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## 80. Warlpiri

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### 1. Introduction

Warlpiri is an Australian Aboriginal language spoken in Central Australia. It has received a good deal of attention recently, because of its 'nonconfigurational' structure. The properties of Warlpiri that make it a 'non-configurational language', (such as free word order, discontinuous constituents and null anaphora) have been examined in various theories. Hale (1981a) and Nash (1986) present accounts of Warlpiri as a W\* language in revised extended standard transformational grammar, as does van Riemsdijk (1981). Bouma (1985, 1986) presents an account of nonconfigurationality within categorial grammar. Lexicalist accounts are given in Andrews (1985) and Simpson (1983b, 1991). Government-Binding accounts are given in Hale (1983), Jelinek (1984) and Laughren (1985a, b, c, 1989). Swartz (1988, 1991) looks at some of these properties in terms of a functional approach to grammar, and discourse pragmatics.

A general introduction to Warlpiri grammar is given in Nash (1986), and various aspects are discussed in papers in Swartz (1982a), as well as other references in the bibliography. Apart from grammar, other work on Warlpiri includes work on language acquisition by Edith Bavin and Tim Shopen, and on an auxiliary language, Warlpiri sign

language, by Adam Kendon. As well, Michael Kashket has prepared a parser for Warlpiri, based on the Government-Binding theory. A large body of material in Warlpiri is available, including oral and written material in machine-readable files prepared by the Massachusetts Institute of Technology Lexicon Project, as well as many books written by Warlpiri people and published by the Yuendumu Bilingual Resources Development Unit, and translations of the Bible prepared with the help of Stephen Swartz.

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In this sketch, we outline some of the important features of Warlpiri grammar, referring wherever possible to published works on the topics discussed.

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### 2. Some General Features of Warlpiri Clause Structure

#### 2.1. Verbal and Nominal Sentences

Warlpiri has both verbal and nominal sentences. In the former, illustrated by (1) and (2) below, the predicator is a verb. In the latter, illustrated by (3) and (4), the predicator belongs to the other major part of speech in Warlpiri, i.e. the noun:

- (1) Ngaju ka-rna wangka-mi.  
I IMPF-1sS speak-NPST  
'I am speaking'
- (2) Ngajulu-rlu ka-rna-ngku nyuuntu  
I-ERG IMPF-1sS-2sNS you  
nya-nyi.  
see-NPST  
'I see you.'
- (3) Ngaju (-rna) mata.  
I (-1sS) tired  
'I am tired.'
- (4) Ngaju (-rna) ngampurrpa nalija-ku  
I (-1sS) wanting tea-DAT  
'I want some tea.'

(See Appendix for abbreviations and glosses)

In a finite verbal sentence, an auxiliary (AUX) is obligatory – in (1) and (2) above, the base of the auxiliary is the present imperfective element *ka*. This is construed with the nonpast endings of the verb. In addition, person marking clitics – corresponding to the direct arguments (subject, object) of the verb – are suffixed to the base of the auxiliary. In (1), an intransitive sentence, the auxiliary contains just the first person singular subject clitic (glossed '1sS'), corresponding to the subject argument. But in the transitive sentence (2), in addition to the subject clitic immediately following the base, the auxiliary contains a non-subject clitic corresponding to the second person singular object argument (glossed '2sNS').

Nominal sentences are stative and have no phonologically overt auxiliary base, though they can optionally have pronominal clitics, as is shown by the parentheses in (3) and (4). This essay will be concerned primarily with the syntax of verbal sentences.

#### 2.2. Free Word Order

A prominent feature of Warlpiri surface syntax is free word order. A transitive sentence, with overt subject and object, may exhibit any of the theoretically possible orderings of these arguments and the verb:

- (5a) Ngarrka-jarra ka-pala-jana  
man-DUAL IMPF-3dS-3pNS  
wawirri-patu-ku  
kangaroo-PAUCAL-DAT  
wurru-ka-nyi  
stalk-move-NPST  
'The (two) men are stalking the (several) kangaroos.'
- (5b) Wawirri-patu-ku ka-pala-jana ngarrka-jarra wurru-ka-nyi.
- (5c) Ngarrka-jarra ka-pala-jana wurru-ka-nyi wawirri-patu-ku.
- (5d) Wawirri-patu-ku ka-pala-jana wurru-ka-nyi ngarrka-jarra.
- (5e) Wurru-ka-nyi ka-pala-jana ngarrka-jarra wawirri-patu-ku.
- (5f) Wurru-ka-nyi ka-pala-jana wawirri-patu-ku ngarrka-jarra.

Only the auxiliary complex is restricted in its placement. It normally appears in second position (the so-called Wackernagel position), if its initial element is not a complementizer. Otherwise, an auxiliary may appear either in second position or in initial position, as in (8), (with the exception that the negative complementizer *kula* cannot follow the verb).

This may be thought of as a phonological constraint – the AUX must be contained in the first phonological phrase of the phonological clause, where the phonological clause is an intonational unit marked by a final pause and a distinctive tonal melody. (Preceding the phonological clause there may be a topicalised element, as in (18)).

Although the choice of different word order alternatives is conditioned by stylistic and discourse factors, as yet only partially understood, it is also true to an extraordinary degree in Warlpiri that different orderings are considered to be repetitions of one another. When asked to repeat an utterance, speakers depart from the ordering of the original more often than not (cf. Hale 1981a, 1983, Laughren 1984, Swartz 1988, 1991).

#### 2.3. The Ergative Case System

The sentences of (1) through (5) serve to illustrate the essential character of the Warlpiri ergative case system. The subject of a canonical intransitive sentence, like (1), or the nominal sentences (3) and (4), is assigned the so-called absolutive (phonologically unmarked) case, as is the object of a canonical transitive sentence, such as (2). The subject of a transitive sentence of this type appears in the so-called ergative case (glossed ERG and realized morphologically by the ending *-ngku* after disyllabics and *-rlu* after polysyllabics and certain exceptional disyllabics). Canonical transitives are, however, not the only ones in which a dyadic predicator can appear. Thus, sentence (5) contains a dyadic verb which differs from that of (2) in that its subject is assigned the absolutive case while its object is assigned the dative (glossed DAT and realized morphologically by the ending *-ku*). Sentence (4) contains a dyadic nominal predicator, with a similar case assignment; the subject is assigned the absolutive case, and the other argument is assigned the dative case.

#### 2.4. Agreement with the AUXILIARY

These sentences also illustrate another prominent feature of the grammar of Warlpiri tensed clauses – to wit, agreement between the auxiliary complex and the arguments of the verb. As mentioned earlier, this is realized by means of pronominal clitics suffixed to the auxiliary base. These elements appear in the order subject-non-subject, with a partial exception to be noted later, and they embody the person and number categories of the corresponding argument. This agreement is suf-

ficiently "rich" to permit free use of so-called "null anaphora" in Warlpiri tensed clauses – i. e. arguments need not be expressed in syntax as overt noun phrases (cf. Hale 1973a, 1983, Jelinek 1984, Swartz 1991, Simpson 1991). This also holds for nominal sentences containing pronominal clitics. Thus, beside (1–5) above, we also find the following:

- (6a) Wangka-mi ka-rna.  
speak-NPST IMPF-1sS  
'I am speaking.'
- (6b) Nya-nyi ka-rna-ngku.  
see-NPST IMPF-1sS-2sNS  
'I see you.'
- (6c) Mata -rna.  
tired -1sS  
'I am tired.'
- (6d) Ngampurrpa-rna nalija-ku.  
wanting-1sS tea-DAT  
'I want some tea.'
- (6e) Wuru-ka-nyi ka-pala-jana.  
stalk-NPST IMPF-3dS-3pNS  
'The (two) are stalking them (more than two).'

As these sentences show, the clitics correspond to grammatical functions, not to the case categories of arguments. Thus, subject clitics – i. e. *-rna* (1sS = first person singular subject) and *-pala* (3dS = third person dual subject) – are construed with absolutive subjects in (1), (3), and (5), but with an ergative subject in (2). And non-subject clitics (i. e. *-ngku* (2sNS = second person singular non-subject) and *-jana* (3pNS = third person plural non-subject) – are construed with an absolutive object in (2) and with a dative object in (5).

In tensed sentences whose verb is triadic, taking both absolutive and dative "objects", only the dative exhibits true object properties (cf. Carrier 1976, Simpson/Bresnan 1983, Swartz 1982b) and is represented by a clitic in the auxiliary complex:

- (7) Ngajulu-rlu kapi-rna-ngku  
I-ERG FUTCOMP-1sS-2sNS  
karli-patu yi-nyi  
boomerang-PAUCAL give-NPST  
nyuntu-ku.  
you-DAT  
'I will give you (the) (several) boomerangs.'

The absolutive argument is not represented by a clitic in such cases. Here again, the direct arguments of the verb, including the absolutive, may be non-overt:

- (8) Kapi-rna-rla yi-nyi.  
FUTCOMP-1sS-3sDAT give-NPST  
'I will give (it) to him.'

As an aside, it should be pointed out that this sentence illustrates an additional detail of Warlpiri grammar as well, namely, the fact that a third person singular dative argument is overtly registered in the auxiliary (here by the clitic *-rla*). Otherwise, third singular arguments, subject or object, are not overtly represented by clitics in the auxiliary, and we do not represent them in our interlinear glossing. (It is very rare for dative arguments of nominal predicates to be cross-referenced by clitics – hence the lack of a clitic agreeing with *nalijaku* in (4)).

Sentence (8) also exemplifies the fact that an auxiliary complex with a complementizer being disyllabic, or longer, may remain in initial position. The alternative, with the auxiliary following the verb, is also possible here, of course.

## 2.5. Complex Clauses

As we show in Section 7., Warlpiri complex sentences involving tensed dependent clauses are adjoined in protasis or apodosis – they are not, strictly speaking, embedded. Infinitival dependent clauses, however, can be embedded. In addition to the use of these dependent clause types in forming complex sentences, Warlpiri makes liberal use of the "secondary predication" of nominal expressions. Secondary predicates may attribute a state to some referent, or describe the circumstances of an event, such as reason, or the resulting state. Secondary predication is important in Warlpiri, shouldering a large portion of the expressive burden in the language.

## 2.6. Syntactic Categories

The Warlpiri categorial (or part-of-speech) system recognizes two large classes: nouns and verbs. The verbal category is circumscribed in its notional content, while the nominal category appears, from the viewpoint of Indo-European languages, say, to express a rather wide range of notions, including some which are typically expressed by verbs in Indo-European languages.

Apart from verbs of emotion (e.g. *yulka-mi* 'like, love') and perception (e.g. *nyuntu-ku* 'see'), Warlpiri verbs typically denote overt types in which an entity undergoes a change caused to undergo, a change (in location,

stance, or condition, e.g. *yuka-mi* 'enter', *yirripi-mi* 'insert', *pali-mi* 'die, expire', etc.), assumes an attitude or stance (in some location or state, e.g. *nyina-mi* 'sit, be in location or state'), or produces some effect (in itself or in some other entity, e.g. *yula-mi* 'cry', *pi-nyi* 'affect (harmfully)'). (Here and elsewhere, when verbs are cited in isolation, they are given in their nonpast tense forms. This serves not only to provide pronounceable verbal words but also to identify the conjugation to which a cited verb belongs). (Cf. Hale 1982b, 1983, Hale/Platero 1986b, Hale/Laughren 1986, Nash 1986, Swartz 1982b).

The notional range of Warlpiri nouns extends from definite and fully referential expressions to ones which, although morphologically nominal, are almost exclusively predicative in use. Thus, the nominal category encompasses deictics (e.g. the pronouns and demonstratives, such as *ngaju* 'I', *nyampu* 'this'), the indefinite determiners (and "quantifiers", e.g. *jinta* 'one'), names (e.g. the subsection terms), substantives (e.g. *karnta* 'woman', *pirli* 'stone'), attributives (e.g. *wiri* 'big'), mental and psychological statives (e.g. *ngampurrpa* 'wanting, desirous'), and locatives and directionals (e.g. *kulkurru* 'in the middle'). Items toward the end of this listing are more often than not predicative in function, while those toward the beginning are more often argumental (cf. Hale 1983).

While nouns and verbs are the two major lexical categories in Warlpiri, heading the major syntactic phrasal categories (noun phrase and clause), there is a third lexical category which plays a significant role in Warlpiri morpho-syntax – namely, the preverb. While Warlpiri probably has only some 120 monomorphemic verbs, it boasts an impressive inventory of preverbs, and the category accounts for the bulk of the verbal vocabulary in the language (cf. Hale 1982b, Nash 1982, 1986, Swartz 1982b).

The Warlpiri preverb is evidently nominal in origin, and it is often ambiguous in its classification – as noun or preverb – in the synchronic grammar. In its basic position, it precedes the verbal stem, forming with it a metrical unit. However, many are rather loosely associated with their verbal hosts, in that an auxiliary, in seeking Wackernagel's position, may intervene between the preverb and the verb stem – particularly, but not exclusively, when the auxiliary has the null base. Thus, with the preverb *pina* 'back, returning', both (9a) and (9b) are possible:

- (9a) Pina-ya-nu- $\emptyset$ -pala.  
back-go-PST-PERF-3dS  
'They (two) went back.'
- (9b) Pina- $\emptyset$ -pala ya-nu.  
back-PERF-3dS go-PST  
'They (two) went back.'

In (9a) and (9b), the string (of preverb, auxiliary, and verb) forms a phonological phrase, with a single main stress – on the initial syllable. Warlpiri words, complex or simple, carry primary stress on the first syllable. The string in (9a) (of PV, V, AUX) forms a single phonological word which also constitutes a phonological phrase, whereas in (9b) the string (of PV AUX V) consists of two phonological words which form a single phonological phrase.

The nature of the morphological binding between the preverb and the verb is such that, with the most "productive" preverbs, at least, the relative order of verb and preverb may be reversed – maintaining the metrical unity of the combination, normally:

- (10) Ya-nu-pala pina.  
go-PST-PERF-3dS back  
'They (two) went back.'

As hinted in the preceding paragraph, preverbs are not all equally "productive". They range from those (like *pina* 'back, returning') which are fully productive, forming predicates whose semantics is entirely compositional, to those (like *wurru-*, the first two syllables of the verb *wurru-ka-nyi* 'stalk', see (5) above) which, though clearly preverbs morphologically, are unique in their occurrence (according to our records, at least) and utterly obscure in their semantics.

## 3. Constituent Structure and the Sentence

### 3.1. Discontinuous Constituents and AUX Placement

The second-position placement of the auxiliary in Warlpiri offers certain clues to surface constituent structure in the language. If we can assume, as is usually done, that what precedes a second-position auxiliary (in the normal unmarked execution of a sentence) comprises a single constituent, then an argument expression consisting of a noun and modifier (e.g. determiner, genitive, attributive) forms a single constituent, though it may consist of more than one word:

- (11a) Kurdu yalumpu-rlu ka-jana  
child that-ERG IMPF-3pNS  
jiti-rni.  
tease-NPST  
'The child is teasing them.'
- (11b) Maliki ngaju-nyangu-ku  
dog me-GEN-DAT  
ka-rna-rla kuyu yi-nyi.  
IMPF-1sS-3sDAT meat give-NPST  
'I am giving meat to my dog.'
- (11c) Maliki wiri-ngki-0-ji  
dog big-ERG-PERF-1sNS  
yarlku-rnu.  
bite-PAST  
'A big dog bit me.'

The evidence afforded by the position of the auxiliary here coincides with another type of evidence. The case inflections in (11), being marked once only, at the right-hand margins of the nominal expressions, indicate that these are single constituents. Where a nominal expression is discontinuous – a possibility in Warlpiri – each of the separate sub-constituents must be marked for case:

- (12) Maliki-rli-0-ji yarlku-rnu  
dog-ERG-PERF-1sNS bite-PAST  
wiri-ngki.  
big-ERG  
'A big dog bit me.'

The same evidence applies in the case of infinitival expressions, as exemplified by the first two words in (13). The infinitival verb and its object, inflected by a complementizer (appearing just once, at the right margin), may precede the auxiliary:

- (13) Marna nga-rninja-kurra ka-rna  
grass eat-INF-OBJCOMP IMPF-1sS  
wawirri nya-nyi.  
kangaroo see-NPST  
'I see a kangaroo eating grass.'

Both the position of the infinitival expression and its inflection by a single complementizer indicate that it is a single constituent in the surface syntax of (13). Like nominal expressions, infinitivals too may be discontinuous, in which case the complementizer will appear not only on the verb but on its object as well:

- (14) Marna-kurra ka-rna wawirri  
grass-OBJCOMP IMPF-1sS kangaroo  
nya-nyi nga-rninja-kurra.  
see-NPST eat-INF-OBJCOMP  
'I see a kangaroo eating grass.'

Complex locative expressions, consisting typically of a nominal in the locative case in apposition with an inherently locative nominal, may also appear in pre-auxiliary position and therefore, presumably, form syntactic constituents when they so occur, (cf. Hale 1981a, 1982a, Laughren 1989, Nash 1986).

- (15) Piri-ngka kankarlumparra  
mountain-LOC over  
ka ya-ni pintapinta.  
IMPF go-NPST airplane  
'The airplane is going over the mountain.'

### 3.2. Flat Structure

If it is true that what precedes the auxiliary in the above examples is a syntactic constituent, and if it is true that a sequence which cannot precede the auxiliary is not a constituent, but rather more than one, then it is evident that there is no surface constituent corresponding to the verb phrase, as normally understood. The verb may precede the auxiliary, – even a complex verb including a pre-verb may do so, as in (9a) and (6e). But it may not be accompanied there by any of its complements. Thus, (16) is ungrammatical (unless the first word is topicalised):

- (16) \*Wawirri nya-nyi ka-rna.  
kangaroo see-NPST IMPF-1sS  
'I see a kangaroo.'

Here the verb and its object, in the order object-verb, jointly precede the auxiliary. The order verb-object is equally ungrammatical:

- (17) \*Nya-nyi wawirri ka-rna.  
see-NPST kangaroo IMPF-1sS  
'I see a kangaroo.'

The ill-formedness is presumably due to the fact that the verb and its object do not form a single subconstituent within the clause.

There is an apparent exception to the principle that the auxiliary is in second position in surface structure. This is the common Warlpiri topicalization construction in which a constituent, a topic, is displaced to the left of the clause to which it relates, the comment:

- (18) Wawirri nyampu, ngajulu-rlu  
kangaroo this, I-ERG  
0-rna pantu-rnu.  
PERF-1sS spear-PAST  
'This kangaroo, I speared it.'

Sentence (16) would be grammatical with *wawirri* as a topic, but it is unlikely that this could save (17).

The dislocated phrase, or topic, does not count in determining the surface positioning of the auxiliary. Typically, the topic is marked by a characteristic falling-rising intonation on the final two syllables, and it is normally, but not inevitably, separated from the comment by a pause (cf. Laughren 1984, Swartz 1991).

Sentences of the type represented by (18) are not true exceptions to the canonical positioning of the auxiliary, since the relevant domain to which the second-position principle applies is just the comment portion of the topicalization construction.

The evidence just adduced for the constituent structure of Warlpiri sentences in their surface form indicates that this structure is "flat", in the sense that the verb does not form a separate constituent with any of its arguments. This is consistent not only with the facts concerning the placement of the auxiliary but also with the free word order, exemplified in (5). This freedom is quite evidently not at all constrained by any hierarchical organization uniting the verb with particular ones of its arguments.

This is not to say, however, that there is no phrasal structure at all within the clause, since nominal, locative, and infinitival expressions do form constituents. The free constituent order observed within finite clauses is also observed in nominal and locative expressions; their component words may be freely ordered, although there are preferred orders (cf. Swartz 1988, 1991). However, in nominal expressions a case inflection applying to the whole must appear on the final word. The internal word order of infinitivals is more rigid – the object must directly precede the verb (unless the object is itself marked with the complementizer). This probably follows from the fact that the complementizer must appear on the infinitival verb and must be final in the phrase.

### The Auxiliary and Agreement

The AUX has a flat template-like structure, comprising morphemes which express mood, aspect and tense (which we call "verbal morphemes"), and morphemes which express agreement (which we call "argumental morphemes"). The full AUX consists of an auxil-

ary base, comprising an obligatory ASPECT element optionally preceded by a sentential COMPLEMENTIZER element; the auxiliary base is followed by obligatory pronominal AGREEMENT clitics.

AUX is obligatory in finite verbal clauses (although it may be phonologically null if there is no COMP and ASP is PERFECTIVE). AUX is restricted in its occurrence in nominal-headed clauses: ASP is neutralised, and only the COMP elements *kula* (NEGCAMP) and *kuja* (FACTCOMP) can occur, while the AGR pronominal clitics are optional. AUX cannot appear in nonfinite clauses.

#### 4.1. Verbal AUX Morphemes

The sentential categories of tense, mood and aspect are realized discontinuously in the surface string of a Warlpiri sentence. The meanings associated with the verbal inflectional suffixes correspond to those traditionally included in the tense and mood categories. For any given clause, the choice of verbal AUX morphemes and the choice of tense/mood suffix on the verb are interdependent. Thus, in a Warlpiri finite clause, tense-mood-aspectual information is encoded through the interaction of co-occurring members of each category.

There is a perfective/imperfective contrast expressed in Warlpiri by means of the T/ASP AUX morpheme. The perfective aspect morpheme is phonologically null, while the imperfective aspectual morpheme is realized as *-lpa* in conjunction with the past and irrealis verb forms, and as *ka* with the nonpast verb forms. The perfective-imperfective contrast with *-lpa* is shown in (19).

- (19a) Wati-0-li ya-nu.  
man-PERF-3pS go-PAST  
'The men left.'
- (19b) Wati-lpa-lu ya-nu.  
man-IMPF-3pS go-PAST  
'The men were leaving.'

The categories of sentential complementizers, which we refer to as COMP, are listed in the Appendix. Some of these will be discussed further in Section 8. There are complex compatibility constraints on the coexistence of COMP and T/ASP morphemes and verbal tense/mood suffixes, (cf. Hale 1973a, Laughren 1982, Nash 1986).

#### 4.2. Agreement: Person-Number Clitics

The third category of morphemes which constitute the AUX are the agreement (AGR) pronominal clitics. These contain morphemes

belonging to two subcategories: PERSON and NUMBER. These categories are indirectly related to the main predicator (verbal or nominal) of a finite clause, in the sense that they manifest features which identify the direct arguments of the predicator, in addition to certain more peripheral arguments.

The person-number auxiliary clitics and their interaction with the transitivity features of the clause are of considerable complexity (cf. Hale 1973a, Laughren 1977, Nash 1986, Hale/Laughren 1986, Simpson/Withgott 1986, Simpson 1991, Swartz 1982b, 1991). There is one series of subject clitics, another of non-subject clitics. Warlpiri person-number clitics can be classified according to whether, in their surface form, they are composed of a portmanteau person-number morpheme, or whether they consist of two distinct clitics – one being the person morpheme, the other, the number morpheme. The clitics belonging to the latter set may appear discontinuously in the AUX template.

The presence of a subject clitic is obligatory in the AUX except under some very specific conditions, which we will leave aside here. The presence or absence of a non-subject clitic depends on a number of complex factors (cf. Hale 1973a, Laughren 1977). Which argument agrees with a subject clitic, and which arguments agree with non-subject clitics will be discussed in Section 5.

Normally, both subject and non-subject clitics agree with the arguments of the verb in both person and number. However, there are certain exceptions. These include uses of plural for singular referents and of third person for second person referents, in "special language" (auxiliary languages used in addressing or referring to certain sets of kin relations). Another exception is found in a comitative construction in which nominals with dual or plural marking appear with subject clitics of all persons:

- (20) Jakamarra-jarra-rlujarra ya-nu.  
Jakamarra-DUAL-1ds go-PAST  
'I went with Jakamarra.'

A third exception, observed by Stephen Swartz in Lajamanu Warlpiri, is the appearance of second person clitics in sentences with presentational verbs and non-second person subjects. He says that, typically, this combination is used in narratives to announce a surprise development.

- (21) Kala-npa nyina-nya marliyarra.  
but-2s sit-REST man  
'There you go, the man's sitting there!'

The number portion of the clitic agrees with the actual subject of the sentence:

- (22) Kala-npala nyina-nya  
but-2ds sit-REST  
marliyarra-jarra.  
man-DUAL  
'There you go, the two men are sitting there!'

### 5. Predicators, Argument Structures, and Case Arrays

Predicates in Warlpiri may be headed by either of the two morphologically distinct categories, verbs or nominals (cf. section 2.1.). In either case this head, or predicator, denotes an action, process, or state involving one or more participants, commonly referred to as its arguments. The lexical entry of a given predicator defines its argument structure which, in turn, determines the initial syntactic structure of core arguments which it projects.

While the surface syntactic structure of a Warlpiri sentence is evidently "flat", in the sense that there is no evidence for a verb phrase at that level of syntactic representation (cf. 3.2.), it is nonetheless clear that the syntactic organization of a predicator's arguments, as defined by its lexical argument structure, exhibits an asymmetry distinguishing its subject from its complements, if any. This asymmetry is revealed in the Warlpiri systems of anaphora, or binding. We first look at verbs with ergative subjects, and then at verbs with absolutive arguments.

#### 5.1. Verbs with Ergative Subjects

Consider, for example, the verb of (23) below:

- (23) Ngarrka-jarra-rlu ka-pala-jana  
man-DUAL-ERG IMPF-3ds-3pNS  
maliki-patu paka-rni.  
dog-PAUCAL strike-NPST  
'The (two) men are striking (killing) the dogs.'

This verb takes two core arguments: one assigned ergative case (ERG), the other the phonologically null absolutive case (ABS). The argument with ergative case agrees with the subject clitic *-pala*, while the argument with absolutive case agrees with the non-subject clitic *-jana*.

Where one of these arguments anaphorically binds the other, the binder is the erga-

tive argument, and the anaphor is the absolutive argument (represented only by the anaphoric clitic *-nyanu* 'reflexive-reciprocal' (REFL), occupying non-subject position within the auxiliary, as in:

- (24) Ngarrka-jarra-rlu ka-pala-nyanu  
man-DUAL-ERG IMPF-3ds-REFL  
paka-rni.  
strike-NPST  
'The (two) men are striking themselves/each other.'

This direction of binding, holding for all verbs which exhibit the ERG-ABS case array, is never reversed. Hence an ergative argument can only be anaphorically bound "from outside"; that is to say, an ergative argument of a nonfinite clause can only be bound by an argument in a matrix clause in a "control structure", as in (13). In that sentence, the ergative argument, the eater, of the non-finite verb *nga-rni-nja* 'eat' is bound – i.e. "controlled" – by the object *wawirri* of the matrix verb *nya-nyi*. Thus, for ERG-ABS verbs, the ergative argument is the "prominent" argument. It is the ergative which may bind another argument clause-internally in reflexive-reciprocal constructions; and it is the ergative which may be bound from outside, by a matrix argument. Neither of these properties holds of the absolutive in these verbs. Since these are both properties indicating subjecthood, the ergative, therefore, is the subject.

The facts of anaphoric binding and control, of course, are in accord with the facts of agreement. It is the ergative argument that agrees with the subject clitics, as can be seen in (24) and (23), as well as in other illustrative sentences used here.

Not only for ERG-ABS verbs, but for all verbs whose case arrays include an ergative, the ergative is the subject. (25) exemplifies the prototypical ERG-ABS-DAT verb *yi-nyi* 'give'. The ergative argument is represented by the ergative-marked noun *karnta-jarra-rlu* and agrees with the subject clitic *-pala*. The absolutive argument is represented by the noun *miyi* (not cross-referenced by a clitic), while the dative argument is represented by the non-subject REFL clitic *-nyanu*. The agreement structure indicates that the ergative argument is the subject, as does the binding relation, according to which the ergative subject binds the dative object:

- (25) Karnta-jarra-rlu  
woman-DUAL-ERG  
ka-pala-nyanu miyi yi-nyi.  
IMPF-3ds-REFL food give-NPST  
'The (two) women are giving each other food.'

And, correspondingly, the verb in (26) exemplifies the ERG-DAT array. The ergative argument agrees with the subject clitic, and the dative argument agrees with the non-subject clitic.

- (26a) Kurdu-patu-rlu  
child-PAUCAL-ERG  
ka-lu-ngalpa warri-rni  
IMPF-3pS-1piNS seek-NPST  
ngalipa-ku  
us-DAT  
'The children are looking for us (plural inclusive).'
- (26b) Kurdu-patu-rlu  
child-PAUCAL-ERG  
ka-lu-nyanu warri-rni.  
IMPF-3pS-REFL seek-NPST  
'The children are looking for each other.'

Although it is not a prominent feature of Warlpiri, there exists a class of verbs whose case array consists solely of an ERG argument. Typically, these are morphologically complex verbs containing preverbs of clearly nominal origin. The single argument of such verbs, not surprisingly, exhibits the properties of a subject, as illustrated by the agreement pattern of (27) and by the binding (control) relation of (28):

- (27) Kurdu-jarra-rlu ka-pala  
child-DUAL-ERG IMPF-3ds  
ngungkurru-pangi-rni.  
snoring-dig-NPST  
'The (two) children are snoring.'
- (28) Kurdu-jarra ka-rna-palangu  
child-DUAL IMPF-1sS-3dNS  
purda-nya-nyi  
audio-see-NPST  
ngungkurru-pangi-rminja-kurra.  
snoring-dig-INF-OBJCOMP  
'I hear the (two) children snoring'.

In (28), of course, the subject of the non-finite verb *ngungkurru-pangi-rminja* may not appear – it is bound, or controlled, and so must be non-overt. It is without question an ERG argument, however, as is clear from the case marking which appears on the overt subject *kurdu-jarra-rlu* in the corresponding finite clause (27).

## 5.2. Verbs with Absolutive Subjects

Not all verbs have an ergative argument in their case array, as is evident from examples in Section 2. Where there is no ergative, the absolutive assumes the subject function. This fact is illustrated in (1) above, where the verb *wangka-mi* 'speak' appears in its monadic use, representing the simple ABS array. The ABS-DAT array is exemplified by (5) above, and also in (29), where *wangka-mi* appears in a dyadic use. In both (5) and (29), the absolutive argument agrees with the subject clitic and the dative argument agrees with the non-subject clitic:

- (29) Ngaju ka-rna-ngku wangka-mi  
I IMPF-1sS-2sNS speak-NPST  
nyuntu-ku.  
you-DAT  
'I am speaking to you.'

The dative argument may be bound by the absolutive subject in a reflexive/reciprocal construction:

- (30) Wangka-mi ka-lu-nyanu  
speak-NPST IMPF-3pS-REFL  
wati-patu.  
man-PAUCAL  
'The men are talking to each other.'

Similarly, the absolutive subject of a non-finite verb may be controlled by an argument of the matrix verb, as illustrated in (31) in which the dative argument of the higher verb controls the absolutive subject of *nyina-nja-kurra*.

- (31) Wangka-mi ka-rna-rla  
speak-NPST IMPF-1sS-3sDAT  
wati-ki nyina-nja-kurra(-ku).  
man-DAT sit-INF-OBJCOMP(-DAT)  
'I am talking to the man while (he's) sitting.'

The sentences so far exhaustively exemplify the assignments of grammatical case categories to the subject and object functions. The subject is assigned the ergative case, if there is one (i.e. if the verb has an ergative in its case array); otherwise, the subject is assigned the absolutive. The object is assigned the dative, if there is one, otherwise the absolutive. In a triadic case array, as in (25), therefore, the absolutive is assigned to an argument which bears neither the subject nor the object function (cf. Swartz 1982b).

That the dative argument is the grammatical object in such structures can be shown, in

part. Thus, in (7) above, the dative argument, not the absolutive, is cross-referenced by non-subject agreement morphology in the auxiliary. The objecthood of the dative argument is shown also by control of infinitivals in *-kurra* 'OBJCOMP' clauses (cf. Carrier 1976, Hale 1982a, 1983, Simpson/Bresnan 1983). The subjects of these infinitivals are controlled by a matrix object. In (31) and (32) it is the dative argument which controls the infinitival subject.

- (32) Kurdu-jarra-ku ka-rna-palangu  
child-DUAL-DAT IMPF-1sS-3dNS  
miyi yi-nyi  
food give-NPST  
nyina-nja-kurra(-ku).  
sit-INF-OBJCOMP(-DAT)  
'I am giving food to the (two) children  
(while they are) sitting.'

## 5.3. Alternations in Semantic Role and Case

Some verb classes show an alternation between a dative object and an absolutive object involving a change of meaning. These include perception verbs, and verbs of impact and concussion (cf. Guerssel/Hale/Laughren et al. 1985, Hale 1982b, Hale/Laughren 1986, Laughren 1988b, Swartz 1982b, Simpson 1991).

That both the dative and the absolutive arguments act as objects is shown by the fact that they control the infinitival subject of an OBJCOMP clause:

- (33a) Janganpa-rna paka-rnu  
possum-1sS chop-PAST  
ngajulu-rlu nguna-nja-kurra  
I-ERG lie-INF-OBJCOMP  
'I chopped out a possum while it was sleeping - and I got the possum.'
- (33b) Janganpa-ku-rna-rla paka-rnu  
possum-DAT-1sS-3sDAT chop-PAST  
ngajulu-rlu  
I-ERG  
nguna-nja-kurra(-ku).  
lie-INF-OBJCOMP(-DAT)  
'I chopped for a possum while it was sleeping - and I didn't necessarily get the possum.'

A special case of the alternation with verbs of impact and concussion is the 'conative' or 'attempted action' alternation, in which a second dative clitic is used in the AUX in addition to the clitic that cross-references the dative object:

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- (34a) Ngarrka-ngku ka marlu  
man-ERG IMPF kangaroo  
luwa-rni.  
shoot-NPST  
'The man is shooting the kangaroo.'
- (34b) Ngarrka-ngku ka-rla-jinta  
man-ERG IMPF-3sDAT-3sDAT  
marlu-ku luwa-rni.  
kangaroo-DAT shoot-NPST  
'The man is shooting at the kangaroo.'

Again, both the dative and the absolutive argument can control the infinitival subject of OBJCOMP clauses.

## 5.4. Adjunct Datives

In preceding sections, we have seen the suffix *-ku* used as a dative marking a core argument of the verb. We turn now to other uses of this suffix in which its status as a dative object argument marker is more questionable. (35) illustrates some such uses:

- (35a) Yapa ka-lu muku-ya-ni  
Person IMPF-3pS all-go-NPST  
miyi-ki.  
food-PURP  
'The people are all going for food.'
- (35b) ... Purra-nja-rla (ngaka)  
cook-INF-PRECCOMP (later)  
kala rdipi-ja  
PASTCOMP set.off-PAST  
wirrkardu-ku-warnu  
several-FREQ-ASSOC  
ngurra-ku-warnu.  
camp-FREQ-ASSOC  
'Having cooked it, he set off again after several days.'
- (35c) Ngarrka-ngku ka-rla  
man-ERG IMPF-3sDAT  
kurdu-ku karli jarnti-rni.  
child-DAT boomerang trim-NPST  
'The man is trimming the boomerang on account of the child.'

In neither (35a) nor (35b) does the adjunct agree with a non-subject clitic in the AUX. In (35a), the nominal marked with this suffix indicates the purpose of the action, and is glossed PURP, while (35b) shows the *-ku* suffix indicating the frequency of an action. (This use of *ku*, glossed as FREQ (Frequentative), differs from the dative, and from the bare purposive uses, in that it may be followed by further case-marking).

In (35c) the suffix *-ku* indicates for whose benefit the action is performed. The person and number of this participant agree with the

non-subject clitic in the AUX. This is a dative case use of the suffix *-ku* - to denote a participant which, in some unspecified way, is affected by the action or event denoted by the verb, or provides the cause or purpose of that action or event. The dative is not a direct argument of the verb, but rather an adjoined argument, the so-called 'adjunct dative'. Agreement with a non-subject clitic in the AUX may be interpreted as foregrounding the participant concerned.

The adjunct dative may be expressed as a reflexive bound by the subject, as in (36) in which the dative benefactive 'themselves' is expressed by a reflexive pronominal clitic *-nyanu* bound to the subject *wati-patu-rlu* and the subject pronominal clitic *-lu*:

- (36) Wati-patu-rlu-lpa-lu-nyanu  
man-PAUCAL-ERG-IMPF-3pS-REFL  
warlu yarrpu-rnu.  
fire light-PAST  
'The men were lighting themselves a fire.'

Intransitive verbs (and sometimes even transitive verbs) may go a step further, and permit the dative participant to act as the object. A verb such as *ngarlarrimi* 'laugh' is essentially an intransitive verb. However, in (37) it appears with a dative participant, which agrees with the dative non-subject clitic in the AUX. That this dative is an object is shown by the fact that it can control an OBJCOMP *-kurra* clause:

- (37) Kurdu ka-rla yinka  
child IMPF-3sDAT laughing  
ngarlarrimi  
smile-NPST  
wangka-nja-kurra-ku.  
talk-INF-OBJCOMP-DAT  
'The child is laughing at the one talking.'

Agreement with the AUX allows the argument marked with *-ku* to be foregrounded, and raised to the status of object.

However the dative participant may act as the controller of a *-rlarni* OBVCOMP or "pure obviative complementizer" clause, as in (38), even though such clauses cannot be controlled by objects (absolutive or dative) in the matrix clause.

- (38) Kurdu-ngku ka(-rla) jarntu  
child-ERG IMPF-(3sDAT) dog  
waru-wajili-pi-nyi karnta-ku,  
around-chase-NPST woman-DAT,

miyi purra-nja-rlarni(-ki)  
 food cook-INF-OBVCOMP(-DAT)  
 'The child is chasing the woman's dog  
 around while she is cooking food.'

Control of the OBVCOMP is independent of whether or not the participant marked with *-ku* is foregrounded and agrees with the AUX, as the optionality of the third person singular dative non-subject clitic *-rla* in (38) shows.

Thus there are three main uses of the suffix *-ku*: as adjuncts with no AUX agreement (the *FREQ* or *PURP* uses), as adjunct datives with AUX agreement and control of OBVCOMP clauses, and as objects with AUX agreement and control of OBVCOMP clauses.

The relation of the dative participant to the action or event may be made more specific by combining the verb with one of a set of preverbs that add dative participants: *jirnganja*, *yirrkirnpa* 'with (dependent)', *jurnia* 'away from, removal from', *kaji*, *ngayi* 'for, on behalf of', *marlaja*, *marlangka* 'because of, associated with', *piki* (*piki*) 'in danger of'. The meanings given to the preverbs further specify the relation between the dative participant and the action or event denoted by the verb. Thus, in (39) the action is "cutting the boomerang", the dative participant is "the little child", and the preverb *kaji* indicates that the relation between the child and the boomerang-cutting is benefactive:

- (39) Ngarrka-ngku ka-rla kurdu  
 man-ERG IMPF-3sDAT child  
 wita-ku karli  
 small-DAT boomerang-ABS  
 kaji-jarnti-rni.  
 benef-trim-NPST  
 'The man is trimming the boomerang  
 for the little child.'

See Craig/Hale (1988), Hale (1982b), Nash (1982, 1986b), Swartz (1982b), Simpson (1991).

## 6. Anaphora

In Warlpiri, the pronominal features of person and number are expressed by two distinct syntactic categories: bound pronominal clitics realized in AUX, and optional free pronouns. The reciprocal-reflexive non-subject clitic *-nyanu* is always coreferent with the subject of the finite verb in the same clause

as itself. The anaphor can never be bound by an element bearing a non-subject grammatical function.

### 6.1. Disjoint Pronominal Reference and Pronominal Coreference

While a free pronoun occurs in the same syntactic position as a common or proper noun as the argument of a verb, bearing the same set of grammatical functions and case-marking, its distribution is restricted by relations of possible or impossible coreference between a pronoun and another argument in the same clause.

A free pronoun such as the third person pronoun *nyanungu* cannot be coreferent with the reflexive anaphor *-nyanu* and hence with the subject of a sentence in which *-nyanu* expresses the object of a verb that takes an ERG subject. This constraint is demonstrated in (40)–(42):

- (40a) Jakamarra<sub>i</sub>-rlu ka-nyanu<sub>i</sub>  
 Jakamarra-ERG IMPF-REFL  
 (\*nyanungu<sub>i</sub>) paka-rni.  
 PRONOUN hit-NPST  
 'Jakamarra is hitting himself (\*him<sub>i</sub>).'  
 (40b) Jakamarra<sub>i</sub>-rlu ka nyanungu<sub>i</sub>  
 Jakamarra-ERG IMPF PRON  
 paka-rni.  
 hit-NPST  
 'Jakamarra is hitting him.'  
 (40c) Jakamarra<sub>i</sub>-rlu ka-nyanu<sub>i</sub>  
 Jakamarra-ERG IMPF-REFL  
 (\*nyanungu<sub>i</sub>)-ku kuyu yi-nyil.  
 PRON-DAT meat give-NPST  
 'Jakamarra is giving himself (\*him<sub>i</sub>)  
 meat.'  
 (40d) Wati<sub>i</sub>-patu-rlu  
 man-PAUCAL-ERG  
 ka-lu-nyanu<sub>i</sub>  
 IMPF-3pS-REFL  
 warri-rni (\*nyanungu<sub>i</sub>)-rra-ku  
 search-NPST PRON-PL-DAT  
 '\*The men are looking for each other  
 (\*them<sub>i</sub>).'

The constraint which prevents the pronoun from bearing the absolutive or dative object function in (38)–(40) does not apply when it bears a dative adjunct function and is construed with the anaphor *-nyanu*. This is shown in (41):

- (41a) Jakamarra<sub>i</sub>-rlu  
 Jakamarra-ERG  
 ka-nyanu<sub>i</sub>-rla warri-rni  
 IMPF-REFL-3sDAT search-NPST

kuyu-ku nyanungu<sub>i</sub>-ku.  
 meat-DAT PRON-DAT  
 'Jakamarra is looking for his meat.'  
 OR 'Jakamarra is looking for meat  
 for himself.'

- (41b) Jakamarra<sub>i</sub>-rlu ka-nyanu<sub>i</sub> warlu  
 Jakamarra-ERG IMPF-REFL fire  
 yarrpi-rni nyanungu<sub>i</sub>-ku.  
 light-NPST PRON-DAT  
 'Jakamarra is lighting himself a fire.'

A dative pronoun construed with the anaphor *-nyanu* bearing the object grammatical function may be realized in a sentence containing a verb which takes an absolutive subject and a dative object, as shown in (42):

- (42a) Nyanungu<sub>i</sub>-ku ka-nyanu<sub>i</sub>  
 PRON-DAT IMPF-REFL  
 Jakamarra<sub>i</sub> yulka-mi/wangka-mi.  
 Jakamarra love/talk-NPST  
 'Jakamarra loves himself/talks to  
 himself.'  
 (42b) Jakamarra<sub>i</sub> ka-nyanu<sub>i</sub>  
 Jakamarra IMPF-REFL  
 yulka-mi/wangka-mi.  
 love/talk-NPST  
 'Jakamarra loves himself/talks to  
 himself.'  
 (42c) Jakamarra<sub>i</sub> ka-rla-<sub>i</sub>  
 Jakamarra IMPF-3sDAT  
 nyanungu<sub>i</sub>-ku yulka-mi.  
 PRON-DAT love-NPST  
 'Jakamarra loves him/her.'

See Farmer/Hale/Tsujimura (1986), Laughren (1985b, 1988a), Simpson (1991).

No non-pronominal nominal expression may be construed directly with the anaphor *-nyanu*, which would imply binding of that nominal by the verb's subject. However, indirect construal is possible – a nominal which is predicated of the argument or adjunct expressed by the anaphor *-nyanu* may be overtly expressed as shown in (43). In (a) the ABS nominal *jurru* 'head' is predicated of the object expressed by *-nyanu* (see Hale 1981b, Laughren 1992, for a detailed study of part-whole syntax in Warlpiri). In (b) the ABS nominal *murrumurru* 'pain' is predicated of the argument associated with the anaphor *-nyanu*. In (c) the ABS nominal *wati* 'man' is predicated of the non-subject argument associated with *-nyanu*.

- (43a) Wati<sub>i</sub>-ngki-nyanu<sub>i</sub> paka-rnu jurru.  
 man-ERG-REFL hit-PAST head  
 'The man hit himself (on) the head.'

- (43b) Karnta-ngku-nyanu<sub>i</sub> purdanya-ngu  
 woman-ERG-REFL feel-PAST  
 murrumurru.  
 pain  
 'The woman felt herself (to be) in  
 pain.'  
 (43c) Wati-iki-li-nyanu nya-ngu  
 man-CS-3pS-REFL see-PAST  
 kurdu-warnu-rlu.  
 child-ASSOC-ERG  
 'The young people saw each other (to  
 be) men then.'

## 7. Complex Clauses

### 7.1. Sentential Complements

In Warlpiri, very few verbs select events as arguments, and thus few allow sentential complements. The main semantic classes appear to be verbs of ordering, telling, enlisting, and verbs meaning "fail", or "cause to fail", as in (44). Selected sentential complements must be non-finite, and may generally be replaced by a nominal bearing the same complementizer, as in (c).

- (44a) Walya kiji-rninja-ku ka-rna  
 earth throw-INF-PURP IMPF-1sS  
 kapakapa-jarri-mi (ngaju).  
 fail-INCH-NPST  
 'I am failing to throw out the dirt.'  
 (44b) Nyuntulu-rlu ka-npa-ju  
 you-ERG IMPF-2sS-1sNS  
 kapakapa-ma-ni walya  
 fail-CAUS-NPST ground  
 kiji-rninja-ku.  
 throw-INF-PURP  
 'You are preventing me from (succeed-  
 ing in) throwing out the dirt.'  
 (44c) Ngaju ka-rna jaru-ku  
 I IMPF-1sS language-DAT  
 kapakapa-jarri-mi.  
 fail-INCH-NPST  
 'I fail at, make mistakes in language.'

What the subject of the non-finite clause will be is predictable – if the matrix verb has one argument, as in (a), that argument will control the subject of the non-finite clause. But if the matrix verb has two arguments, as in (b), the object argument will control the subject of the non-finite clause (cf. Hale 1982b, Nash 1986, Simpson 1983).

### 7.2. Infinitive and Nominal Secondary Predicates

Secondary predicates, as opposed to the primary verbal or nominal predicate of a finite clause, have no independent tense, mood, as-

pect or overtly realized pronominal clitics associated with them. A secondary predicate consists of a nominal or infinitive verb to which a complementizer case and/or nominal case is suffixed. Non-subject arguments of the nominal or infinitive, as well as various adjuncts and modifiers, may also be expressed.

There are basically two classes of secondary predicate: eventive and stative. Eventive predicates are headed by a complementizer case which indicates the temporal relation of the event denoted by the secondary predicate to the event or process denoted by the primary (or finite) predicate. The eventive interpretation is attributable to the complementizer case, since a referential nominal bearing one of these cases will be interpreted as referring to some event involving the referent of the subject of the secondary predicate and the referent of the nominal expression.

In (45), stative and eventive secondary predicates are compared. In (a) the ABS case-marked nominal *nyurnu* 'sick' is a stative predicate. Its subject is *karnta* 'woman' which is the ABS case-marked object of the verb. In (b) *nyurnu* is interpreted as part of an eventive predicate headed by the object complementizer case *-kurra*, meaning something like 'involved with the sick one'. The subject of this eventive secondary predicate is coreferent with *karnta*, the ABS case-marked object of the finite verb.

- (45a) Wati-ngki karnta nya-ngu  
man-ERG woman see-PAST  
nyurnu.  
sick  
'The man saw the woman (was) sick.'
- (45b) Wati-ngki karnta nya-ngu  
man-ERG woman see-PAST  
nyurnu-kurra.  
sick-OBJCOMP  
'The man saw the woman involved with the sick one.'

See Hale (1982b), Nash (1986), Simpson (1983), Laughren (1992).

### 7.3. Eventive Predicates

Eventive predicates may be further classified according to their time-reference; whether they denote an event taking place at the same time as the event denoted by the main clause, or preceding it, or subsequent to it.

#### 7.3.1 Simultaneous Event

Warlpiri has three complementizer cases which indicate that the event denoted by the secondary predicate occurs at the same time

as the event denoted by the main verb. These are illustrated below. In addition to their temporal content, each of these complementizer cases specifies how the understood subject of the secondary predicate is to be interpreted.

- (46a) Wati-ngki marlu nya-ngu,  
man-ERG kangaroo see-PAST  
nguna-nja-kurra.  
lie-INF-OBJCOMP  
'The man saw the kangaroo while it was lying down.'
- (46b) Wati-ngki marlu nya-ngu  
man-ERG kangaroo see-PAST  
parnka-nja-karra-rlu.  
run-INF-SUBJCOMP-ERG  
'The man saw the kangaroo while he was running.'
- (46c) Wati-rla jurnta-ya-nu  
man-3sDAT away-go-PAST  
karnta-ku  
woman-DAT  
jarda-nguna-nja-rlarni.  
sleep-lie-INF-OBJCOMP  
'The man went away from the woman while she was sleeping.'
- (46d) Kurdu-lu pu-ngu  
child-3pS hit-PAST  
ngati-nyanu-ku wirlinyi-rlarni.  
mother-his-DAT daytrip-OBJCOMP  
'They hit the child while its mother was out hunting.'

In (a) the secondary predicate consists of the infinitive form of the verb *nguna-mi* plus the complementizer case *-kurra* which indicates that the understood subject of the infinitive verb is obligatorily coreferent with the object *marlu* of the finite verb *nya-ngu*. In (b) the secondary predicate is made up of the infinitive form of the verb *parnka-mi* plus the complementizer case *-karra* which specifies that the understood subject of the infinitive is coreferent with the subject, *wati-ngki*, of the finite verb. This relationship is further marked by the presence of the ergative case ending *-rlu* on the secondary predicate. In (c) the secondary predicate *jarda-nguna-nja-rlarni* contains the complementizer case *-rlarni* which indicates that the understood subject of the compound verb *jarda-nguna-nja-rlarni* is coreferent with the dative case-marked *karnta-ku*. *Karnta-ku* is neither the subject nor the object of the finite verb, but rather a dative adjunct (see Section 5.4.).

Whereas the subject of a nominal or infinitival predicate headed by either OBJCOMP

or SUBJCOMP cannot be overtly expressed and is obligatorily interpreted as being coreferent with, or controlled by, the object or subject of the finite verb, the subject of a predicate headed by the OBJCOMP *-rlarni* may be overtly expressed by a dative noun phrase as in (d). In this case we may consider the combination of dative noun phrase plus *-rlarni* headed predicate and its non-subject arguments to be adjoined to the clause headed by the main finite verb.

#### 7.3.2. Preceding Events

- (47a) Wati-ngki kuyu  
man-ERG meat  
purra-nja-rla nga-rnu.  
cook-INF-PRECCOMP eat-PAST  
'The man cooked the meat and ate it./  
The man, having cooked the meat, ate it.'
- (47b) Wati-ngki kapu kuyu  
man-ERG FUTCOMP meat  
purra-nja-rla nga-lku.  
cook-INF-PRECCOMP eat-FUT  
'The man will cook the meat and eat it.'

(Other translations are possible).

In (47) the secondary predicate consists of the infinitive form of the verb *purra-mi*, its object *kuyu* and the complementizer case *-rla*, homophonous with the LOC[ative] case suffix. This suffix indicates that the event of cooking precedes the event of eating denoted by the finite forms of the verb *nga-rni* 'eat' - in the past tense in (a) and the immediate future tense in (b). The understood subject of the PRECCOMP is typically coreferent with the subject of the finite verb.

#### 7.3.3. Subsequent Events

- (48a) Wati-ngki-nyanu jurnarrpa  
Man-ERG-REFL belongings  
ma-nu, wurna  
get-PAST travel  
ya-ninja-kungarni-rlu.  
go-INF-PREPCOMP-ERG  
'The man picked up his things before going on a trip.'
- (48b) Wati ya-nu wirlinyi kuyu  
Man go-PAST daytrip game  
pi-nja-ku.  
kill-INF-PURPCOMP  
'The man went out to kill game.'
- (48c) Wati warrka-rnu maarnta-rla  
man climb-PAST bus-LOC  
ya-ninja-kurra.  
go-INF-SEQCOMP

'The man climbed into the bus ready to go.'

(The SEQCOMP, as in (c) is homophonous with the OBJCOMP, but differs from it in time-reference, and in what may be the controller of the subject of the non-finite clause).

Each of the complementizer cases in (48) signals that the event denoted by the infinitive verb or nominal to which it is suffixed follows, or is dependent on, the event denoted by the finite verb.

Another complementizer case which refers to a subsequent event is the evitative or negative purposive (NEGPURP) complementizer *-kujaku* illustrated in (49). This complementizer sometimes allows the object of the nonfinite clause to be construed with an argument of the main clause. There is no obligatory control of the subject of the non-finite clause.

- (49a) Kulpari-ya-nu-rna kulu-kujaku  
back-go-PAST-1sS fight-NEGPURP  
'I turned back to avoid involvement in the fight.'
- (49b) Yantarli nyina-ya kurlarda-kujaku  
home stay-IMP spear-NEGPURP  
panti-rinja-kujaku.  
pierce-INF-NEGPURP  
'Stay put so not to get speared.' OR  
'Stay put so as not to spear someone/something.'
- (49c) Yampi-ya nyurnu-kujaku.  
leave-IMP sick-NEGPURP  
'Leave it alone lest (you) get sick.' OR  
'Leave him alone lest (he) get sick.'  
(and so on)

This NEGPURP complementizer may also occasionally be used on finite verb forms, as in (50):

- (50) Jinta-wangu ya-nata,  
one-PRIV go-IMP  
kalaka-ngku  
POTCOMP-2sNS  
jarnpa-ngku  
kurdaitcha-ERG  
paka-rni-kijaku.  
hit-NPST-NEGPURP  
'Don't go alone lest a kurdaitcha man might attack you.'

#### 7.3.4. Objects of Infinitive Verbs

Whereas a finite verb combines with AUX in such a way that certain of its arguments are expressed by means of person-number clitics with which a case-marked nominal expres-

sion may be construed, an infinitive verb does not combine with an independent AUX, falling as it does under the scope of the tense, mood and aspect morphemes associated with AUX and the related finite verb in the clause. The arguments of the infinitival verb may be realised as nominal expressions, apart from the subject argument of an infinitive to which is suffixed one of the complementizer cases that requires obligatory control of the subject, as in (46).

The dative case argument of a verb, finite or nonfinite, may always be expressed by a dative case-marked nominal expression. The object argument of an infinitive which would be expressed by an absolutive case-marked nominal expression of the corresponding finite verb, cannot be thus expressed, since absolutive case fails to be assigned to the object of an infinitive verb. Rather it falls within the scope of the complementizer case which marks the infinitive. However, when the object nominal immediately precedes the infinitive, overt complementizer case-marking on the nominal is not obligatory (giving the appearance of an absolutive object), and the nominal and infinitive verb form a single phonological phrase, as in (48b). When the object nominal occupies another position in the clause, it too is overtly marked by the complementizer case ending (cf. Hale 1982b, Laughren 1989). Compare (51) with the sentences in (48). Not only does the object nominal fall within the scope of the complementizer case, but so does a modifying nominal which has semantic scope over the infinitive and its arguments.

- (51a) Wati-ngki-nyanu jurnarrpa  
man-ERG-REFL belongings  
ma-nu, ya-ninja-kungarnti-ri  
get-PAST go-INF-PRÉPCOMP-ERG  
warna-kungarnti-ri.  
travel-PRÉPCOMP-ERG  
'The man picked up his things before going on a trip.'
- (51b) Kuyu-ku wati ya-nu  
game-PURPCOMP man go-PAST  
wirlinyi pi-nja-ku.  
daytrip kill-INF-PURPCOMP  
'The man went hunting to kill game.'

Arguments of an eventive secondary predicate need not be overtly expressed in Warlpiri. Occasionally, as shown in (52), none of the arguments of the infinitive verb *yi-nja* 'give-INF' are overtly expressed:

- (52) Wangka-ja-rna-rla  
say-PAST-1sS-3sDAT  
yi-nja-ku.  
give-INF-PURPCOMP  
'I said to him to give (someone something).'

### 7.3.5. Stative Secondary Predicates

A stative secondary predicate typically attributes some quality to its "subject" (which may be a nominal expression or a pronominal clitic or both). The secondary predicate consists of a nominal or infinitival expression which agrees in case-marking with its "subject".

- (53a) Mata ka karnta nyina-mi  
tired IMPF woman sit-NPST  
wapa-nja-warnu.  
walk-INF-ASSOC  
'The woman is sitting tired from walking.'
- (53b) Nyampu ka-rna nga-rni  
this IMPF-1sS eat-NPST  
wanka, warlu-ngku purra-nja-wangu  
raw fire-ERG cook-INF-PRIV  
'I am eating this raw without it having been cooked by fire.'
- (53c) Kuyu nga-rnu kurdu-ngku  
meat eat-PAST child-ERG  
purra-nja-warnu, yarnunjuku-rlu.  
cook-INF-ASSOC hungry-ERG  
'The child ate the cooked meat, being hungry.'

In (a) the ABS nominal predicate *matans* predicated of the absolutive case-marked *karnta*, the subject of the sentence. The infinitive expression *wapa-nja-warnu* is also predicated of the woman. The ASSOC[ative] case transforms an eventive predicate into a stative one, i.e. the state which results from involvement in the activity, process or event denoted by the verb. The PRIV[ative] suffix *-wangu* can also transform an eventive predicate into a stative one as in (b). (This is an unusual example, showing ergative case on *warlu-ngku* in the non-finite clause, agreeing with the understood ergative subject of *purra-nja-wangu*). In (c) we have two stative secondary predicates, *purra-nja-warnu* is predicated of the absolutive object *kuyu* while *yarnunjuku-rlu* is predicated of the ergative subject *kurdu-ngku*. The relationship between "subject" and secondary predicate is formally indicated in each case by the case-marking on the predicate. This case-marking is identical to that on the nominal understood to be the "subject" of this secondary predicate.

### 7.3.6 Secondary Predicates and Semantic Cases

Warlpiri has a number of semantic cases which fall into two classes: derivational and non-derivational (see Appendix and also Hale 1982b, Nash 1986, Simpson 1983). These cases are suffixed to nominal expressions. The resulting compound expression is predicated of some element in the sentence, which acts as the "subject" of the expression, as in (54). A semantic case can be suffixed to a nominal plus derivational case compound. A grammatical case, dative or ergative, can be further suffixed to a semantic case-headed predicate, thus indicating the argument of which it is predicated.

- (54a) Karnta-lpa nyina-ja walya-ngka.  
woman IMPF sit-PAST ground-LOC  
'The woman was sitting on the ground.'
- (54b) Karnta ya-nu-rnu  
woman go-PAST-HITHER  
kuyu-kurlu kartaku-rla-kurlu.  
meat-PROP can-LOC-PROP  
'The woman came with meat in a billycan.'
- (54c) Karnta-kari paka-rnu  
woman-other hit-PAST  
watiya-kurlu-rlu  
stick-PROP-ERG  
Yurmtumu-wardingki-rli,  
Yuendumu-DENIZ-ERG  
kulu-parnta-rlu,  
anger-PROP-ERG  
pama-jangka-rlu.  
grog-SOURCE-ERG  
'The one from Yuendumu, in anger, drunk, hit another woman with a stick.'
- (54d) Jakamarra-kurlangu-wana-lpa  
Jakamarra-POSS-PERL-IMPF  
nguna-ja maliki, ngurra-wana.  
lie-PAST dog home-PERL  
'The dog was lying around Jakamarra's home.'

As these examples show, semantic case-headed predicates too may receive case in agreement with the nominal of which they are predicated. See Laughren (1992).

### 7.3.7 Inchoative

There are two inchoative suffixes, illustrated in (55), which are suffixed to predicative nominals to form a resultative secondary predicate. These are *-kurra* 'TRANS[ative]' and

*-kurra* 'RESULT[ative]'. They refer to a state which is achieved or arrived at, that is different from the implicit or explicit original state. While the predicate formed with *-kurra* is freely used and may take any argument or adjunct in the same clause as its "subject", the predicate formed with *-kurra* is very restricted in its application. It may only be predicated of the absolutive object of an impact verb. Only a few predicative nominals have been found with the resultative suffix, namely *nyurnu* 'sick, dead', *yalyu* 'blood' and *tarnnga* 'long time, forever'.

- (55a) Wanta-kurra ka-rnalu  
sun-ALL IMPF-1peS  
kurdji yirra-rni linji-karda.  
shield put-NPST dry-TRANS  
'We put the shield in the sun to (become) dry.'
- (55b) Yapa ka-rnalu-jana japi-rni  
people IMPF-1peS-3pNS ask-NPST  
pina-karda.  
knowing-TRANS  
'We ask people so as to know.'
- (55c) Yapa-lu-jana paka-rnu  
person-3pS-3pNS hit-PAST  
nyurnu-kurra tarnnga-kurra.  
dead-RESULT forever-RESULT  
'They hit the people to death.'

## 8. Sentential Adjuncts

Finite tensed clauses apparently never appear as complements in Warlpiri. However, they are used in a very common construction, the adjoined relative clause, illustrated in (56):

- (56) Ngajulu-rlu-rna yankirri pantu-rnu,  
I-ERG-1sS emu spear-PAST,  
kuja-lpa  
FACTCOMP-IMPF  
ngapa nga-rnu.  
water consume-PAST  
'I speared the emu which was/ while it was drinking water.'

Morphologically, adjoined relative clauses are marked by the presence in the AUX of one of a set of complementizer (COMP) morphemes, such as *kuja* above. The others include the factive *ngula* (FACTCOMP), the nonfactive *kaji* (NFACTCOMP), and the relational *yungu* and its allomorphs (REL-COMP).

Syntactically, these clauses are dependent on the main clause, and peripheral to it. They are never embedded in the main clause, and



they are usually separated from it by a pause. They may be preposed to the main clause, which may start with the anaphorical element *ngula*, as in (57). There may even be multiple subordinations, as in (58).

- (57) Yankirri-rlu kuja-lpa  
emu-ERG FACTCOMP-IMPF  
ngapa nga-rnu,  
water consume-PAST,  
ngula-rna pantu-rnu  
FACTCOMP-1sS spear-PAST  
ngajulu-rlu.  
I-ERG  
'The emu which was drinking water,  
that one I speared.' OR 'While the emu  
was drinking water, then I speared it.'
- (58) Karli-ji ma-ninji-nta  
boomerang-1sNS get-go-IMP  
yali, ngula-ka  
that.yonder, FACTCOMP-IMPF  
marda-rni yapa-kari-rlu  
hold-NPST person-OTHER-ERG  
ngula-ka ngurra  
FACTCOMP-IMPF camp  
ngalipa-nyangu-rla nyina.  
us-GEN-LOC sit-NPST  
'Go get me that boomerang that that  
other person who lives in our camp  
has.'

Semantically, as the translations show, adjoined relative clauses are open to different interpretations, which have been the subject of some investigation (cf. Hale 1976; Larson 1983). Roughly speaking, there are two main classes of interpretation. The first is the "NP-Relative" interpretation, in which the adjoined clause modified an argument of the main clause, and is often translated as a relative clause in English.

The second is the "T-Relative" interpretation, a term derived from the use of adjoined relative clauses to specify the time of the main clause, or to describe an event holding at the same time as the main clause. However, it has been extended to cover the use of adjoined relative clauses for comments, which may be linked by any reasonable connection to the main clause. As well as time, these include comments on place, cause, purpose, reason, "enabling cause", contrastive parallels, conditionals and so on. They are often translated into English by clauses headed by conjunctions such as *when*, *where*, *while*, *if*, *whereas*, *because* and so on.

Many sentences may have both NP-relative and T-relative readings, and only context

will disambiguate them. However, the choice of complementizer, the time references of both the main clause and the adjoined clause, and the presence of coreferent noun phrases in both the main and the adjoined clause are factors in determining what reading is given. An example of a T-relative reading is given in (59):

Factive, no shared argument, same time reference, T-relative

- (59) Ngajulu-rhu-lpa-rna karli  
I-ERG-IMP-1sS boomerang  
jarntu-rnu, kuja-npa  
trim-PAST, FACTCOMP-2sS  
ya-nu-rnu nyuntu.  
go-PAST-HITHER you  
'I was trimming a boomerang when you  
came up.'

There appears to be no difference in behaviour between coreferential noun phrases in clauses with NP-relative interpretations and those in clauses with T-relative interpretations. Both are represented by pronominal clitics, if they bear the right grammatical functions. In terms of pronominalisation usually the second of the two (whether this happens to be in the main clause or the adjoined clause) undergoes pronominalisation but pronominalisation is not essential.

## 9. Operators and Logical Form

In content questions the interrogative element normally appears in initial position preceding the auxiliary; in that position, presumably, it has scope over the remainder of the sentence:

- (60a) Ngana-ngku ka karli  
who-ERG IMPF boomerang  
nyampu jarnti-rni?  
this trim-NPST  
'Who is trimming this boomerang?'
- (60b) Nyiya-ku ka-npala-rla  
what-DAT IMPF-2dS-3dat  
warri-rni nyumpala-rlu?  
seek-NPST you:two-ERG  
'What are you two looking for?'

There is, however, no evidence that syntactic movement is involved in the formation of content questions in Warlpiri. Initial position is available to any constituent simply by virtue of the free surface ordering characteristics of Warlpiri syntax generally. Diagnostic such as the so-called "weak cross-over effect"

(cf. Farmer/Hale/Tsujimura 1986), assuming that they are valid, suggest that no movement is involved in the formation of content questions:

- (61) Ngana ka nyanungu-nyangu  
Who IMPF he-POSS  
maliki-rlu wajili-pi-nyi?  
dog-ERG chase-NPST  
'Who is his dog chasing?'

The Warlpiri sentence here, unlike the English given in translation, can receive an interpretation according to which the question word binds the possessive pronoun. The Warlpiri sentence can have the meanings associated with the English passive counterpart: 'Who is being chased by his dog?' This would follow if the Warlpiri question word were not involved in an operator-variable relationship with a trace in object position resulting from syntactic movement. The English of the translation, of course, involves movement and the pronoun may not, therefore, function as a bound variable without violating the restriction against weak cross-over.

Relativization in Warlpiri also fails to give evidence of syntactic movement. When the relative clause is in protasis position, the internal head of the relative may appear in ini-

tial position within its clause, as in (62) and (63). But, again, this position is simply available by virtue of the word order characteristics of Warlpiri generally.

- (62) Karli-ngki  
boomerang-ERG  
kuja-npa yankirri  
FACTCOMP-2sS emu  
luwa-rnu, ngulaju rdilyki-ya-nu.  
shoot-PAST that broken-go-PAST  
'The boomerang you hit the emu with  
broke.'
- (63) Yankirri kuja-npa  
emu FACTCOMP-2sS  
karli-ngki luwa-rnu, ngulaju  
boomerang-ERG shoot-PAST that  
pali-ja.  
die-PAST  
'The emu you hit with the boomerang  
died.'

Although the evidence cannot be considered conclusive at this point, it is doubtful that operator-variable binding relationships are formed, through movement, in the syntactic representations of Warlpiri sentences. The interpretations of questions and relatives, therefore, are evidently effected through movement in logical form, rather than in syntax (cf. Larson 1983).

## APPENDIX: Abbreviations, Glosses

### (A) AUXILIARY (AUX) ELEMENTS

#### (a) Sentential Complementizers (COMP)

FACTCOMP	factive complementizer	<i>kuja, ngula</i>
FUTCOMP	future	<i>kapulkapi, ngarra</i>
NEGCOMP	negative complementizer	<i>kula</i>
NFACTCOMP	nonfactive complementizer	<i>kaji</i>
PASTCOMP	remote past, usitative	<i>kala</i>
POTCOMP	potential (with aspect <i>ka</i> )	<i>kala</i>
RELCOMP	relational (causal, reason)	<i>yungulyingalyingilyi</i>

#### (b) Aspect (ASP)

IMPF past imperfect *lpa* IMPF present imperfect *ka*  
(Perfect (PERF)  $\emptyset$  is not usually glossed).

#### (c) Glosses for pronominal agreement clitics (AGR)

Person	Number	Grammatical relation
1st person	<i>s</i> singular	S subject
2nd person	<i>d</i> dual	NS non-subject
3rd person	<i>p</i> plural	
		3sDAT third singular Dative
		REFL reflexive

3sNS and 3sNS,  $\emptyset$ , are not usually glossed).

## (d) Pronominal agreement clitics

	Singular		Dual		Plural	
	S	NS	S	NS	S	NS
1s	rna	ju	1di rli 1de rlijarra	ngali(ngki) jarrangku	1pi rli 1pe rna-lu	ngalpa nganpa
2s	n(pa)	ngku	2d n(pa)- pala	ngku-pala	2p nku-lu	nyarra
3s	∅	∅	3d pala	palangu	3p lu	jana

rla (DAT)

## (2) COMPLEMENTIZER SUFFIXES

## (a) Simultaneous event

OBJCOMP	object-controlled complementizer	-kurra
OBVCOMP	obviative-controlled complementizer	-rlarni
SUBJCOMP	subject-controlled complementizer	-karra

## (b) Preceding or purposive event

PRECCOMP	preceding event	-rla
PURPCOMP	purposive	-ku
DESIDCOMP	desiderative purposive	-kupurda
NEGPURP	negative purposive	-kujaku
PREPCOMP	preparatory purposive	-kungarnti
SEQCOMP	directional purposive	-kurra

## (c) Stative

ASSOC	associative, resultative, perfective	-warnu
PRIV	privative, negative	-wangu

## (3) NOMINAL SUFFIXES

## (A) Grammatical case

ABS	Absolutive	∅ (not usually glossed)
DAT	Dative	-ku
ERG	Ergative	-ngku, -rlu

## (B) Semantic case

## (a) Non-derivational case

ALL	allative: 'to, into'	-kurra
COMIT	comitative: 'with'	-ngkajinta, -rlajinta
EL	elative: 'from'	-ngurlu
LOC	locative	-ngka, -rla
RESULT	resultative	-kurra
TRANS	translative	-karda

## (b) Derivational case

ASSOC	associative, perfective: 'being'	-warnu
DENIZ	denizen of: 'belonging to'	-malu, -ngarna, -ngawurpa, -wardingki
LIKE	simile-former: 'as, like'	-piya
PERL	perlative: 'along'	-wana
POSS	possessive	-kurlangu
POSS	possessive (on pronouns)	-nyangu
POSS	possessive (on kinterms)	-nyanu
PRIV	privative, negative: 'without'	-wangu
PROP	proprietary: 'having'	-kurlu, -parnta
SOURCE	relative of source: 'from, because of'	-jangka

## (C) Number

DUAL	dual	-jarra
PAUCAL	plural, paucal: 'few'	-patu
PL	plural	∅
PL	plural	-rra (on some pronouns)

## (D) Nominal formatives and other clitics

CS	change of state: 'now, then'	-lku
OTHER	other, next	-kari
WARD	towards	-purda

## (4) VERBS

## (A) Verbal inflections, arranged by conjugation

Conjugation class	I	II	III	IV	V
(a) Tense, co-occurring with Aspect					
NPST nonpast	-mi, ∅	-rni, -ni	-nyi	-rni, -ni	-ni
PAST past	-ja	-rnu	-ngu	-rnu	-nu
IRR irrealis	-ya-rla	-ka-rla	-ngka-rla	-nja-rla	-nta-rla

## (b) Tense/Mood, no Aspect distinction

FUT future	-jul-ji	-ku	-ngku	-lku	-nku
IMP imperative	-ya	-ka	-ngka	-nja	-nta
PREST presentational	-nya	-rni-nya	-nga-nya	-rni-nya	-na-nya

## (c) Non-finite verb forms

INF: infinitive	-nja	-rni-nja	-nja	-rni-nja	-ni-nja
NOMIC:	-ngu	-rnu	-ngu	-rnu	-nu

## (B) Verb formatives

CAUS	causative (transitive)	N-ma-ni
INCH	inchoative	N-jarri-mi

## (C) Directionals

HITHER	hither, to here	-rni
BY	past, by, across	-mpa
THITHER	thither, to there	-rra

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## 81. The Syntax of Creole Languages

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## Introduction

The term 'creole' has been applied to a wide variety of languages. For instance, languages as varied as Proto-Germanic, Egyptian, Songhay, Mbugu and Middle English have been hailed as creoles. Such indiscriminate use deprives the label of all meaning, and has led to the belief that there is no distinct creole typology (see Muysken 1988 and comments thereon in Section 5. below). In what follows, the term will be restricted to what, in Bickerton (1988), were described as 'plantation creole' languages that arose among peoples of diverse linguistic backgrounds who had been removed from their traditional homelands into the aegis of colonial power and who were thus obliged to 'invent' some means of mutual communication. Such languages would include, for example, Gullah, Haitian, Saramaccan, Papiamentu, Seselwa, Tok Pisin and Hawaiian Creole, to take a random sample of the two or three dozen exemplars. Much of what can be said about these languages would apply also to 'fort'

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and 'maritime' creoles, as defined in Bickerton (1988). However, it is only about 'plantation creoles' that one can make typological statements which are both general and detailed, without requiring frequent disclaimers of the type 'except in the case of X, where ...' Although questions surrounding the origin of creoles are and always have been controversial, and are thus best left unbroached in a study such as this, it is difficult to describe these languages, except at a superficial level, without giving some idea of the problems they faced and the solutions that, accordingly, they were obliged to adopt. The essentials of creole syntax were created, for each of the languages in question, in a single generation. The input to this generation was a highly variable pidgin continuum, the greater part of which was degraded to a point at which it is probably fair to say that it was no longer rule-governed (in any sense of linguistic rule); certainly, a syntactic system could not have been induced from it. At the same time, the input lexicon was radically reduced, both in the number of available items and the properties which those items possessed. Yet the creole-forming generation was equipped with the same set of syntactic principles as are all other members of our species. The interaction between invariant principles and a degenerate lexicon is what gives creole languages their unmistakable stamp.

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## Vorwort zum zweiten Band

Der hiermit vorliegende zweite Halbband des Handbuchs Syntax konzentriert sich auf die die Syntax betreffenden Teile der Typologie und der Sprachgeschichtsforschung sowie auf das Verhältnis der Syntax zu einigen ihrer Nachbardisziplinen. Außerdem wird der Satzbau einer Reihe von Sprachen skizziert, die unter verschiedenen Gesichtspunkten interessant erscheinen. (Nähere Erläuterungen im Vorwort zum ersten Band.) Den Abschluß bilden ein Personen-, ein Sach- und ein Sprachenregister für beide Halbbände.

Zwei Hinweise für die Benutzung der Register: (a) Aus technischen Gründen konnten im Personenregister Namensmehrdeutigkeiten nicht aufgelöst werden; gelegentlich beziehen sich also verschiedene Seitenangaben unter demselben (Familien-)Namen auf verschiedene Personen, was sich in der Regel durch Nachschlagen an den entsprechenden Textstellen oder in der jeweiligen Artikelbibliographie klären läßt. (b) Im Sachregister ist bei Verweisen, die sich auf das Thema größerer Abschnitte (etwa ganzer Kapitel) beziehen, die Seite angegeben, auf der der Abschnitt beginnt. Auf eine weitere Kennzeichnung mit „ff“ oder „passim“ wurde in solchen Fällen verzichtet.

Für vielfältige Hilfe bei der Arbeit am zweiten Band haben wir (außer den schon im Vorwort zum ersten Band genannten Personen) Nürten Öztürk zu danken sowie auf Seiten des Verlags Christiane Graefe und Heike Plank. Unser besonderer Dank gilt darüber hinaus Birgit Kaiser, die das Register konzipiert und erstellt hat.

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