure of Warlpiri is crucially different from core argument structure in the constituent structure it recognizes, as will become evident in what follows.

## 1.2. Warlpiri Overt Phrase Structure (OPS) representations.

It is, of course, not correct to say that Warlpiri OPS representations are "non-configurational", since there is constituent structure, after all. But overt phrase structure simply does not correspond directly and consistently to the universal hierarchical configurations clearly present in the core argument structures defined by predicators -- in Warlpiri and, by hypothesis, universally.

The structural asymmetries of Warlpiri OPS representations are to be observed in the organization of words into syntactic expressions. In certain clear cases, where two or more words belong to a single syntactic expression, this is evident from the surface form of OPS.

The syntactic coherence of a Warlpiri linguistic expression is realized in OPS in one of two ways: (i) by unary functional category inflection (for case, complementizer) at the righthand margin of a string of words forming a syntactic constituent; (ii) by identical functional category inflection of linearly nonadjacent words functioning as a syntactic unit, defining so-called "discontinuous expressions". Only in the former case can we assume that the expression involves is a "constituent" in the familiar sense of a string exhaustively dominated by a common node, a condition further distinguished by

the ability of the expression to appear as a unit in pre-AUX position, not otherwise possible for sequences of words.

The sentences of (6) through (35) illustrate both continuous and discontinuous expressions in Warlpiri, including determiner (demonstrative) modification expressions, genitive expressions, attribute modification expressions, infinitival clauses, and locatives.

(6) Determiner (demonstrative):

Kurdu yalumpu-rlu ka-jana maliki-patu jiti-rni.  
child that-ERG PRES-3po dog-PL tease-NPST  
'That child is teasing the dogs.'

Kurdu-ngku ka-jana maliki-patu jiti-rni yalumpu-rlu.  
child-ERG ...  
Kurdu-ngku ka-jana yalumpu-rlu maliki-patu jiti-rni.  
Yalumpu-rlu ka-jana maliki-patu jiti-rni kurdu-ngku.  
\*Kurdu ka-jana ... yalumpu-rlu ... .  
\*Yalumpu ka-jana ... kurdu-ngku ... .

(7) Genitive:

Maliki ngaju-nyangu-ku ka-rna-rla kuyu yi-nyi.  
dog me-GEN-DAT PRES-1ss-3so meat give-NPST  
'I am giving meat to my dog.'

Maliki-ki ka-rna-rla kuyu yi-nyi ngaju-nyangu-ku.  
dog-DAT ...  
Maliki-ki ka-rna-rla ngaju-nyangu-ku kuyu yi-nyi.  
Ngaju-nyangu-ku ka-rna-rla kuyu yi-nyi maliki-ki.  
\*Ngaju-nyangu ka-rna-rla ... maliki-ki ... .

(8) Modifier:

Maliki wiri-ngki 0-ji yarlku-rnu.  
dog big-ERG PERF-1so bite-PST  
'A big dog bit me.'

Maliki-rli 0-ji yarlku-rnu wiri-ngki.  
dog-ERG PERF-1so bite-PST big-ERG

(9) Infinitival clause:

[marna nga-rninja-kurra] ka-rna wawirri nya-nyi.  
[grass eat-INF-OBJCOMP] PRES-1ss kangaroo see-NPST  
'I see a kangaroo eating grass.'

Marna-kurra ka-rna wawirri nya-nyi nga-rninja-kurra.  
grass-OBJCOMP PRES-1ss kangaroo see-NPST eat-INF-OBJCOMP

(10) Locative expression:  
Pirli-ngka kankarlumparra ka ya-ni pintapinta.  
mountain-LOC over PRES go-NPST airplane  
'The airplane is going over the mountain.'

Pintapinta ka kankarlumparra ya-ni pirli-ngka.  
airplane PRES over go-NPST mountain-LOC

It is noteworthy that the verb phrase, clearly present in the configurational representation of Warlpiri argument structure, is not obviously a constituent in the OPS representation -- consider (11):

(11) Verb and object:  
\*Wawirri nya-nyi ka-rna.  
kangaroo see-NPST PRES-1ss  
'I see a kangaroo.'

\*Nya-nyi wawirri ka-rna.  
see-NPST kangaroo PRES-1ss

An object cannot precede a fronted (pre-AUX) verb in OPS unless it is left-dislocated, a circumstance clearly marked intonationally. Thus, the verb and its overt object do not form a constituent in (12), for example:

(12) Left dislocation:  
Wawirri nyampu, pantu-rnu 0-rna ngajulu-rlu.  
kangaroo this, spear-PAST PERF-1ss I-ERG  
'This kangaroo, I speared it.'

While it is possible to argue that certain strings of words in Warlpiri form constituents of a clause (e.g., certain nominal and infinitival expressions qualify as constituents), the structural relation between such readily identifiable constituents is evidently of a different nature. In the following section, I will consider the question of whether Warlpiri overt phrase structure exhibits asymmetries in command relations among the discernible constituents of a clause, e.g., between the subject and the object, etcetera.

## 2. Command Relations in Overt Phrase Structure Representations.

A number of phenomena, in a significant number of languages, have been identified by grammarians as being sensitive to command relations, and some of these phenomena are commonly held to be universal. Thus, it is claimed that Warlpiri conforms to the principle that an anaphor is bound by a c-commanding antecedent (cf. (2, 4) and related discussion above). But in Warlpiri this relation obtains in the basic projection of argument structure, a level of representation distinct from that which I am temporarily calling overt phrase structure. There, the presence of clear c-command asymmetries, for example, is not obvious. In fact, it is not clear that grammatically relevant asymmetries are present at all.

For a variety of reasons, it is somewhat difficult to find relevant tests for command asymmetries among overt constituents (say subject and object). Obvious tests, such as the behavior of anaphoric arguments, are not available in overt phrase structure, since anaphora is realized in Warlpiri by means of bound morphology, and asymmetries are observable only in the basic projection of argument structure, a representation whose structure is detectible precisely in the functioning of anaphora and control (as noted in 1.1 above). There are, however, certain dependencies which are observable to some extent in overt phrase structure. Their relevance is not totally clear, but they are suggestive and will be discussed briefly in the following subsections.

### 2.1. Depictive secondary predication.

Secondary predication is severely limited by c-command conditions in familiar languages like English (cf. Williams, 1980; Rapoport, 1990), and correspondingly, the observed positioning of a secondary predicate is restricted in relation to that of its subject. In Warlpiri, by contrast, secondary predication is essentially oblivious to linear order, as illustrated

in (13a-c) -- the secondary predicate agrees in case with its subject (i.e., 'dog' and 'tired' agree in (13a), 'kangaroo' and 'tired' in (13b), and so on):

(13) (a) Maliki-rli ka marlu wajilipi-nyi mata-ngku.  
dog-ERG PRES kangaroo chase-NPST tired-ERG  
'The dog, tired, is chasing the kangaroo.'

Mata-ngku ka marlu wajilipi-nyi maliki-rli.

(b) Maliki-rli ka marlu wajilipi-nyi mata.  
dog-ERG PRES kangaroo chase-NPST tired  
'The dog is chasing the kangaroo (and the latter  
is) tired.'

Mata ka wajilipi-nyi maliki-rli marlu.

(c) Karnta-ku 0-rla yu-ngka miyi wirlinyi-jangka-ku.  
woman-DAT IMP-3sd give-IMP food hunting-EL-DAT  
'Give the woman some food, as she is back from hunting.'

Wirlinyi-jangka-ku 0-rla yu-ngka karnta-ku miyi.

Although there are stylistic and discourse related preferences among these alternative orderings (and the others that are also possible), there are no strictly grammatical considerations which would preclude any of them.

On independent grounds, it is clear that command is relevant to secondary predication in Warlpiri, since, for example, a secondary predicate appearing in a matrix clause cannot be construed with a nominal appearing within an infinitival complement:

(14) Kurdu ka-rna mata nya-nyi  
child PRES-1ss tired see-NPST

[maliki wajilipi-nja-kurra].  
dog chase-INF-OBJCOMP  
'I see the child, tired, chasing the dog.'

The only interpretation possible here is that according to which 'tired' is predicated of the nominal 'child', despite the fact that the predicate agrees in (absolute) case not only with the latter but also with the subject of the infinitival (i.e., with 'dog'). And the possibilities in secondary

predication would not be altered, for example, if the infinitival were reordered in any of the permissible ways relative to the secondary predicate.

If secondary predication is sensitive to command relations, then the various orderings in (13) do not differ in relation to the particular command relation which is relevant to secondary predication. If the relevant relation is, say, c-command, so that the secondary predicate must be c-commanded by its subject (i.e., by the nominal of which it is predicated), then there are evidently no relevant c-command asymmetries in the overt phrase structure representations of (13) -- the secondary predicate is, observationally, appropriately commanded by its subject in all orderings.

I should temper the foregoing remarks with the caveat that a lot of work remains to be done on "secondary predication" in Warlpiri to determine whether such sequences as those represented by (13) are in fact relevant to the present discussion. In particular, a careful study of the intonational phrasing of sentences with nonadjacent nominals "construed together" has yet to be done, particularly in relation to the right-periphery of the clause. Such a study will be essential to a proper understanding of the phrase structures involved and to the question of whether secondary predication is really at issue here, technically speaking. If, for example, some sentences of the general type represented by (13) are not cohesive clauses but, rather, are clauses to which a "tag" (i.e., the final nominal) is appended (as an "afterthought", "parenthetical", or "correction", say), then their relevance to the study of c-command asymmetries is altered considerably. Thus, in any definitive study of these matters, efforts will have to be made to distinguish "parentheticals", and the like, from integral constituents of a clause. And the matter of clausal cohesion is not altogether straightforward in Warlpiri -- except perhaps in what might be called the "clear cases", of which there

are roughly two subcases: (i) pre-AUX position, and (ii) between an AUX and a verb occurring later to the right. Although a parenthetical is possible in the second of these cases, generally the elements appearing in the environments corresponding to (i) or (ii) form integral parts of the clause. By contrast, the status of material following both the verb and the AUX is generally unclear. This caveat must be extended to all claims made here about relations between overt phrase structure and phenomena which may or may not be sensitive to structural asymmetries.

I turn now to another phenomenon which, like secondary predication, evidently involves a local dependency.

## 2.2. Attributive Reciprocals.

Warlpiri nominal expressions formed with the suffix -kariyinyanu, informally termed "attributive reciprocals" here, are illustrated in (15) through (20). Attributive nominals are interpreted with reference to a local "antecedent", in roughly the following manner. In a sentence of the form

[... NP' ... NP-kariyinyanu ...],

order irrelevant, where NP and NP' are associated with distinct grammatical functions within the clause, the expression NP-kariyinyanu attributes the property denoted by NP to the entity referred to by NP'. The following passage exemplifies this usage:

(15) (Wawirri kala mata-jarri-ja),

mata-kariyinyanu-lku  
tired-ATRECIP-NOW

kala paka-rnu purlka-ngku.  
NARPST strike-PST oldman-ERG  
'(The kangaroo got tired and), tired like himself,  
the old man killed it.'

Here, the attributive reciprocal expression mata-kariyinyanu, a secondary predicate of the object (hence in absolutive case), indicates that the predicate mata 'tired' applies not only to the object (represented within the local clause only by agreement, but clearly linked to wawirri 'kangaroo' in the parenthesized clause) but also to the ergative subject purlka-ngku 'old man(-ERG)'. The latter is, so to speak, the "antecedent" of the attributive reciprocal.

The antecedent of an attributive reciprocal need not be realized as an NP in the overt phrase structure representation of a sentence; it may, as in (15) for example, be represented solely in the agreement morphology within the auxiliary (and possibly by an associated pro, though this is an issue apart, see below). In general, however, the antecedent is "local", i.e., whether or not it is an overt NP, the antecedent is generally to be found within the same clause as the attributive reciprocal.

Furthermore, an overt antecedent may not be contained within a constituent which excludes the attributive reciprocal, suggesting that an overt antecedent must c-command the reciprocal:

- (16) Kurdu-kurlangu maliki ka-rna wajilipi-nyi  
 child-GEN dog PRES-1ss chase-NPST  
 mata-kariyinyanu-rlu.  
 tired-ATRECIP-ERG  
 'I, tired like it, am chasing the child's dog.'

Here, the antecedent of the reciprocal is the entire possessive expression ('the child's dog'), and not, for example, the genitive ('the child'). Thus, if c-command is really at issue here, then the possessive NP bears that relation to the reciprocal, while the possessor NP does not.

To the extent that we can determine this from textual examples, it is evident that the surface ordering of the reciprocal and its antecedent has no effect on well-formedness, suggesting that the overt phrase structure representations do not show asymmetries in the command relation which is relevant to the interpretation of attributive reciprocals. Further examples are given below:

- (17) Wati-patu-kariyinyanu-lpa-lu-rla nyuyu-jarri-ja  
 man-PL-ATRECIP-IMPERF-3sp-3dat joint-INCH-PST  
 (nyanungu-ku) jjanu.  
 (him-DAT) visiting  
 'The other men came together to visit him (a man).'
- (18) Purdapurda-ya-nu 0-rla (nyanungu-ju) purlka-kariyinyanu-ku.  
 listening-go-PST PERF-3dat (he-OI) oldman-ATRECIP-DAT  
 'He (an oldman) went along listening for the other oldman.'
- (19) Nyanungu-ju-lpa purlka-kariyinyanu-rlu nya-ngu.  
 he-OI-IMPERF oldman-ATRECIP-ERG see-PST  
 'The other old man saw him (an old man).'
- (20) Ngula yika-lu-nyanu ma-ni nyurrpu-kariyinyanu  
 so COMP-3ps-refl take-NPST harmonic-ATRECIP  
 yangka -- karnta-ju ngarrka-ngku-ju.  
 that:EVOG woman-OI man-ERG-OI  
 'And so men marry women, each of harmonic generation level.'

### 2.3. Bound kin terms.

Referentially bound kinship nominals in *-nyanu* (glossed KINR; cf. the reflexive/reciprocal morphology in AUX, also *-nyanu*) favor a local antecedent if one is available, as in (21), in which the absolutive subject *kurdu nyampu* 'this child' is the antecedent of the (causal) dative argument *kirda-nyanu-ku* 'self's father', an example of a "bound kin term":

- (21) *Kirda-nyanu-ku ka-rla marlaja-nguna*  
 father-KINR-DAT PRES-3dat CAUSE-lie(-NPST)  
 -- *paka-rninja-warnu -- kurdu nyampu.*  
 strike-INF-RESULT child this  
 'The child*<i>* is lying prostrate because of  
 his*<i>* father, from being beaten.'

Although the evidence in this case is not absolutely clear, where a c-command asymmetry is clearly present, the bound nominal prefers a c-commanding antecedent. Thus, in (22), the genitive expression contained within the possessive construction does not readily serve as antecedent for the bound kinship nominal -- thus, on the favored reading, the uncle is the child's, not Jakamarra's:

- (22) *Ngamirni-nyanu-ku ka-rla marlaja-yula*  
 MoBro-KINR-DAT PRES-3dat CAUSE-cry(-NPST)  
  
*Jakamarra-kurlangu kurdu.*  
 J.-GEN child  
 'J.'s child is crying because of his/her uncle.'

But here again, the ordering of the relevant words is evidently immaterial, and in fact "cross-binding" is common, in which the subject binds into an object, and vice versa, as in (23) through (25). Thus, linear order of the relevant expressions does not correspond to asymmetries in any command relations relevant to the interpretation of bound kin terms:

- (23) Kirda-nyanu-rlu kaji-lpa ka-ngkarla-rni  
 father-KINR-ERG IRR-IMPERF carry-IRR-HITHER  
 ngalapi-nyanu wiri, ngarrka-yijala.  
 offspring-KINR big, male-ALSO  
 'Were [his<i> father]<j> to bring [his<j> grown son]<i>.'
- (24) Kurdu-nyanu-rlu ka-rna-lu-jana ngarri-rni --  
 child-KINR-ERG PRES-3ps-3po call-NPST  
 purtarirlangu-ju -- ngamirni-nyanu-patu.  
 "p." mother-KINR-PL  
 '[Their<i> children]<j> (we) call [our<j> mothers]<i>  
 "purtarirlangu".'
- (25) Kurriji-nyanu-kujaku ka malirdi-nyanu-rlu  
 WiMo-KINR-EVIT PRES DaHu-KINR-ERG  
 kurnpariji ngarri-rni.  
 fire call-PNST  
 '[Her<i> son-in-law]<j> calls it (i.e., fire)  
 "kurnpariji" in deference to [his<j> mother-in-law]<i>.'

Assuming that c-command is relevant to the local binding of these nominals, so that an antecedent must c-command the kin term it binds, then in the overt phrase structure representations of these sentences, there can be no constituent which contains one kin term and excludes the other -- in the relevant sense.

#### 2.4. Oblique Datives.

Dative arguments in Warlpiri divide into two classes, direct and oblique. A pronominal appearing in an oblique dative may be bound by the subject of the same clause, as in (26) and (28) -- though the reverse is impossible, of course, by Condition B of the Binding Theory, as shown by (27) and (29) (from Laughren, 1989). Evidently, therefore, the pronoun in an oblique dative expression does not command the subject, in the relevant sense, though the subject evidently does command the pronominal of the oblique:

- (26) Jakamarra-rlu ka-nyanu-rla warri-rni (kuyu-ku) nyanungu-ku.  
 J.-ERG PRES-REFL-3dat seek-NPST (meat-DAT) him-DAT  
 'J.<i> is looking for meat for himself<i>.'
- (27) \*Nyanungu-rlu ka-nyanu-rla warri-rni (kuyu-ku) J.-ku.  
 he-ERG PRES-REFL-3dat seek-NPST (meat-DAT) J.-DAT
- (28) Nyanungu-ku ka-nyanu Jakamarra wangka-mi.  
 him-DAT PRES-REFL J. speak-NPST  
 'Jakamarra is talking to himself.'
- (29) \*Jakamarra-ku ka-nyanu nyanungu wangka-mi.  
 j.-DAT PRES-REFL he speak-NPST

As these examples show, linear order is evidently immaterial, since the binding relations remain the same for both orders.

#### 2.5. Control and Negative Adverbial Clauses.

Although Warlpiri cannot have parasitic gaps, strictly speaking, negative adverbial clauses do show parallel "gapping" of the subject and the object in those cases in which the subject and object of the negated infinitival clause are pairwise identical to the subject and object of the matrix. As in control constructions elsewhere in Warlpiri, the linear positioning of the infinitival clause in overt phrase structure is immaterial to the control relation, as illustrated in (30). Sentence (31) illustrates a negated infinitival whose object is not shared in the matrix:

- (30) J.-rlu ka wawirri yampi-mi [e e luwa-rninja-wangu-rlu].  
 J.-ERG PRES roo left-NPST [e shoot-INF-NEG-ERG]  
 'J. is leaving the kangaroo without shooting it.'
- [e e luwa-rninja-wangu-rlu] ka wawirri yampi-mi J.-rlu.  
 Wawirri ka [e e luwa-rninja-wangu-rlu] yampi-mi J.-rlu.  
 [e e luwa-rninja-wangu-rlu] ka J.-rlu yampi-mi wawirri.

- (31) Jakamarra ka nyina-mi [e wawirri luwa-rninja-wangu].  
J. PRES sit-NPST [roo shoot-INF-NEG]  
'J. is sitting without shooting the/a kangaroo.'

#### 2.6. Summary remarks on command relations.

The above examples have been cited to illustrate the apparent fact that the surface linear arrangement of constituents in Warlpiri overt phrase structure representations does not correspond to asymmetries in interpretations involving referential dependency. Known structural asymmetries apparently do have the expected affect for the phenomena discussed -- thus, it matters if one member of a pair of items involved in a dependency relation (binding, predication, etc.) is included in a constituent (e.g., NP, infinitival subordinate clause, etc.) which excludes the other. But the data considered in this section do not seem to reveal any constituent in Warlpiri overt phrase structure representations which, say, includes the object but excludes the subject -- i.e., no verb phrase. This accords with the testimony of auxiliary placement (as exemplified in (11)), of course. Thus, the asymmetry inherent in the subject relation, according to which the subject is external to the subconstituent VP containing the object, clearly relevant in the basis Warlpiri projection of argument structure (cf., 1.1 above), is not visible in the overt phrase structure representations of Warlpiri clauses.

I will turn now to the question of whether there are overt phrase structure asymmetries can arise through movement.

### 3. Overt Phrase Structure and Movement of Phrasal Constituents.

If the word order variations observed in Warlpiri clauses are due to "scrambling" in the technical sense, i.e., if they are due to movement in syntax (as opposed, say, to PF), then scrambling in overt phrase structure has

no "visible" effect in relation to the phenomena discussed in section 2. The possibility exists, of course, that scrambling is not what is responsible for surface word order variations in Warlpiri clauses.

In this section I will briefly consider the question of whether movement is involved at all in the derivations of Warlpiri overt phrase structure representations. I begin with a discussion of content questions.

### 3.1. Content Questions in Warlpiri.

On the face of it, it would appear that movement must be involved in content question formation, since the question word consistently appears in initial position -- as illustrated in all of (32) through (38). But apart from the possible local movement into pre-AUX position, there is little to suggest that the initial position of the question word is actually due to movement (but see section 4 below).

Firstly, initial position is possible for any constituent, and we have as yet no clear evidence of movement as the responsible agent of this. Second, as (34) shows, a theoretically possible candidate for the weak crossover effect shows no such effect.

Moreover, candidates for long-distance movement fail to be credible cases of the phenomenon. Apparent extraction from an infinitival clause typically involves questioning part of a so-called "discontinuous expression", as in (35), where an element marked with the objective complementizer is questioned and construed with an infinitival verb, also marked with the objective complementizer (indicating matrix object controller). Although such discontinuous expressions might be formed by movement, it is not obvious that they are. In any event, they are not exclusive to questions -- they are freely

alternative to the corresponding contiguous expressions. That movement is probably not involved here is suggested by constructions like (36), in which the questioned constituent, marked with the objective complementizer, is base generated in the matrix clause and construed, in an appropriate way, with an adjunct finite clause. Again, no evidence for movement.

- (32) Ngana-ngku ka karli nyampu jarnti-rni?  
 who-ERG PRES boomerang this trim-NPST  
 'Who is trimming this boomerang?'
- (33) Nyiya-ku ka-npala-rla warri-rni nyumpala-rlu?  
 what-DAT PRES-2dus-3sdat seek-NPST you:two-ERG  
 'What are you two looking for?'
- (34) Ngana ka nyanungu-nyangu maliki-rli wajilipi-nyi?  
 who PRES he-GEN dog-ERG chase-NPST  
 'Who is his dog chasing?'
- (35) Nyiya-kurra 0-npa nya-ngu Jakamarra jarnti-rninja-kurra?  
 what-OBJCOMP PERF-2ss see-PST J. trim-INF-OBJCOMP  
 'What did you see J. trim?'
- (36) Nyiya-kurra 0-npa nya-ngu J. [kuja-lpa jarntu-rnu]?  
 what-OBJCOMP PERF-2ss see-PST J. [COMP-IMPERF trim-PST ]

Extraction from a finite dependent clause is not possible in Warlpiri, as such clauses are adjuncts. To question or relativize a constituent in an adjunct dependent clause, an *in situ* strategy must be used. For questions especially, this device is rare in actual usage. When it is used, the requirement that the question word be initial is satisfied by using a "proxy interrogative" (similar in nature to the "pleonastic" interrogative of Hindi; cf. Srivastav, 1991) in the main clause, as in (37) and (38):

- (37) Q: Nyarrpa J. wangka-ja pirrarni-rli [kuja nyiya luwa-rnu]?  
 how J. say-PST yesterday-ERG [COMP what shoot-PST]  
 'What did Japanangka say he shot yesterday?'
- A: Ngayi luwa-rnu marlu pirrarni-rli.  
 'He just shot a kangaroo yesterday.'

(38) Q: Nyarrpa-rlu 0-ngku ngarru-rnu-rra Japangardi-rli  
how-ERG AUX-2so tell-PST-CNTF Japangardi-ERG

[nyarrpara-kurra kuja ya-nu Japanangka].  
[where-ALLATIVE COMP go-PST Japanangka]  
'Where did Japangardi tell you that Japanangka went?'

A: Japangardi-rli 0-ji ngarru-rnu 'Japanangka ya-nu  
tawunu-kurra'-waja.  
'J. told me 'Japanangka went to town' actually.'

### 3.2. Relative Clauses.

In relativization, Warlpiri uses the so-called "internal head", as illustrated in (39) through (42). Though LF movement is undoubtedly involved in the interpretation of these structures, it is not evident that movement is involved in defining the observed overt phrase structure representations associated with them:

(39) Karli-ngki kuja-npa yankirri luwa-rnu,  
boomerang-INST COMP-2ss emu shoot-PST

ngulaju rdilyki-ya-nu.  
that broken-go-PST  
'The boomerang you hit the emu with broke.'

(40) Yankirri kuja-npa karli-ngki luwa-rnu, ngulaju pali-ja.  
emu COMP-2ss boomerang-INST shoot-PST, that die-PST  
'The emu you hit with the boomerang died.'

(41) Kurdu yali kuja-ka nyanungu-nyangu maliki-rli  
child that COMP-PRES he-GEN dog-ERG

wajilipi-nyi, ngulaju ka yula-mi.  
chase-NPST, that PRES cry-NPST  
'That child<i> that his<i,j> dog is chasing is crying.'

(42) Nyanungu-nyangu kurdu-jarra-rlu kuja-pala-rla miyi  
he-GEN child-DUAL-ERG COMP-3dus-3odat food

yu-ngu ngarrka yangka-ku, ngula-ngku-ju ka-palangu  
give-PST man that-DAT, that-ERG-OI PRES-3duo

karli-jarra yi-nyi-lki kurdu-jarra-ku.  
boomerang-DUAL give-NPST-THEN child-DUAL-DAT  
'That man<i> who his<i,j> two kids gave food to  
is giving boomerangs to the two kids.'

Question formation and relativization, alike, fail to give evidence in favor of the position that movement is responsible for the observable form of overt phrase structure representations in Warlpiri. The same must be said of

scrambling, as exemplified in examples already given and in the examples assembled from (43) through (76). A consideration of these sentences, in relation to the Binding Theory and associated effects, provides little in support of a movement theory of Warlpiri free word order.

### 3.3. Free Word Order and Coreference Effects.

It is possible to make use of well-known diagnostics of movement and constituent structure. A contiguous string of words in overt phrase structure, making up, say, a noun phrase or an infinitival clause, reveals its status as a constituent through its behaviour with respect to Binding Theory conditions, among other things. Thus, for example, in sentences (43) and (44) the R-expression (kurdu wita, Jakamarra) may be coreferential with the genitive pronoun in the possessive NP construction. This is possible by Condition B of the binding theory. And the fact the sentences are grammatical with coreference indicates that the R-expression is free, as required by Condition C, and hence that it is not c-commanded by the pronoun. None of this is affected by the linear order of subject and object. And, in particular, no ordering, including that of (44), shows the Weak Cross-Over effect.

(43) Nyanungu-nyangu maliki-rli ka kurdu wita wajilipi-nyi.  
 (s)he-GEN dog-ERG PRES child small chase-NPST  
 'His<sub><i,j></sub> dog is chasing the little child<sub><j></sub>.'

(44) Jakamarra ka nyanungu-nyangu maliki-rli wajilipi-nyi.  
 J. PRES he-GEN dog-ERG chase-NPST  
 'His<sub><i,j></sub> dog is chasing Jakamarra<sub><j></sub>.'

Surprisingly, (45) and (46) are not possible with coreference, at least not in the dialect of the speakers who have given these sentences their most

careful consideration.<sup>2</sup> If this is to be explained within the Binding Theory, then presumably the reason is that coreference violates Condition C. And this would be expected, of course, if the overt phrase structure representations of Warlpiri lacked the relevant subject-object asymmetry, and if Condition C is in fact operative in the overt phrase structure representations of clauses:

(45) J.-kurlangu maliki-rli ka nyanungu wajilipi-nyi.  
 J.-GEN dog-ERG PRES him/her chase-NPST  
 'J.<i>'s dog is chasing him<j,\*i>.'

(46) Nyanungu ka wajilipi-nyi J.-kurlangu maliki-rli.  
 him/her PRES chase-NPST J.-GEN dog-ERG  
 'J.<i>'s dog is chasing him<j,\*i>.'

An alternative conception of (45) and (46) seeks to attribute the lack of coreference there to a property inherent in the Warlpiri pronoun nyanungu. When construed as a direct argument (subject or object) in a root clause, this overt pronoun is marked by comparison with the more neutral non-overt alternative. It is used to focus an entity previously mentioned in discourse. If the overt pronoun in such cases represents a discourse topic, then the binding violation would be at LF, not necessarily at s-structure.

Sentence (47) is also not possible with coreference. If this is due to Condition C, then the forward position of the possessive NP does not mitigate this -- coreference between the R-expression possessor and the pronoun is still impossible:

(47) J.-kurlangu maliki ka nyanungu-rlu wajilipi-nyi.  
 J.-GEN dog PRES he-ERG chase-NPST  
 -----

2. These are speakers consulted by Mary Laughren in context of the Bilingual Education Program at Yuendumu, Northern Territory. Cf. also Laughren, 1989.

'He<i,\*j> is chasing J.<j>'s dog.'

Sentences (44) and (47) together show that "scrambling" cannot simply be A-movement or A'-movement, as generally understood. If the forward (pre-subject) positioning of an object is by A-movement (cf., Mahajan, 1990), then coreference should be possible in both (44) and (47). Coreference is not possible in the latter, suggesting rather that A'-movement (with "reconstruction") is involved. But if so, then (44) should show the Weak Cross-Over effect, which it does not. In short, the linear ordering is simply irrelevant to the actual coreference relations and, in particular, nothing suggests that movement is involved in deriving the surface ordering in Warlpiri overt phrase structure representations (except, perhaps, for a strictly local movement involved in defining the placement of the auxiliary; see below).

Given these observations, the possible coreference relations indicated for (48) and (49) follow from accepted assumptions and from the structural relations involved. In particular, the data follow from the fact that an asymmetrical c-command relation holds between NP and NP' if one of these is contained within a constituent which excludes the other. For example, the possessive constructions of (48-3) include the possessor but exclude the ergative subject.

(48) Nyanungu-nyangu maliki ka wajilipi-nyi J.-rlu.  
he-GEN dog PRES chase-NPST J.-ERG  
'J.<i> is chasing his<i,j> dog.'

(49) Nyanungu-rlu ka J.-kurlangu maliki wajilipi-nyi.  
he-ERG PRES J.-GEN dog chase-NPST  
'He<i,\*j> is chasing J.<j>'s dog.'

And in (49-51) the infinitival clause includes the dative object of the infinitive, but it excludes constituents of the matrix, including the ergative

subject there. The coreference possibilities follow from standard assumptions, of course:

(50) Marlu-ngku ka J. nya-nyi nyanungu-ku wurruka-nja-kurra.  
roo-ERG PRES J. see-NPST it-DAT stalk-INF-OBJCOMP  
'The kangaroo<i> sees J. sneaking up on it<i,...>.'

(51) Nyanungu-rlu ka J. nya-nyi marlu-ku wurruka-nja-kurra.  
'It<i,\*j> sees J. sneaking up on the kangaroo<j>.'

#### 3.4. Summary.

The material examined in this and the previous section supports, I believe, the intuition that free word order in Warlpiri is of a different nature from that which has been known, since Ross (1967), as scrambling. Scrambling, properly speaking, involves movement. And some languages which exhibit freedom of word order as great as that of Warlpiri can be shown to achieve this through scrambling in the technical sense -- e.g., the Uto-Aztecan language Papago. If so, then Papago is to be classed with German (Webelhuth, 1989; but see Bayer and Kornfilt, 1990, for an alternative view of scrambling) and Hindi (Mahajan, 1990), for example. By contrast, Warlpiri is to be classed with the polysynthetic Mohawk (Baker, 1990, 1991), and the languages described in Mithun (1987).

The basic finding here, if it can be assumed to be real, is that variations in overt phrase structure word order -- e.g., between subject and object, particularly -- do not reveal asymmetries which might be attributed either to (1) a VP or like constituent including one argument and excluding another, or (2) movement to a position asymmetrically commanding both the point of origin and other overt constituents in the clause.

In the following section, I will consider a conception of Warlpiri (and other so-called non-configurational) overt phrase structure which has,

deservedly, gained acceptance in recent years and which seems to me to be consistent with the observations made here. This is the proposal of Jelinek (1984), as modified recently by Baker (1990).

#### 4. Arguments and Adjuncts.

The nominal expressions appearing in overt phrase structure, according to Jelinek, are not arguments. Rather they are adjuncts, linked to argument positions in the core syntactic projection of a clause. Following Baker, I will assume that the core syntactic projection conforms to the usual configurational type (accounting for the configurational properties discussed in 1.1 above). The core syntactic arguments of a tensed clause are non-overt pronominal or anaphoric elements construed, respectively, with pronominal or anaphoric agreement in the auxiliary (the morphological base of which is to be identified with the functional category I(nfl), presumably).

The linking of adjuncts to argument positions is by coindexation -- this is the manner in which adjunct NPs are licensed (Baker, 1990; and cf. Hale, 1983, for the relation between overt case and core grammatical function in the linking of adjunct NPs in Warlpiri). Overt nominal expressions, then, are related to the core syntactic projection in a manner similar to the way dislocated NPs in more familiar languages are related to the clauses with which they are associated, i.e., by coindexation with resumptive pronouns. In Warlpiri, however, all overt NPs linked to argument positions (in tensed clauses, at least) are adjuncts, by hypothesis, and all resumptive pronominals are non-overt (small pro, presumably), though construed with agreement (overt, except in the third person singular, which happens to be zero).

As an aside, and despite my enthusiasm for this conception of Warlpiri overt phrase structure, I must voice one lingering reservation. Overt NPs in

preverbal position do not have the "feel" of dislocated phrases -- unlike true left dislocated "topics" (as in (12) above, for example), and unlike clear cases of trailing corrective or explanatory tags. I am not sure at this point what to make of this. Perhaps "true dislocation" is adjunction to CP, hence "outside the clause", as suggested by the auxiliary placement in (12). By contrast, perhaps, adjunction of the type under consideration here is adjunction to IP (i.e., S in the abbreviatory notation of Baker, 1990), and accordingly adjuncts of this type are not "excluded" from the clause structurally or intonationally. I will assume for present purposes that IP-adjunction is correct, though I cannot really defend that view at this point. In any event, this is a general problem in the study of non-configurational languages.

#### 4.1. The Obligatory Adjunction of Overt Nominal Expressions (in tensed clauses).<sup>3</sup>

If the essential characteristics of Warlpiri core and adjunct syntax are as outlined here, then why is this so? What is the fundamental property from which everything follows?

Here again, I think that Jelinek (1984) has the correct intuition. Her proposal is that the real arguments in a Warlpiri tensed clause are represented by the agreement morphology in the auxiliary. Suppose we interpret this to mean that Warlpiri agreement is "rich", which is to say that it is "pronominal" (or anaphoric). If so, the corresponding argument positions are fully determined in syntax. And as is common in such cases (e.g., Irish, cf. -----

3. I limit discussion here to overt NPs in tensed clauses. There is some evidence that an overt object NP in infinitivals is not an adjunct, a matter still under investigation (cf. Laughren, 1987).

McCloskey and Hale, 1984), the argument positions themselves are represented by non-overt elements, pronominal (or anaphoric, as the case may be) by virtue of their identification with pronominal (or anaphoric) agreement morphology.

Since the arguments of a (tensed) clause are fully determined, by virtue of the agreement morphology in the manner suggested, no overt NP may appear in a core argument position. Overt NP expressions can therefore only appear as adjuncts, not to the argument positions, of course, for theta-theoretic reasons (cf. Chomsky, 1986a), but to some higher position. The fact that no structural asymmetries can be detected suggests that all overt NPs linked to argument functions are (or at least can be) adjoined to the same maximal projection. This must be at least as high as IP. Furthermore, phrases adjoined to the same maximal projection mutually c-command each other, evidently, insofar as the phenomena examined in sections 4 and 5 are concerned. And this follows, presumably, from the fact that all adjunction nodes are segments of one and the same maximal category (cf. Chomsky, 1986b) -- there is no "complete node" (as opposed to "segment") which differentially counts as the "first branching node" dominating any two co-adjunct NPs.

#### 4.2. On the Relation among Co-adjuncts.

In previous sections, I have implied that mutual (c-)command is responsible for certain coreference judgments, under the assumption, for example, that the Binding Theory operates in Warlpiri overt phrase structure in the now well understood manner. But this is as much in the nature of speculation as an opposite assumption would be. I would like briefly to consider an alternative, purely speculative at this point.

Imagine that command relations are irrelevant in adjunction structures and, therefore, in Warlpiri overt phrase structure generally. And imagine that

this is because the relevant grammatical principles -- e.g., in particular, those inherent in the Binding Theory -- simply do not apply among adjuncts dominated by segments of the same maximal projection.

We have seen that subject-object asymmetries are evidently absent in Warlpiri overt phrase structure, and one way in which to understand that is to suppose that adjunct NPs mutually c-command each other, a coherent position if c-command is relevant. The view that it is relevant is supported, to some extent, by the observation that asymmetries do apparently exist, and matter, in overt phrase structure in certain clear cases in which a phrase includes one NP while excluding another -- e.g., the possessive construction, or infinitival dependent clauses. And in some such cases, Condition C of the Binding Theory appears to be implicated in accounting for observed coreference possibilities, or impossibilities -- e.g., in (45) through (47) above). But if the Binding Theory is inoperative among co-adjunct NPs, then Condition C cannot really be what is at work here.

In fact, the putative Condition C effect may be apparent only, since an alternative explanation exists which makes reference not to the Binding Theory, as that is normally understood, but to the discourse function of argument-linked overt pronouns. Consider again sentence (45), repeated here as (52):

(52) J.-kurlangu maliki-rli ka nyanungu wajilipi-nyi.  
J.-GEN dog-ERG PRES him/her chase-NPST  
'J.<i>'s dog is chasing him<j,\*i>.'

If the pronoun nyanungu corresponds to a discourse topic, then the failure of coreference is explained without making direct appeal to the c-command asymmetry which is undoubtedly present. If coreference here is a binding violation of some sort, then it is so because the R-expression

Jakamarra (abbreviated J. in (52)), a name, is bound by a discourse operator, and not because the R-expression is apparently c-commanded by its putative overt "antecedent", an co-adjunct NP.

This is not a mere quibble, as it could have empirical correlates. If this alternative conception of coreference in adjunction structures is correct, then a reported difference between Mohawk (Baker, 1990) and Warlpiri becomes understandable. In Mohawk, a sentence having much the same structure as (52) permits coreference between the possessor NP, a name, and a pronominal argument.

Unfortunately, however, comparison here is not perfect, since the Mohawk sentence which Baker cites in relation to this issue has a non-overt pronominal, not an overt one. In Warlpiri, even if the object in (52) were non-overt, coreference would be difficult, probably impossible, suggesting that in cases of this type even a non-overt pronominal corresponds to a discourse topic (cf. Huang, 1984). More research is needed, clearly.

In any event, in Mohawk, the reasoning would be, pronominals (non-overt ones at least) are not discourse topics, and coreference is possible because the Binding Theory is not directly relevant to adjuncts. In the Mohawk analogue of (52), both the pronoun and the R-expression, being essentially invisible to one another, behave as if free. The same would be true in Warlpiri, presumably, though the effect is obscured by the special discourse-related property of pronominal adjuncts.

#### 4.3. Adjuncts and The Binding Theory.

Although the binding principles may or may not be operative within the domain of the adjunction structure, this does not mean that the appearance of

an argument-linked adjunct NP is entirely without effect in determining the coreference possibilities in a Warlpiri clause.

Consider, for example, sentences (26) through (29) above. These show that an overt pronoun or name, linked to a position in the core argument structure, has the effect of "fixing" or "setting" the NP category of that core argument as pronominal or R-expression, respectively. Then, of course, the Binding Theory operates in the normal fashion, within the fully configurational core syntactic projection, accounting for the judgments which Laughren reports for sentences of this type (Laughren, 1989). Thus, as the judgments indicate, an R-expression subject can bind a pronominal oblique object, but an R-expression oblique object cannot be bound at all.<sup>4</sup>

I suspect that this category-setting relation, which evidently holds between overt argument-linked NP expressions and the core argument positions with which they are coindexed, is extremely important in the interpretation of Warlpiri sentences. And it is probably this relation which makes it possible to form conventional content questions of the type represented by (32-36) above. If adjuncts did not bear the suggested relation to their corresponding core argument positions, then it is difficult to imagine how questions could be formed, since the required operator-variable relation could not arise. But if a content question word "sets" the NP category of a coindexed argument as that of variable, then the appropriate structure is present.

I think it is unlikely that this can be a simple matter, however, given the well-known fact that question words cannot, in general, be adjuncts. But  
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4. The binding of an oblique pronominal by a subject, as in (26) and (28), is only an apparent violation of Condition B, presumably. Various accounts of this have been offered, e.g., Laughren (1989), and Hale (1981).

Warlpiri might be instructive here. This could be the significance of the general fact that content question words appear in initial position. In particular, they precede the auxiliary, suggesting, perhaps that they actually move to that position. Suppose pre-AUX position is higher than the IP projection to which adjunct NPs are attached. For example, it is possible that pre-AUX constituents are adjoined to CP or in the specifier thereof, the latter possibility being the most likely, given the fact that pre-AUX position is unary. If this is right, then a fronted question word would bind a variable in the adjunct structure (a possibility, surely). The adjunct variable would be linked to its corresponding argument, fixing its category in the appropriate way, and accounting, among other things, for the impossibility of coreference in variants of (51) and (53) in which ngana-ngku (who-ERG) and ngana-ku (who-DAT) replace, respectively, nyanungu-rlu (he-ERG) and Jakamarra-ku (J.-DAT)).

Contrary to what was implied in section 3.1 above, it is suggested here that question formation actually does involve movement in Warlpiri. However, the phrase which undergoes movement in the syntax of content questions is an adjunct, not an argument. It is presumably this fact that accounts for why the putative movement must always be "short", a circumstance which interacts with the general freedom of word order to give the superficial appearance of "no movement at all", i.e., the conclusion reached in 3.1.<sup>5</sup>

The suggestions just made raise a number of issues which I will not be able to go into here. In particular, however, it suggests that the appearance  
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5. In this respect, Warlpiri evidently differs from Mohawk (Baker, 1990), where question words are not adjuncts but core arguments and, accordingly, can undergo "long" movement, including extraction from dependent clauses, and so forth.

of an adjunct constituent in pre-AUX position is by virtue of movement. If this is to be classed as A-bar movement -- which it surely must be, under accepted assumptions<sup>6</sup> -- then the adjunct variable left at the foot of the corresponding chain might be expected to have some discernable effects, opening up a range of as yet untested possibilities, including the possibility that Warlpiri overt phrase structure actually has configurational properties. Although I doubt it, this might conceivably be the case, and the effects might show up, for example, if variable traces can be shown to occupy different positions correlating with different grammatical functions (subject, object). The fact that it does not seem possible, as yet, at least, to discover such differences is consistent with the conception of Warlpiri overt phrase structure adopted here, following the ideas of Jelinek (1984) and Baker (1990). But the investigation must continue, I feel, since the Warlpiri "evidence" for this position is, in large part, negative. That is to say, evidence is so far lacking for configurational asymmetries in overt phrase structure, but little positive evidence is forthcoming for non-configurational structure, except in so far as the negative evidence itself can be interpreted as direct evidence for it.

#### 5. Scrambling and Adjunction.

The term "scrambling" is now associated with a particular theory of free word order, namely, that according to which departures from a "basic" order are effected by means of syntactic movement. And, accordingly, "scrambling" is generally identified with movement and, in fact, means movement.

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6. A conclusion strengthened somewhat by the observation that coreference in sentences like (45) is not possible; an effect which would follow from reconstruction.

Recent work on a variety of languages which have free word order has given strong support to the scrambling theory, by showing that deviations from a basic order produce effects identical to those associated with established grammatical processes such as NP-movement and Wh-movement, processes whose movement status is unquestioned, given accepted theoretical assumptions.

However, Warlpiri cannot be classed unequivocally as a scrambling language. If this is the correct conclusion to draw from the data, then not all free word order languages are scrambling languages. Or, to be more exact, not all free word order can be due to scrambling.

It seems to me reasonable that there might exist languages of the type to which Warlpiri is assigned here -- i.e., languages whose free word order results simply from the fact that (certain or all) overt phrasal expressions are adjuncts (resumed, of course, in core argument positions by non-overt pro elements). The existence of such languages is an empirical question, plainly, since no theoretical barrier to it exists. Dislocation structures are commonplace among the languages of the world. Warlpiri (with Mohawk, and a number of others) differs from the commonplace only in that all overt NP expressions (in tensed clauses, at least) are adjuncts, necessarily so, since the core argument positions are fully determined by rich pronominal or anaphoric agreement. The Jelinek-Baker conception of languages of this "non-configurational" type expresses at once their special character and the manner in which they realize universal principles of grammar.

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