

COMPARATIVE CARIBAN MORPHOSYNTAX:  
ON THE GENESIS OF ERGATIVITY  
IN INDEPENDENT CLAUSES

by

SPIKE LAWRENCE OWEN GILDEA

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APPROVED: \_\_\_\_\_  
Dr. Doris L. Payne

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Spike Lawrence Owen Gildea for the degree of Doctor of Philosophy  
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Approved: \_\_\_\_\_  
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In this dissertation, I compare the grammar of 19 Cariban languages and then reconstruct certain elements of the Proto Cariban verbal and nominal systems. Two different verbal systems have been described in modern Cariban languages: one is nominative-accusative and the other ergative-absolutive. The ergative-absolutive system occurs in subordinate clauses in all Cariban languages; however, in main clauses, some languages use exclusively the nominative-accusative system, some use exclusively the ergative-absolutive system, and some use a combination of the two. It has been suggested in previous studies that Proto Cariban used the ergative-absolutive system in both main and subordinate clauses, and that the nominative-accusative system in main clauses is a later innovation. However, based on a larger sample of languages, and with more rigorous methodology, I conclude that Proto Cariban main clauses utilized the nominative-accusative system; in a limited subset of Cariban languages, the subordinate clause ergative system has invaded main clauses, in some cases coexisting with remnants of the historical system, but in other cases completely replacing the historical system.

A large part of this dissertation is devoted to explaining and documenting the mechanism by which subordinate clause grammar is allowed into main clauses. The subordinate clauses first occur as adverbials to or complements of either a copula or a main clause aspectual/modal verb (e.g. 'finish', 'want'). The biclausal construction is then reanalyzed as monoclausal, with the etymological main verb becoming an auxiliary and the etymological complement/adverbial verb becoming the new main verb. During the course of this evolution, the newly reanalyzed main clause verbal system may co-exist with remnants of the older finite verbal system. Since the currently accepted theoretical notion of "finite verb" is restricted to a single verbal system in any given language, these data force a reconsideration of the theoretical notion "finite verb". Also, it has been claimed that modern ergative systems can be reconstructed exclusively to passive constructions. This study refutes this simplistic notion, and proposes a more realistic alternative scenario for the development of ergativity cross-linguistically.

## VITA

NAME OF AUTHOR: Spike Lawrence Owen Gildea

## GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon  
Washington University in St. Louis

## DEGREES AWARDED:

Doctor of Philosophy, 1992, University of Oregon  
Master of Arts, 1989, University of Oregon  
Bachelor of arts, 1983, University of Oregon

## AREAS OF SPECIAL INTEREST:

Methods and Ethics of Field Research  
Diachronic Syntax  
Functional and Typological Linguistics

## PROFESSIONAL EXPERIENCE:

Teaching Assistant, Department of Linguistics, University of Oregon, 1989-91.  
Teaching Assistant, American English Institute, University of Oregon, 1986-1991.  
Research Assistant, Department of Linguistics, University of Oregon, Eugene and Venezuela, 1987-88, 1990.  
Teacher of English as a Foreign Language, Peace Corps/Nepal, Ragani, Okhaldhunga, Nepal, 1983-85

## AWARDS AND HONORS:

University of Oregon Doctoral Research Fellowship, 1991-92.  
LSA Linguistic Institute Tuition Fellowship, 1991.  
B.A. *cum laude*, University of Oregon, 1983.  
National Merit Scholarship, University of Washington in St. Louis, 1979.

## PUBLICATIONS:

- Dietrich, Wolf, and Spike Gildea. To appear. "The Tupi-Guarani/Cariban Linguistics Symposium Report". In Proceedings of the 41st Congress of Americanists, New Orleans.
- Gildea, Spike. 1989a. Simple and Relative Clauses in Panare. Master's Thesis, Department of Linguistics, University of Oregon. Ann Arbor: Microfilms International.
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- Gildea, Spike. 1989c. "The development of tense markers from demonstrative pronouns in Panare (Cariban)." Presented at the Summer Meeting of the Society for the Study of Indigenous Languages of the Americas (SSILA), Tucson, AZ. July, 1989.
- Gildea, Spike. 1989d. "SOV to VS in Panare: a historical explanation". Presented at the Annual meeting of the American Anthropological Association, Washington, D.C. November, 1989.
- Gildea, Spike. 1990a. "Análisis funcional y tipológica en lingüística, con el ejemplo de cláusulas relativas en Panare". Presented at the University of Zulia, Maracaibo, Venezuela. March, 1990.
- Gildea, Spike. 1990b. "A historical explanation for ergative case-marking in the Cariban language family". Presented at the University of Wisconsin/Milwaukee 19th Annual Symposium. April, 1990.
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- Gildea, Spike. 1991c. "From Genitive pro-clitic to verb agreement: an intermediate stage in Cariban languages". Presented at the Workshop on Clitics, LSA Summer Institute, Santa Cruz, CA. July, 1991.
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## PART I: INTRODUCTION

### CHAPTER 1

#### AN OVERVIEW OF THE CARIBAN LANGUAGE FAMILY

The Cariban language family is composed of some 40-60 languages spoken in South America, in the Amazon, Orinoco, and Xingu river drainages (see the map, p. 2). So little linguistic work has been done that genetic subgroupings within the Cariban language family (and even the inclusion of some languages within the family) still cannot be reliably determined. Many Cariban languages have become extinct, several more are on the verge of extinction (more may have died out in the 1980s), and others are spoken by groups of less than 500 people. Any discussion of the entire Cariban language family must begin with an urgent call for further field research. If many these languages are not described soon, they will never be described. In this chapter I review previous attempts to sub-classify languages within the Cariban family, and then discuss the current status of linguistic research on each Cariban language for which I present data in this study.

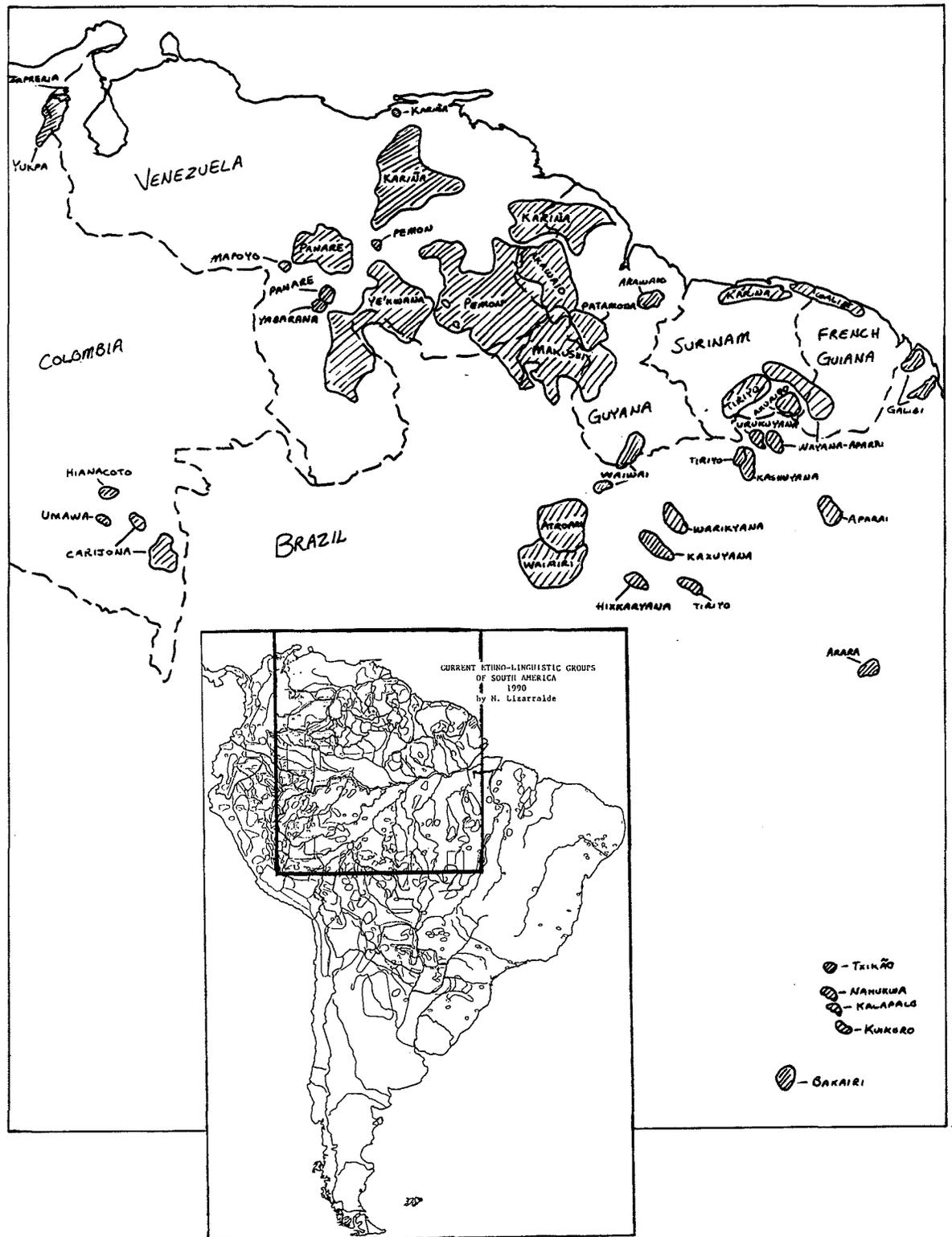


Figure 1. Locations of Cariban-Speaking Communities as of 1987  
(Used with permission from Lizzaralde, to appear)

### 1.1 Classifications

I begin with a brief discussion of external classifications (i.e. locating the Cariban family within the context of other South American languages) and then discuss in somewhat more detail the various proposed internal classifications of the family.

In the last century, several large-scale comparisons have been done for all South American languages, with varying conclusions about the place of Cariban. To cite only the most recent studies, Greenberg (1987) proposes that the Cariban family connects to a number of smaller groups and isolates to form Macro-Caribe, which then connects with Macro-Panoan and Macro-Ge to form Ge-Pano-Carib, branch VI of his Amerind superfamily. Greenberg places the geographically adjacent Tupí stock into Equatorial-Tukanoan, branch V of Amerind. Rodrigues (1985) cites numerous apparent cognate forms between individual Cariban and Tupí languages to argue for a close Tupí-Cariban relationship, with the additional possibility of links between Tupí-Cariban and Ge. Loukotka (1968) links Cariban with Tupí, Arawakan, and Panoan, but not with Ge. Kaufman (1990) makes a strong case that none of these classifications is reliable for the simple reason that there is no reliable data for a large proportion of the languages of South America. Reconstructions are tentative within each language family (a point which I will second for the Cariban family later in this section), and thus it is premature to compare the various proto-languages in search of related forms. In sum, the relationships between the Cariban family and other South American language families will not be known without much more basic descriptive work followed by more reliable reconstructions for each of the families in question.

Competing internal classifications of Cariban differ as to which of the language names in the historical literature represent independent languages, which represent dialects, which should be included in the family at all, and what the relations are among

those which do belong in the family. Early classifications (e.g. Adam 1893, von den Steinen 1892, de Goeje 1943, Rivet 1924, Rivet and Loukotka 1955, Loukotka 1968) were flawed due to lack of reliable data for many languages; some even included language names for which there were no linguistic data at all. The first problem a researcher faces in classifying the Cariban languages is knowing how many there are (and what to call them). Historically, many Cariban speaking communities have been contacted several times, with each explorer coming from a new direction, assigning the group/language a new name, and in some cases transcribing the language idiosyncratically, so that the different descriptions do not obviously refer to the same language. As a result, there are literally hundreds of names in the literature, all referring to groups who spoke some Cariban variety (i.e. either language or dialect). Girard (1971:7-43) provides an excellent overview of many older sources of Cariban data, in the process explaining that many of the language names are spelling variants, but he does not lay out the process by which he reduces the list of names to 61 languages in his classification. Similarly, Durbin (1977) — the classification most frequently cited in modern Cariban studies — reduces the list to 60 languages, but offers no explanation of why he included some names and excluded others. It would be simple to accept the agreement in number and say that there are some 60 Cariban languages except that Girard and Durbin agree on only 47 language names, with each listing an additional 13 which the other does not include. Kaufman (1989) considers many of the names in Girard and Durbin to represent dialects, and hence collapses the total number of languages to 39.

For the extinct languages, we will never be able to sort out the confusion. For surviving languages, modern field work can help decide (1) how many communities speak Cariban varieties, and (2) of these, which constitute independent languages and which might be better considered dialectal variations of a single language. Migliazza

(1985) offers several case studies of single Cariban languages being given multiple names; his conclusions (although limited to the subset of the family spoken near the Orinoco drainage) are parallel to Kaufman's. For example, in one sub-branch of the family, he reduces some 28 names from the literature to only six actual linguistic communities: Makushi, Arekuna, Taurepang, Kamarakoto, Akawayo, and Patamona. Based on his field notes, he then suggests that the speech of these six communities actually constitutes only three separate languages: Makushi, Pemóng (with the three distinct dialects Arekuna, Turepang, and Kamarakoto), and Kapóng (with two distinct dialects Akawayo and Patamona). Others have questioned whether even these three are distinct enough to be considered separate languages: Abbott (1991:23) states that she, who speaks Makushi quite fluently, has had conversations with speakers of both Arekuna and Taulipang (dialects of Pemóng according to Migliazza), and "although there are differences, conversation was not a problem." Further, Edwards (1972:34 says of Akawayo (a dialect of Kapóng) and Arekuna (a dialect of Pemóng):

They have so many linguistic properties in common that in many cases conversations can be carried on between monolingual Akawios and Arekunas with near-perfect intelligibility. The linguistic differences between the languages are mainly at the phonetic level (i.e. in the sounds used by speakers) but there are some grammatical differences as well.

Despite the problems with names and questions about the status of these names as designations for "dialects" versus "languages", at least three recent classifications are sufficiently detailed to be testable: Girard (1971), Durbin (1977), and Kaufman (1989).

Girard (1971) is the first methodologically sound attempt at sub-classifying within the Cariban family. He includes only languages for which he has data, he evaluates most of his data sources, and he bases the classification on a preliminary reconstruction of some 150 words. In his classification, Girard separates the 61 purported languages of the family into 15 sub-groups (the last of which holds an "unclassifiable residue" of four

languages). Girard points out that Cariban languages are quite conservative phonologically, and as such, some groupings are made simply because languages shared a certain cognate form, or on the single phonological feature of treatment of consonant cluster reduction (both of questionable reliability in brief word lists compiled by non-linguists). Girard does not find sufficient evidence to posit further higher-level relationships among his 14 groups, although he proposes tentative connections between a few of them. Girard's classification of Cariban languages appears in Table 1.1.

Durbin (1977), the best-known classification of the family, is purportedly based on extensive reconstruction from a huge data base compiled in collaboration with Haydée Seijas (cf. Durbin and Seijas 1973a-c, 1975, and discussion in Durbin 1977:28); however, the evidence in support of Durbin's classification has never been published. Durbin divides the entire family into two main branches, Northern (with five sub-branches) and Southern (with three sub-branches); the division is made on the basis of the phonological change of Proto-Cariban \*p > h in the Southern Branch languages. He does not discuss the basis on which he sub-classifies within these two main branches. Durbin does not appear to have been aware of Girard's work, and so does not address the discrepancies between his and Girard's classifications (and list of languages). Durbin's classification has been convincingly criticized by Villalón (1987), Mattéi-Muller and Henley (1990), Kaufman (1989), and Migliazza (1985), but it is still the best known of the classifications and is often cited in the literature as though there were no others. Durbin's classification is presented in Table 1.3.

Kaufman (1989), a conspectus of four previous classifications, including Girard (1971) and Durbin (1977), first reduces the total number of languages to 39, then divides these 39 languages into 20 genetic groups on the basis of cognate retention, consonant cluster reduction, and stress patterns. He then further posits some higher level sub-

grouping of these 20 groups into 10 main branches of the family. Kaufman stresses that his classification is preliminary, based on "very limited data", and that especially the higher-level groupings are "hypotheses to be tested." Kaufman's classification is presented in Table 1.2.

In all three tables, the names of languages which figure in this study are both underlined and in a different print type (Helvetica).

Table 1.1. Girard's Classification of the Cariban family

Proto Carib (Girard 1972)

1. Cumaná	2. Makiritare	3. Pemón	4. Wayana	5. Wayway	6. Carib	7. Tiriyo	8. Yawarana	9. Aparai	10. Paushiana	11. Bonari	12. Arara	13. Bakairí	14. Motilon	15. Miscellaneous
Chayma Cumanágotó	Maionggang Yekwana/Dekwana	Arekuná Ingarikó Kamarakoto	Wayana Upurui Arakwayú Tiverikoto Yao	Wayway Hishkaryana	Carib Galibi Kaliña Akawoyo?	Tiriyo Kumayena Pauxi Pianakoto Saluma Tiriometesem Urukuena Wama Cariona Guake Hianá-koto-Umawa	Yawarana Mapoyo?	Aparai	Paushiana Paravilhana Sapará	Bonari Crishaná Ipurukoto Porokoto Purukoto Yawaperi	Apiaká Arara Parirí Yarumá	Bakairí Kwikurú Nahukwa Yamarikuma	Motilon Yukpa Japrería etc.	Opon-Carare Panare †Palmella †Pimenteira

Table 1.2. Kaufman's Classification of the Cariban Family

Kariban Family (Kaufman 1989)

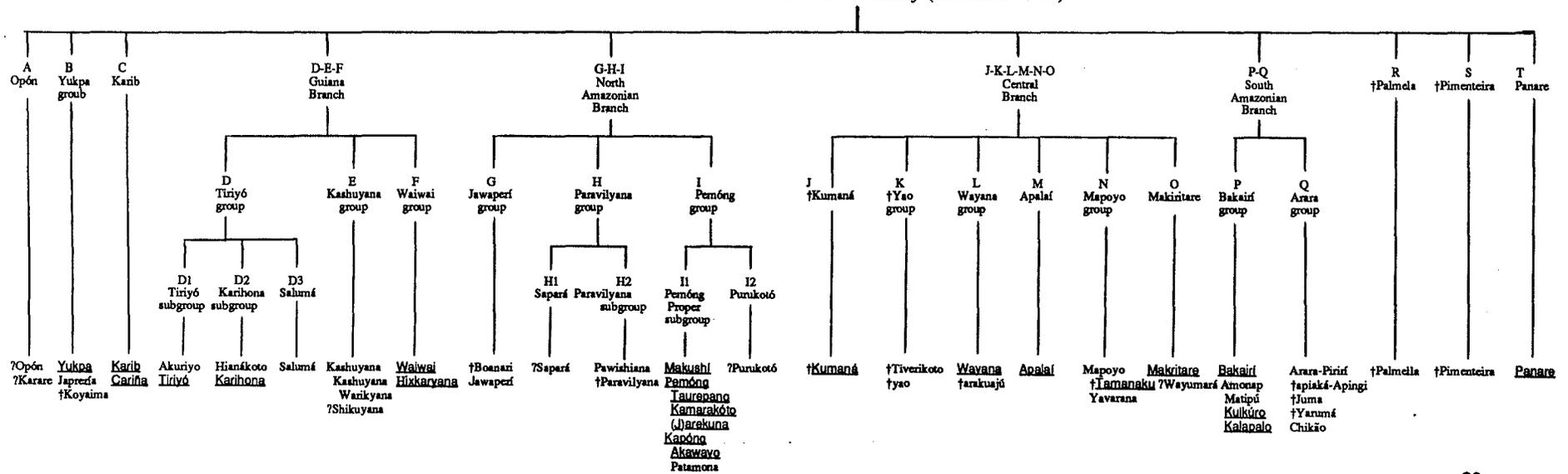
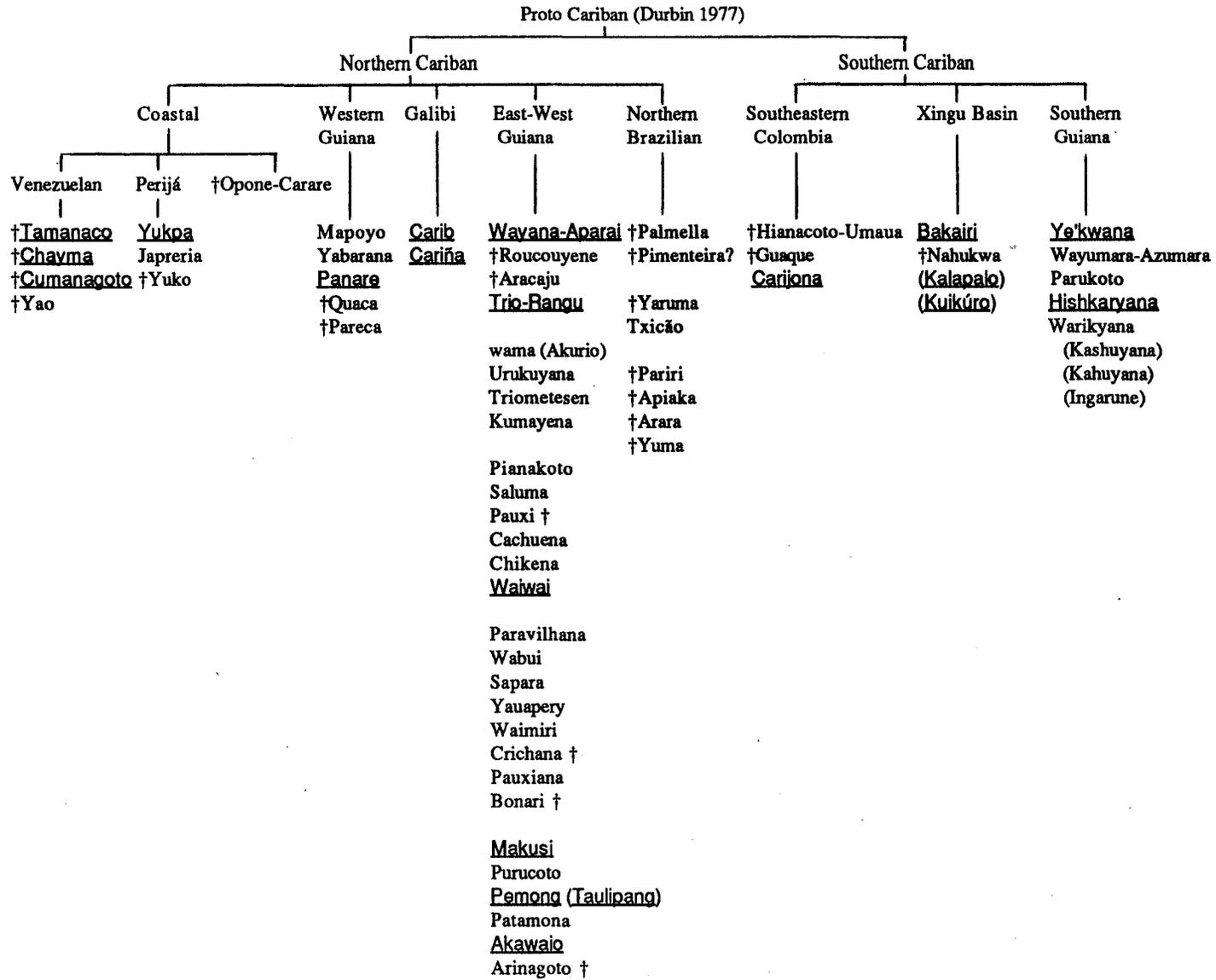


Table 1.3. Durbin's Classification of the Cariban Family



The dramatic differences among these classifications reflect the fact that each linguist had to draw conclusions from minimal data, such that minor differences in interpretation of a single sound change lead to entirely different classifications of a given language. For a case study of the unreliability of even these minimal data, consider Panare. Loukotka (1968) and Girard (1971) relied on two old, conflicting word lists of Panare (Delgado 1949 and Riley 1958/59, both by non-linguists); each concluded that Panare was highly divergent within the family (Girard was even uncertain whether the relationship to Cariban was genetic). On the basis of this same data, Kaufman (1989) continues to place Panare alone in its own separate branch of the family. However, in my own field work with Panare, I have not been able to elicit a single one of the “Panare” words in Loukotka’s table — Loukotka’s Panare “words” turn out to be composite forms apparently created by blending words from the two lists. Delgado’s list appears to be taken from another language entirely, and while Riley’s list contains recognizable Panare words, the transcription misses certain phonemic distinctions and the words are morphologically complex (which makes them appear more divergent than they actually are). The actual Panare forms that I have collected are actually not so divergent, and are clearly cognate to the other words in Loukotka’s table.

Recent comparative work by Mattéi-Muller (1974, 1981, 1989, Mattéi-Muller & Henley 1990) shows that Panare is closely related to Tamanaco, Mapoyo, and Yabarana; Villalón (1987), presumably working with her own field notes, finds that Panare is solidly Cariban (albeit at the periphery of her data base); and more general comparative work by Gildea (1989c,e, 1990, 1991b,f) shows that Panare is actually quite similar in both phonological and morphological structure to a broad group of northern Cariban languages, including Hixkaryana, Makushi, Pemóng, De’kwana, Apalaf, and Carib of Surinam. In essence, the early word lists were not at all representative of Panare, and the

classifications based on these word lists were unavoidably flawed. It is reasonable to expect similar problems with other old word lists, and thus to expect other revisions in the classifications as new, more reliable data becomes available.

The only current reconstructions of Proto-Cariban are ostensibly of lexical roots — Proto-Cariban morphology has never been reconstructed. Both reconstructions are weak due to the lack of reliable data, and the lack of morphemic analysis for that data. In the absence of morphemic analysis of the “cognate” words, sometimes roots without additional morphology are compared to fully inflected words bearing several additional morphemes, a procedure which does not lead to consistent reconstructions. De Goeje (1946) contains 1,923 cognate sets, with over 1000 reconstructed forms. However, as noted in Girard (1971:38-41, reviewing de Goeje 1909, 1946), many of the reconstructed forms are incorrect due to a lack of morphemic analysis of the various cognate words. Girard’s criticisms of de Goeje must be taken with a grain of salt, for he also is working with true morphological analyses only of Makushi (Williams 1932) and Carib (Hoff 1968); accordingly, he does not offer reconstructions of grammatical morphemes, and so his own lexical reconstructions are potentially liable to the same criticisms. Further, neither de Goeje nor Girard reconstruct intermediate daughter branches, but they simply make one gross comparison of all potentially cognate forms. In principle, Occam’s razor calls for majority rule with the caveat that one branch of a given family only counts as one token toward a higher-level reconstruction.<sup>1</sup> As such, until the various sub-branches of the Cariban family are reconstructed, any reconstruction of Proto-Cariban must be considered tentative.

In conclusion, previous Cariban classifications and reconstructions are unreliable: first, due to the lack of reliable data; second, because complex word forms are compared; and third, because no intermediate branches of the family have been reconstructed. As

shown in the next section, in the last twenty years many new morphemic analyses have appeared, making it possible to (1) compare individual morphemes from these languages, and (2) extract cognate morphemes from complex word forms given in the older sources.

### 1.2. The Languages Discussed in this Study

In 1971, the data were simply too sparse to do more than Girard had done.

However, a number of excellent grammars and dictionaries have recently been produced, and field work is in progress on several more languages. In this section I list the primary data sources and morphological analyses I rely on. This does not constitute an exhaustive list of all currently extant Cariban materials — it contains only materials I am aware of and that I was able to obtain for use in this study. The list is arranged alphabetically by language.

- Apalaí: (a.k.a. Aparai) A reference grammar (Koehn and Koehn 1986), a paper on developing ergativity (E. Koehn 1991), and one on the system of possession (S. Koehn 1991).
- Bakairi: Comparative items extracted from von den Steinen (1892) by Adam (1893), a brief paper by Abreu (1895), and current work by Clemente de Souza (1991). Wheatley (1961) produced a short grammatical sketch, but my copy is mostly unreadable and hence I do not cite his analysis.
- Carib: (a.k.a. Galibi, Kari'na, Cariña) The best documented Cariban language to date, with several dialects represented in the literature: for Carib of Surinam, a grammar and collection of texts (Hoff 1968), several descriptive papers (Hoff 1978, 1986, 1990, 1991), and current research by both Hoff and H. Courtz (pc); for the dialect Cariña of Venezuela, a dictionary (Mosonyi 1978), a morphological treatment (Mosonyi 1982),

and several texts (Mosonyi 1987); for the dialect Galibi of French Guiana, a collection of texts (Renault-Lescure 1987) and a grammar which I was unable to obtain for this study (Renault-Lescure 1984).

- Carijona: (a.k.a. Karihona, sometimes considered identical to Hianácoto-Umaua and Guake) Two brief treatments of morphology (Robayo 1987, 1991) and a text (Robayo 1989).
- De'kwana: (a.k.a. Ye'kwana, Makiritare) A grammar with texts (Hall 1988) and a descriptive paper (Hall 1991).
- Hixkaryana: Two reference grammars (Derbyshire 1979, 1985), a collection of texts (Derbyshire 1965), and additional descriptive and comparative papers (Derbyshire 1986, 1987, 1991).
- Kalapalo: (sometimes subsumed under Nahukwa or Kuikúro) Stylistic analysis of texts (Basso 1985, 1986, 1987), preliminary morphological description (Basso 1992).
- Kapóng: (a.k.a. Akawayo, Accawai, Patamona) Two morphological studies of the Akawayo dialect: (Adam 1905), based on missionary materials translated by W. H. Brett (originals unavailable), and (Edwards 1972), who also offers a brief text.
- Kuikúro: (sometimes subsumed under Nahukwa) Morphological and syntactic data presented in the context of theoretical treatments (Franchetto 1986, 1990a-b, 1991a-b).
- Makushi: Three grammars (Williams 1932, Carson 1982, and Abbott 1991) and an extensive vocabulary (Williams 1932).
- Panare: Several descriptive and comparative papers (Mattéi-Muller 1973, 1975, 1981, 1990), a dictionary which is not yet available (Mattéi-Muller 1992),

author's field notes, field notes from Doris and Thomas Payne, manuscript of a reference grammar (Payne, Payne, and Gildea 1992), and several more recent descriptive and comparative papers (Gildea 1989a-b, d-e, 1991e, T. Payne 1990, 1991).

- Pemóng:** (a.k.a. Taurepan, Taulipan, Kamarakoto, Arekuna) For the Taurepang dialect, two dictionaries (Armellada 1943b, Armellada and Salazar 1982), a grammar (Armellada 1943a), and texts (Armellada 1973); for the Arekuna dialect, a morphological sketch and text (Edwards 1972) and more work in progress (Tuggy 1989); for the Kamarakoto dialect, a brief morphological description with a single text fragment (Simpson 1940) and some words and phrases in Armellada (1943a).
- Tiriyo:** (a.k.a. Trio) Two morphological descriptions (de Goeje 1909 and Leavitt 1971).
- Waiwai:** A descriptive paper (Hawkins 1991a), an unpublished reference grammar (Hawkins 1991b), and an extensive wordlist (Hawkins to appear).
- Wayana:** Two morphological descriptions (de Goeje 1946, Jackson 1972) and wordlists (de Goeje 1946).
- Yukpa:** One dictionary (de Vegamián 1978), one word list (Obregon and Armato 1986), author's field notes, work in progress (Medina pc and Robayo pc).

I have heard that morphosyntactic documentation is in progress on Southern Brazilian Cariban languages Arara and Txikão, and perhaps some morphosyntactic information will be forthcoming on Venezuelan Cariban languages Mapoyo (a.k.a. Wanai) and Yabarana, but as yet, I have only encountered phonological and lexical material on these languages.

In addition to these primary sources, I have made use of three secondary sources. Adam (1893) and de Goeje (1909, 1943) present comparative morphological information from a number of Cariban languages which have either become extinct or have not been documented more recently. Although I do not rely on these materials as grammatical descriptions per se, I do make use of some morphological forms in my reconstruction of Proto-Cariban morphology.

Notes to Chapter 1

1 For example, if we were to count as separate all forms taken from various dialects of Pemón and Kapón, the resulting picture of Proto-Cariban would be heavily skewed towards these languages. Similarly, innovations which take place at the branch level only count as one innovation towards the reconstruction of Proto-Cariban, since the many synchronic forms are actually all instances of the same innovation.

## CHAPTER 2

THE PROBLEM: DIFFERENT MODERN VERBAL SYSTEMS  
AND THEIR SYNCHRONIC DISTRIBUTION

In this chapter I introduce the problem to be addressed in this study. Two different independent clause verbal systems have been described across the Cariban family. For ease of exposition, I identify these systems as Set I and Set II. The problem is twofold: which system (if either) do we reconstruct to Proto-Cariban independent clauses, and how do we explain the genesis of the other system — where did it come from and how did it get into independent clauses in some, but not all, Cariban languages? The Set I and Set II verbal systems are almost completely different from each other. Five morphosyntactic properties constitute the difference: verbal personal prefixes and suffixes, verbal tense-aspect-modality (TAM) suffixes, verbal auxiliaries, nominal case-marking, and word order. In §2.1 and §2.2, I briefly characterize and illustrate the Set I and Set II systems; then in §2.3 I discuss the distribution of each in modern Cariban languages.

2.1 The Set I (Nominative) Verbal System

The primary identifying characteristic of the Set I verbal system is the personal prefix set. In the Set I system, verbs take personal prefixes which identify both subject and object of transitive verbs, and subjects of intransitive verbs. Other aspects of the Set I system which are consistent across Cariban are: the TAM suffixes indicate at least past tense (often three degrees of past tense), sometimes nonpast tense, and in rare cases, future. The suffixes distinguish between completive and noncompletive aspects in many

languages, and may carry evidential or emotional values as well. There are no auxiliaries associated with the nominative system, and subject and object nominals are not case-marked. Although word order varies depending on language, the subjects of transitive and intransitive clauses always pattern together (i.e. word order treats the nominative nominal as distinct from the accusative nominal). In this section I briefly illustrate each point with examples from various languages; in §2.3 I discuss the distribution of the Set I verbal system in modern Cariban languages; then in Chapter 5 I describe the Set I verbal system in detail and illustrate its use in each language where it has been found.

Personal prefixes in the Set I system identify the subject of an intransitive verb (S), and both the subject (A) and direct object (O) of a transitive verb.<sup>1</sup> The prefixes vary for four or five persons: first (1), second (2), third (3), first person dual inclusive (1+2), and sometimes first person plural exclusive (1+3). In some languages, number is marked with verbal suffixes; in others it is not marked on the verb. Gender is not marked on the verb in any Cariban language. The following chart from Carib of Surinam (Hoff 1968:160, 167) illustrates the oppositions in the Set I prefix set:

Table 2.1. The Carib of Surinam Set I Personal Prefixes

	O	1	2	3	1+2	S
A						
1		k(i)-	s(i)-			Ø-/y-
2		k(i)-		m(i)-		a(y)-/o-/m-
3	Ø-/y-	a(y)-/o-	n(i)-	k(i)-		n(i)-
1+2				kis(i)-		k(i)-/kit-

In addition to these forms and categories, one aspect of the person-marking prefix system is idiosyncratic enough to serve as an identifying characteristic: when A is third person and an overt O noun phrase immediately precedes the verb, the personal prefixes do not occur — the 3A1O, 3A2O, 3A3O, and 3A1+2O prefixes are in complementary distribution with with a preverbal O noun phrase. Beyond this word order property of O, the word order properties of A and S are also worthy of note in that they pattern together, whether postverbally (as in OVA / VS language Hixkaryana) or before the verb (as in the AOV / SV language Carib of Surinam).

The examples in 1a-d are from Derbyshire 1985, pp. 31-3. The nominative (i.e. A and S) NP typically occurs postverbally with no case marking and the accusative NP typically occurs preverbally, also without case marking, but causing morphological variation in the verb. In intransitive clauses, the verb takes a personal prefix n- '3S' agreeing with the postverbal subject (1a). In transitive clauses with no overt O NP, the prefix n- '3A3O' indicates that both A and O are third person. When the O NP occurs overtly, it precedes the verb and the n- prefix is lost; in a subset of Cariban languages (including Hixkaryana), vowel initial verbs take a y- prefix when the person prefix drops (1c).<sup>2</sup> When the marked order AV occurs (1d), the verb takes the n- '3A3O' prefix, which indicates that the preverbal NP is not the O (and hence must be the A).

(1) Hixkaryana independent clause verb agreement and word order<sup>3</sup>

- a. n-eweh-yatxhe woris-komo komo  
 3S-bathe-NONPAST.COLL woman-COLL COLL  
 'The women are taking a bath.' (D's 35b)
- b. n-ahosi - ye kamara  
 3A3O-grab-DIST.PAST.COMPL jaguar  
 'The jaguar grabbed him.' (D's 36c)
- c. toto y-ahosi - ye kamara  
 man 3A3O-grab-DIST.PAST.COMPL jaguar  
 'The jaguar grabbed the man' (D's 36a)

- d. kamara n-ahosi-ye  
 jaguar 3A3O-grab-DIST.PAST.COMPL  
 'The jaguar grabbed him.' (D's 36c)

TAM suffixes in the Set I system do not form consistent cognate sets, or even show consistent semantic categories across modern Cariban languages. As such, they are not a significant heuristic for identifying the system. The preceding examples illustrate three negative characteristics of the Set I verbal system: no auxiliaries have been attested, there are no personal suffixes on the verb, and subjects and objects are not case-marked.

## 2.2 The Set II (Ergative) Verbal System

The primary identifying characteristics of the Set II verbal system are absolutive personal prefixes, ergative personal suffixes, ergative case-marking on the A nominal, and ergatively organized word order. I use the term absolutive to refer to a category composed of S and O referents which exhibit the same morphosyntactic behavior; I use the term ergative to refer to a category containing only an A referent which exhibits a different morphosyntactic behavior from the absolutive. In addition to making a clear distinction between ergative and absolutive nominals, the Set II system allows the use of auxiliaries with all conjugations of the verb.

The absolutive prefixes and ergative suffixes are actually clitics in complementary distribution with overt absolutive and ergative nominals. The ergative clitics are composed of the same person forms as the absolutive clitics, followed by the ergative suffix -ya 'Ergative' (although note that for Kuikúro and Kalapalo the ergative suffix is derived from a different form, the locative heke 'from' — Franchetto 1990, Basso 1992). This complementary distribution does not depend on other morphosyntactic constraints, and hence it differs from the alternation between personal prefixes and preverbal O NPs in the Set I system, which only takes place for transitive verbs with third person A.

The forms of the Set II absolutive and ergative clitics are nearly identical to those of possessive clitics.

Table 2.2 illustrates the Set II personal clitics with selected Makushi forms (from Abbott 1991:101):

Table 2.2. Personal Affixes in Makushi

Person	Intransitive	Transitive Stems		Nominal Possessors
	S prefix	O prefix	A suffix	Possessor prefix
1	u-	u(y)-	-u-ya	u(y)-
2	a-	a(y)	-Ø-ya	a(y)-
3	i-	i(t)-/Ø-	-i-ya	i(t)-
3REFL	tí-	t(í)-	-tí(u)-ya	t(í)-

The basic word order pattern in the Set II system is also different from that in the Set I system in that the S nominal occurs preverbally patterning with the O nominal (both in alternation with the preverbal absolutive clitic), whereas the A nominal occurs postverbally (in alternation with the postverbal ergative clitic), yielding the basic orders SV and OVA. Thus, the morphological ergativity of the clitics is paralleled by syntactic ergativity in the placement of A, S, and O nominals. This syntactic ergativity is also present in case-marking: the S and O nouns are not case-marked, but the A noun (if it occurs overtly) bears the *-ya* 'ERG' suffix. These syntactic facts are illustrated in the following examples from Makushi (Abbott 1991):<sup>4</sup>

- (2) Preverbal absolutive clitic in alternation with preverbal S nominal
- a. aa-ko'mamí-'pí asakí'ne wei kaisarí  
3-remain-PAST two day up.to  
'He remained two days.' (Abbott's 293, p. 84)
- b. u-yonpa-kon João Ø-ko'mamí-'pí miarí  
1-relative-COLL John Ø-remain-PAST there  
'Our relative, John, stayed there.' (Abbott's 292, p. 84)
- (3) Preverbal absolutive clitic in alternation with a preverbal O nominal and ergative clitic in alternation with an A nominal
- a. i-koneka-'pí-i-ya  
3-make-PAST-3-ERG  
'He made it.' (Abbott's 3, p. 24)
- b. mí'kírí Ø-koneka-'pí-Ø mí'kírí-ya  
that Ø-make-PAST-Ø 3:PRO-ERG  
'He made that.' (Abbott's 1, p. 24)
- c. mí'kírí Ø-eporí-'pí-i-ya  
3:PRO Ø-find-PAST-3-ERG  
'He found him' (Abbott's 288, p. 83)
- d. warayo'-ya tí-nmu Ø-eporí-'pí-Ø  
man-ERG 3:REFL-son Ø-find-PAST-Ø  
'The man found his own son.' (Abbott's 289, p. 84)

Unlike TAM suffixes in the Set I system, in the Set II system TAM suffixes form a clear cognate set across Cariban languages. Primarily, they inflect the verb for aspect and mood, with tense often marked in an auxiliary:

- (4) Finite Set II verb followed by an auxiliary

to' Ø-erepamí-'pí Ø-waní-'pí  
3.PRO.PL Ø-arrive-PAST Ø-be-PAST  
'They had arrived (before)' (Abbott's 481, p. 117)

In addition, morphologically finite verbs may occur in dependent clauses, and may function as nominal complements even without additional nominalizing morphology. In 5, the *Ø-* on the independent verb indicates that a preverbal NP has replaced the absolutive pro-clitic, but the only preverbal constituent is the finite verb *awenna'po'pikon* 'you all returned':

- (5) Morphologically finite verb functioning as O complement

aw-enna'po-'pi-kon Ø-epu'ti-'pi-i-ya  
 2-return-PAST-COLL Ø-know-PAST-3-ERG  
 'He knew you all returned.' (Abbott's 219, p. 68)

### 2.3 How the Set I and Set II Systems Are Distributed in Synchronic Languages

One of the main problems to be addressed in this study is how the Set I and Set II systems came to be distributed as they are in independent clauses. As might be expected, some languages use exclusively the Set I verbal system in independent clauses, others exclusively the Set II system. In some languages the two systems are in alternation in independent clauses, with some tenses employing the Set I system, others the Set II system, and some tenses which combine the two systems. In order to have an easy way to refer to these three categories of Cariban languages, I label them as follows:

Nominative Languages are those for which only the Set I (nominative) verbal system occurs in independent clauses.

Ergative Languages are those for which only the Set II (ergative) verbal system occurs in independent clauses.<sup>5</sup>

Mixed Languages are those in which both the Set I system and the Set II system can occur in independent clauses.

Thus, the labels Set I and Set II identify complete systems of independent clause morphosyntax and the labels Nominative Language, Ergative Language, and Mixed Language identify categories of languages for which independent clauses utilize one or the other or both of these systems. Since Mixed Languages sometimes combine portions of each system in independent clauses, I also use the terms Set I and Set II to identify which portion of a clause is taken from which system, e.g. in a Mixed Language sometimes the independent verb will take Set II absolutive prefixes and Set II T/A/M

suffixes (making it a fully inflected Set II verb), but the auxiliary will take Set I personal prefixes and Set I T/A/M suffixes (a fully inflected Set I verb). In the following sections, I discuss the distribution of the two systems in these three categories of languages: Nominative, Ergative, and Mixed.

#### 2.3.1 Nominative Languages

I identify at least the following as Nominative Languages: Carib of Surinam (Hoff 1968), Carijona (Robayo 1987, 1991), De'kwana (Hall 1988), Hixkaryana (Derbyshire 1985), Tamanaco (Gilij 1965), Tiriyó (de Goeje 1909, Leavit 1971), Waiwai (Hawkins 1991b), and Wayana (de Goeje 1946, Jackson 1972). Girard (1971), Durbin (1977), and Kaufman (1989) all claim that these languages belong to different branches of the Cariban family, so if Nominative Languages are innovative, then the innovation has arisen many times since Proto-Cariban. In Nominative Languages, a verb can occur in an independent clause only when inflected with the prefixes and suffixes from the Set I system; it also cannot take auxiliaries; the arguments of the verb follow a nominative word order pattern; and neither S, A nor O are case-marked.

The Set I system does not occur at all in dependent clauses. In some languages of the world (e.g. English), finite verbs can occur in dependent clauses when a complementizer or some other subordinating morphology is added. This is not true in Cariban Nominative Languages. In Nominative Languages (as in many other Amerindian languages), dependent clauses are headed solely by nominalized verbs. These derived nominals are then morphosyntactically "possessed" by their notional absolutive nominals (i.e. S or O), and the dependent A, if it occurs overtly, is marked as an oblique by the dative postposition (cf. Chapter 7 for more details). The possessive prefixes and nominalizing suffixes on the dependent verb are cognate to absolutive

prefixes and TAM suffixes in the Set II system, and the oblique marker on the dependent A is cognate to the ergative marker. However, the full ergative verbal system does not operate in dependent clauses of Set I Languages, as the dependent verb takes neither ergative suffixes nor auxiliaries. Word order in dependent clauses of Set I Languages is clearly organized around an ergative alignment system in that S and O nominals always occur immediately preceding the verb, whereas the oblique A is free to occur either preceding or following the verb.

In sum, for Nominative Languages, the Set I verbal system operates exclusively in independent clauses and a partial Set II system (minus auxiliaries) operates exclusively in dependent clauses.

### 2.3.2 Ergative Languages

I have identified at least the following as Ergative languages: Kalapalo, Kapóng, Kuikúro, Makushi, and Pemóng. Girard (1971), Durbin (1977), and Kaufman (1989) agree that Kapóng, Makushi, and Pemóng are closely related to each other, and that Kalapalo and Kuikúro are closely related to each other, but the first three are from a Northern branch of the family, whereas the latter two are from a far southern branch (meaning that if Ergative Languages are innovative, the innovation has happened at least twice). In the northern Ergative Languages, independent clauses utilize exclusively the ergative system. That is, the verb bears absolutive prefixes, Set II TAM and ergative suffixes, and may take an auxiliary; the A bears an ergative case-marker; and the word order is organized according to the ergative alignment. In the Southern Ergative Languages, most independent clauses take the Set II ergative system, but a nominative variant of the Set II system also occurs in some transitive independent clauses. In this nominative variant, the transitive verb bears an extra prefix, which Franchetto (1990)

calls the 'De-ergativizing' prefix; the standard Set II absolutive prefixes then refer to the A rather than the O of the "de-ergativized" verb. The A nominal is restricted to the position preceding the verb, the O nominal freely occurs either preceding or following the verb, and neither A nor O are case-marked. Auxiliaries may still occur with the de-ergativized verb.

In both groups of Ergative Languages, dependent clauses contain either nominalizations or morphologically finite Set II verbs; it is worth noting that the finite Set II verbs may occur in dependent clauses without additional subordinating morphology. Thus, in Ergative Languages, finite verbs and nominalized dependent verbs are isomorphic (this somewhat counter-intuitive statement is illustrated in Chapters 7 and 9, and its implications for the theoretical notion "finite verb" are discussed in Chapter 10). The Set II absolutive prefixes are identical to possessive prefixes.

In sum, the Cariban Ergative Languages use the Set II System in both independent and dependent clauses. Thus, they differ from the Nominative Languages only in independent clause morphosyntax; in dependent clauses, Nominative and Ergative Languages both utilize ergatively organized nominalizations.

### 2.3.3 Mixed Languages

I identify at least the following languages as Mixed: Apalá, Cariña, Panare, and Yukpa. I label these languages "Mixed" because independent clause morphosyntax cannot be described exclusively in terms of the Set I or Set II verbal systems, but only in terms of a mix between the two. In Mixed Languages, a subset of past tense independent clauses utilizes the Set I system, and the rest of the TAM system is expressed with the Set II system. However, the Set II system in these Mixed languages is not as clean and coherent as the Set II system in Ergative languages: sometimes the auxiliary is inflected

with Set I morphology and sometimes the A is not case-marked, either as an oblique or as an ergative. As in other Cariban languages, dependent clauses in Mixed languages are formally nominalized, taking formally possessive prefixes which are identical to the Set II absolutive prefixes. I illustrate Mixed languages with examples from Panare.

The Set I system in Panare is readily discernable: four past tense suffixes on the verb are unique among the 17 TAM inflections in that (1) they take the Set I prefix set; (2) the O NP alternates with the verbal prefix only when the A is third person; (3) S and A NPs pattern together in word order, both occurring postverbally, with the O NP either preceding the verb or following the A (i.e. basic order is VS and either OVA or VAO); and (4) no auxiliary is allowed to co-occur with the verb. These facts are illustrated in 6a-d.

(6) Panare Set I prefixes and word order<sup>6</sup>

- a.           V           S  
wě-tě-yaj chu  
1S-go-TNS 1SG  
'I went / left.'
- b.           V           A           O           V           A  
mipetyú'mayaj (aměn) Toman mipétyu'mayaj (aměn)  
mi-petyú'ma-yaj (aměn) Toman mi-<sup>^</sup>petyú'ma-yaj (aměn)  
2A3O-hit-TNS (2Sg) Thomas 2A3O-NPO-hit-TNS (2SG)  
'You hit him/her.' 'You hit Thomas.'
- c.           V           A           O           V           A  
apetyú'mayaj (kěn) aměn pétyu'mayaj (kěn)  
a-petyú'ma-yaj (kěn) aměn Ø-<sup>^</sup>petyú'ma-yaj (kěn)  
3A2O-hit-TNS (3Sg) 2SG Ø-NPO-hit-TNS (3Sg)  
'S/he hit you.' S/he hit you.'
- d.           V           A           O           V           A  
nipetyú'mayaj (kěn) Toman pétyu'mayaj (kěn)  
ni-petyú'ma-yaj (kěn) Toman Ø-<sup>^</sup>petyú'ma-yaj (kěn)  
3A3O-hit-TNS (3Sg) Thomas Ø-NPO-hit-TNS (3Sg)  
'S/he hit him/her.' 'S/he hit Thomas.'

This system is obviously cognate to the Set I systems found in Apalaf, Carib,

De'kwana, Hixkaryana, Waiwai, etc.

The other 13 independent clause verbal inflections are clearly not part of the Set I system. In some features, they appear to belong to the Set II system; in other features, they differ. The most obvious differences between these inflections and Set I inflections are: (1) the verbal prefixes agree with S and O (the absolutive) and are cognate to the Set II absolutive prefixes in other languages; (2) preverbal absolutive NPs can replace the prefixes regardless of the person of A; and (3) auxiliaries are always allowed with Set II verbs (and at least for Panare, are often required in elicitation, although all informants freely produce Set II verbs without auxiliaries in narrative discourse). These three facts are exactly parallel to those for the Ergative Languages, leading to the conclusion that these other 13 verb types represent the Set II system functioning in Panare independent clauses. An additional point which supports such an analysis is that at least three of the Panare Set II TAM suffixes, *-sa'* 'Perfect.Visible', *-jpe'* 'Perfect.Inferential', and *-mpëj* 'Imperfective.Transitive', are cognate to Set II TAM suffixes in Makushi and Pemóng, whereas none of them are cognate to Set I TAM suffixes in any Cariban language.

However, the Panare Set II system does not show other characteristics of the Set II system in Ergative Languages: (1) A is case-marked (with the postposition which is cognate to the Set II ergative suffix in Makushi and Pemóng) only for three perfect verbal inflections which are synchronically better analyzed as passive than as ergative (cf. Payne 1990).<sup>7</sup> With other Set II inflections, neither S, A, nor O are case-marked. (2) There are no ergative suffixes with Panare Set II verbs. (3) The S NP does not pattern with the preverbal O NP in terms of basic word order, but instead continues to pattern (for the most part) with the postverbal A NP. (4) Auxiliaries in Ergative languages are inflected with Set II finite morphology, whereas in Panare, auxiliaries are most often nonverbal; the verbal auxiliaries may bear either Set I or Set II inflections. In addition, auxiliaries

are more freely omitted in Ergative Languages, whereas some Panare speakers require auxiliaries in elicitation.

The Panare Set II system is illustrated in the following series of examples. In 7a, the intransitive verb *tě* 'go' bears the Set II personal prefix *a-* '2' and the intransitive nonspecific T/A inflectional suffix *-n*; the subject nominal, the second person free pronoun *aměn*, follows the verb with no auxiliary. In 7b, the transitive verb *petyú'ma* 'hit' bears the same second person prefix *a-* '2' and the nonspecific transitive suffix *-ñe*; the subject nominal, the first person free pronoun *yú*, follows the verb and there is no auxiliary.

(7) Nonspecific aspect with transitive and intransitive verbs: no case-marking

- |    |   |    |  |
|----|---|----|--|
| a. | <i>otěn</i> _____ <i>aměn</i><br>a-w-tě-n          aměn<br>2-INTR-go-T/A 2Sg<br>'You go / are going to go.' | b. | <i>apetyú'mañe</i> _____ <i>yú</i><br>a-Ø-petyú'ma-ñe yu<br>2-TRNS-hit-T/A 1Sg<br>'I hit / am going to hit you.' |
|----|---|----|--|

In 8a the transitive verb *a'ma* 'prepare' bears the detransitivizing derivational prefix *t-*, thus forming an intransitive stem, which takes the intransitive imperfective inflectional suffix *-něpěj*. With this particular inflection, the verb does not agree for person, taking instead an invariant neutral prefix *a-*. The subject is not overt (due to zero anaphora), and the auxiliary verb *ej/ichi* 'be' bears the third person Set II prefix *y-* '3' and the intransitive nonspecific T/A suffix *-n* (seen above). In 8b the transitive verb *petyú'ma* 'hit' bears the transitive imperfective suffix *-npěj*. The O nominal precedes the verb, so there is no Set II prefix. The A nominal, the third person animate distal deictic pronoun *kěn*, is postverbal and takes no case-marking. The nonverbal proximal time auxiliary *kěj* agrees with the A for animacy and occurs between the verb and the A nominal.

(8) Imperfective with transitive and intransitive verbs: no case-marking

- |    |   |
|----|---|
| a. | <i>asonwa wiině yuchin</i> _____ <i>ata'maněpěj</i><br>asonwa wiině y-u-ichi-n          a-t-a'ma-něpěj<br>three moon 3-INTR-be-T/A NEU-DETR-prepare-IMPERF.I<br>'(For) three months he will prepare'<br>(lit: 'Three months he is / is going to be preparing.') |
| b. | <i>arakon petyú'mampäj</i> _____ <i>kěj</i> _____ <i>kěn</i><br>arakon Ø-^petyú'ma-npěj          kěj          kěn<br>monkey Ø-NPO-hit-IMPERF.T is(PROX) 3:AN:DIST<br>'S/he is hitting the monkey.'  |

The next two inflections more closely resemble the ergative Set II system from Makushi in that the A NP is case-marked with the dative postposition *ya* (cognate to the Makushi ergative suffix *-(u)ya*) and in that the inflectional suffixes *-sa* 'Perfect.Visible' and *-jpě* 'Perfect.Inferential' are cognate to Makushi inflectional suffixes *-sa* 'Completive' and *-př* 'Past' (Abbott 1991, pp. 116-8). However, both of these suffixes are better thought of in Panare as forming perfect participles from transitive stems, thus functioning in independent clauses as passive verb forms (analogous to the English passive, in which the perfect participle combines with a copular auxiliary to form a passive independent clause). The case-marking on the A NP must thus be considered oblique rather than ergative, marking that the agent is not the subject of a transitive clause but a demoted oblique adjunct to the passive verb. Nonetheless, the parallels to Set II ergative clauses are striking and require explanation.

In 9a the transitive verb *ireema* 'feed' bears the derivational detransitivizing prefix *ch-* and the first person Set II prefix *Ø-* '1' along with the visible evidence perfect suffix *-sa*. The S NP *yú* '1SG' follows the verb with no auxiliary. In 9b the transitive verb *amaika* 'keep' bears the third person Set II prefix *y-* '3' along with the suffix *-sa*. As with all Set II verbs, the prefix agrees with the absolutive, in this case the patient, which is either O (if we assume an active ergative analysis) or S (if we accept the passive analysis). This clause illustrates one of the syntactic arguments for the passive analysis in

Panare: the nonverbal auxiliary mën agrees with an inanimate nominative — the first person A is animate, hence the inanimate O must be the subject of the clause. The A yu '1Sg' bears the oblique postposition uya 'DAT'.

(9) Perfect sa' with transitive and intransitive verbs: A is case-marked

- a. Ø-w-ch-ireema-sa' yu  
1-INTR-DETR-feed-PERF.VIS 1SG  
'I have eaten.'
- b. y-amaika-sa' mën yu-uya  
3-keep-PERF.VIS is.INAN 1SG-DAT  
'I keep it / it is kept by me.'

In 10a the intransitive verb të 'go' bears the third person Set II prefix y- '3' and the inferential evidence perfect suffix -jpë. Neither the S NP nor the auxiliary occurs. In 10b the transitive verb iki-të 'cut' bears the third person Set II prefix y- '3' and the suffix -jpë. There are two invariant auxiliaries, the first a non-agreeing Set II past/perfect form of the verb ej/ichi 'be', and the second the inanimate suppletive auxiliary mën, which agrees for (in)animacy with the patient subject manko 'mango'. The agent toman bears the oblique postposition uya 'DAT'.

(10) Perfect -jpë with transitive and intransitive verbs: A is case-marked

- a. yu-të-jpë Karaka-pana  
3-INTR-go-PERF.INF Caracas-towards  
'He's gone to Caracas (inferred from his absence and knowledge of his plans / habits).'
- b. y-iki-të-jpë wejcha' mën manko Toman-uya  
3-cut-PERF.INF be.PAST be.INAN mango Thomas-DAT  
'Thomas has cut (down) the mango / the mango has been cut (down) by Thomas.'  
(The act of cutting inferred from the absence of the tree)

The identification of a language as Mixed is not so simple as observing that both the Set I and Set II systems operate in independent clauses. There is no controversy over identifying Set I verbs as independent clause verbs in any language for which they are observed, nor is there a problem identifying Set II verbs as independent clause verbs in

Ergative Languages, where the Set I system does not exist. However, Set II verbs in mixed languages might alternatively be analyzed as nominalized dependent forms, occurring in independent clauses only as complements of a Set I copula or other complement-taking verb (cf. Derbyshire 1991:16-7).<sup>8</sup> In essence, the alternative argument would be that Set I verbs are the only finite verbs in Mixed languages, and that Set II verbs must be analyzed synchronically as nominalizations. The apparent Set II tenses are then taken to be bi-clausal constructions, with the nominalized Set II forms occurring as complements of finite Set I copulas (or other complement-taking verbs). By this analysis, what I have identified as Mixed languages would be considered Nominative Languages which happen to use biclausal constructions to express some TAM distinctions.

The syntactic tests which distinguish between nominalized dependent forms in biclausal construction from independent clause verbs with auxiliaries are fairly complicated, and I have only carried them out for Panare (in extensive elicitation with native speakers). Such syntactic information is not available for the other languages I list as Mixed; I have nevertheless grouped them with Panare because of analogous splits in tense/aspect paradigms, and because of certain examples which I have encountered in the course of reading through texts and grammars. I present the detailed argumentation for considering Set II verbs to be independent clause verbs in Panare (and by extension, in other Mixed languages) in Chapter 8.

This concludes my introduction to Set I and Set II verb systems in Cariban languages. To summarize, the Nominative Languages show only the Set I verbal system in independent clauses; the Ergative Languages show only the Set II verbal system in independent clauses; and independent clauses in the Mixed Languages show a prototypical Set I verbal system in combination with a somewhat different Set II verbal

system. In all Cariban languages, dependent clauses take verbs which bear Set II morphology; in Nominative Languages these dependent verbs are nominalizations and in Mixed and Ergative Languages they have been analyzed as either nominalizations or as finite subordinate clauses. Given this background information, we can now explore more thoroughly the problem of where these different systems came from and how they came to be distributed as they are in modern Cariban languages.

#### 2.4 Possible Hypotheses to Account for the Distribution of the Set I and Set II Verbal Systems

The morphemes in the Set I and Set II verbal systems are different in both sound and meaning, and hence cannot be reconstructed to a single Proto-Cariban verb system. The morphosyntax of each system aligns according to a fundamentally different type, nominative/accusative for Set I and ergative/absolutive for Set II. Any of the three modern language types (i.e. Nominative, Ergative, or Mixed) could logically represent a conservative reflex of the Proto-Cariban verbal system, which means that we have three potential historical scenarios to account for the distribution of the two verbal systems in modern languages: (1) both systems existed in Proto-Cariban independent clauses, in which case modern Mixed languages are conservative in retaining both systems — i.e. Nominative languages have lost the Set II system and Ergative languages have lost the Set I system; (2) Proto-Cariban independent clauses took the Set I system and the Set II system is derived more recently from nonverbal sources — i.e. Nominative languages are conservative and Mixed and Ergative languages represent different stages of innovation; or (3) Proto-Cariban independent clauses took the Set II system and the Set I system is derived from other sources — i.e. Ergative Languages are conservative and Mixed and Nominative Languages represent different stages of innovation. In the latter two

scenarios, some modern languages retain the original Proto-Cariban system (whichever that is), Mixed languages are beginning to replace the old system with the new (hence the two systems alternate in independent clauses), and some have completed the change to the new system.

We have no a priori reason to presume that any of these scenarios is more likely than any other. In Chapter 3 I discuss the methodological principles which must inform reconstructions of grammar, then develop the set of predictions which follows from each scenario. In Chapter 4 I argue that scenario 2 is the only one which can be supported: Proto-Cariban was a Nominative language.

## Notes to Chapter 2

1 Following Dixon (1979) and generally accepted use since then, I use the terms A, S, and O as abbreviations for the grammatical relations subject of transitive, subject of intransitive, and direct object of transitive. I prefer this tripartite system of labelling rather than one which conflates A and S (e.g., the term “subject”). Although the label A is doubtless etymologically related to the semantic case role agent (cf. Fillmore 1968), my use of the term A is not semantic, but syntactic (for further elaboration, see definition of terms, Chapter 3).

2 Derbyshire glosses this y- prefix ‘3A3O’ and I retain his glossing in these examples; in Chapter 5 I will argue based on comparative evidence that the y- reconstructs to a nonreferring prefix in Proto-Cariban.

3 The various Cariban languages have very similar phonology. Most orthographies used by the various Cariban linguists are fairly transparent. The variations are as follows:

	Hixkaryana	Carib	Panare	Makushi	Kuikúro
[i]	i	ĩ	ĩ	ĩ	
[ə]		,	ë		â
[ʔ]			,		
[h]	h	h	j	,	h
[ʃ]	x				
[ñ]	ny		ñ		
[č]	tx				

The morphological categories are given different labels by each primary linguist; I use the morphemic glosses given by each primary source that I cite, and I provide the full form of each abbreviation in text where needed. In most examples, I simply insert the gloss T/A for most tense and aspect suffixes. For Hixkaryana, the necessary abbreviations are as follows:

3S = third person intransitive subject  
 COLL = collective (similar to plural)  
 DIST.PAST.COMPL = distant past completive  
 3A3O = third person subject acting on third person object  
 NMLZR = nominalizer  
 POSS = possessed  
 DENOM = denominalizer  
 1SG = first person singular  
 DAT = dative  
 1+3 equals first person plural exclusive  
 NMLZN.PAST = past tense action/patient nominalizer

4 The name ‘Makushi’ is suggested by Terrence Kaufman (pc) as a phonetically accurate compromise between the names given in the three grammars offered to date: ‘Makuchi’ (Williams 1932), ‘Macuxi’ (Carson 1982), and ‘Macushi’ (Abbot 1991). See note 3 for phonological information. I have inserted a Q- prefix on verbs in some

examples to draw attention to the fact that an absolutive clitic has been replaced by a free (pro)noun absolutive. In other examples I have inserted a Q suffix on the verb to draw attention to the lack of an ergative clitic. Neither of these zero forms is intended to reflect an empty category in the verb, and as such are represented as ‘Ø’ in the gloss line as well. In contrast, there is a zero tense suffix, Q ‘Universal Tense’, which is a placeholder for an obligatory morphological category of tense.

5 As will be seen in Chapter 9, some Ergative Languages actually do utilize one or two Set I tenses, but the languages are still best categorized as Ergative Languages due to (1) the clear dominance of the Set II system, and (2) the predominance of unambiguously ergative tenses (as I suggest in §3.3.3, and as I show in greater detail in Chapters 8-11, the Set II system does not always entail unambiguous ergativity — in at least Panare, cognates to ergative tenses are best analyzed as passives, and there is an aspect-based split the Set II system in both Mixed and Ergative Languages).

6 The morpheme Δ ‘Preceding O (PO)’ represents an accent shift in the verb whenever it is preceded by a free (pro)noun O. In 6b, the free noun O Toman precedes the verb, causing the accent shift. In 6c, the free pronoun O amēn precedes the verb, causing both accent shift and loss of the 3A2O prefix (indicated by Q-).

7 Payne’s analysis is discussed further in Chapter 8. Also, in elicitation we have discovered another sentence form which could be analyzed as a main clause ergative: sometimes the suffix -n occurs on a transitive verb in a main clause context, in which casethe A must take the oblique *cum* ergative postposition uyá ‘Dative’. Further research is needed to determine if this inflection is, in fact, a productive part of the paradigm for main clause verbs, and if the case-marked A is best analyzed as an oblique or an ergative.

8 Derbyshire 1991 is published in a collection of working papers, and as such is a preliminary work. I appreciate Derbyshire’s willingness to share this preliminary work with the academic community, and I hope that I do him no disservice in treating it here on equal footing with his more finished publications.

## CHAPTER 3

## TERMS AND METHODS OF SYNTACTIC RECONSTRUCTION

3.1 Definition of Terms

Until now, I have used linguistic terminology as though I assume that everyone shares my assumptions about the nature of language and the proper use of terms. Clearly, however, there are many formal theoretical frameworks in linguistics, each using the 'same' linguistic terms, but with somewhat different meanings. Since I wish this study to be accessible to linguists operating in any framework, I operate with a minimum of theoretical machinery, utilizing only grammatical categories which are forced upon me by my data. In this section I explain what I intend by each of the technical terms I employ.

With regard to lexical categories, I identify lexical word classes by a combination of semantic meaning and morphosyntactic behavior. First, I identify semantically prototypical nouns and verbs as "time-stable concepts" like persons, places, and things versus "time unstable" concepts like actions and sensations (cf. Givón 1983). I then describe the morphosyntax of these prototypical lexical nouns and verbs in the prototypical context of simple independent clause assertions. By independent clause assertions I mean utterances which contain only one predicate, which assert the reality of an event, and which require no further context to be interpretable to a native speaker.

The lexical properties of verbs include such things as subcategorization for semantic case roles (e.g. Agent, Patient) and syntactic arguments (e.g. A, S, and O). In independent clauses assertions, intransitive verbs assert an action or state relative to one semantic participant and require only one syntactic argument; transitive verbs assert an

action or state relative to two participants and require two syntactic arguments. In Cariban languages, the single syntactic argument of any intransitive verb can be identified as simply S — although in some languages, perhaps there are some subcategories of S to account for (cf. Chapter 5, §5.2.2). For transitive verbs, the two syntactic arguments show different morphosyntactic patterns. For a transitive verb with a prototype agent acting on a prototype patient, I label the syntactic role which corresponds to the semantic Agent referent as A and the syntactic role which corresponds to the semantic Patient referent as O. Having thus identified the morphosyntactic patterns which identify A and O as relevant syntactic categories for verbs which take unambiguous agents and patients, the patterns themselves identify the syntactic categories of A and O for verbs which do not have prototype Agent and Patient referents. In this study, I use the terms notional S, notional A, and notional O to refer to the syntactic arguments which a lexical verb requires. That is, I assume that if in an independent clause assertion a particular verb requires both A and O arguments, then in other types of constructions that verb stem continues to categorize for these same arguments even though they cannot necessarily be expressed in their prototypical morphosyntactic patterns (e.g. a nominalized transitive verb stem still subcategorizes for A and O arguments, but as a derived noun the nominal form cannot take A and O arguments per se, since that is a morphosyntactic property of verbs; in such a case I will describe the alternative morphosyntactic patterns by which the notional A and the notional O are expressed in the nominalized clause).

Having identified S, A, and O in this way, I then use the terms nominative, accusative, ergative, and absolutive as the standard cover terms for sub-groupings of the three: nominative = S and A, accusative = O alone, ergative = A alone, and absolutive = S and O. I use the term tripartite for patterns which treat all three differently. For example, the Set I personal prefixes are tripartite in that A, S, and O are marked with different

forms, whereas the Set II personal prefixes are absolutive in that the same forms mark S and O.

I have used the term verbal system as a cover for the entire complex of independent clause morphosyntax, which includes verbal inflectional morphology, auxiliaries, and the morphosyntax associated with the syntactic arguments of the verb (case-marking and word order). These terms themselves need definition.

By verbal inflectional morphology I mean classes of morphology without which the verb cannot be the predicate for an independent clause (cf. Jespersen's 1923 and Timberlake's 1976 definitions of the notion "finite verb", as discussed in Chapter 10). The class of inflectional morphology stands in distinction to two classes of verbal derivational morphology: category-changing derivational morphology, which changes the lexical category of a verb (e.g. to derive a noun) and thus cannot co-occur with verbal inflectional morphology; and meaning-changing derivational morphology, which alters the meaning of the verb root and can co-occur with either inflectional or category-changing derivational morphology.

By auxiliaries, I mean a restricted class of independent words which co-occur with certain verbal inflections as a part of a single independent clause predicate. Key properties of auxiliaries are: (1) phonological or syntactic independence from the independent verb — i.e. an auxiliary must be distinguishable from inflectional morphology; (2) lack of independent lexical content — i.e. the auxiliary must arguably form a single predication with the independent verb, adding only abstract grammatical information such as tense, aspect, mood, or person marking, but not concrete lexical information.

By word order I mean simply the possible sequences of verbs and their syntactic arguments. As much as possible, I intend to avoid positing phrase structure rules in this

study. I do not want to enter into debates over how phrase structure ought to be represented, which categories are required in a given representation, nor which formalism captures the most synchronic generalizations. I believe I can present my study with reference only to simple constituency in certain subdomains of the clause. Where necessary, I will represent constituent boundaries either with brackets or with simple phrase structure trees; when I model a constituent, I do not intend the model to include all possible categories, but simply to offer a convenient shorthand representation for the syntactic behavior I am discussing at the moment.

Lexical subcategories of nouns are not relevant for this study; however, morphosyntactic properties of prototypical lexical nouns are critical. In particular, nouns can possess other nouns, they can be possessed, they can bear postpositions, and they can serve as A, S, or O arguments of a verb. Given this set of morphosyntactic behaviors, we can identify non-prototype nouns in Cariban languages, including modifying nouns (which translate as adjectives in English) and derived nouns.

In describing the personal prefixes and suffixes from both the Set I and Set II systems, three patterns of behavior require labels. All of these patterns involve coreference between prefixes and free noun phrases. In the first pattern, which I label clitic, the prefixal form is in complementary distribution with a free pronoun or noun phrase, i.e. a coreferential free pronoun or noun phrase may not co-occur in the same clause with the personal prefix, but only one or the other may occur. In the second pattern, which I label clitic/agreement the prefix remains in complementary distribution with an adjacent free pronoun or noun phrase, but may co-occur with a coreferential free pronoun or noun phrase elsewhere. In the third pattern, which I label agreement, the prefix is obligatory regardless of the location (or even occurrence) of a coreferential noun phrase. I illustrate the three types of prefixal forms from Panare:

(11) A Clitic possessive prefix

amēn mátan 'your shoulder' (amēn ^-mata-n; 2Sg NPG-shoulder-Poss)  
amatan 'your shoulder'

\*amēn amatan (your shoulder)

\*amatan amēn (your shoulder)

(12) A clitic/agreement Set II verbal prefix

apañe yu 'I feed you' (a-pa-ñe yu; 2-feed-T/A 1Sg)

amēn pañe yu 'I feed you'

apañe yu amēn 'I feed you'

\*amēn apañe yu (I feed you)

(13) An Agreement Set I verbal prefix

mípayaj 'You fed him/her' (mí-pa-yaj; 2A3O-feed-TNS)

mípayaj amēn kēn 'You fed him/her'

kēn mípayaj amēn 'You fed him/her'

amēn mípayaj kēn 'You fed him/her'

### 3.2 Theory and Methodology of Morphosyntactic Reconstruction

In this section I state some principles of grammatical reconstruction to which I subscribe, then explain how these principles interact with the three potential historical scenarios to predict patterns of data in modern languages.

The first principle is drawn from lexical reconstruction, but it applies equally well to morphemes or to sets of morphemes in syntactic systems:

- 1) If all modern cognates for a given form have the same meaning/function, then the form must be reconstructed with that meaning/function in the proto language.

Conversely, if modern cognates have more than one meaning/function, then the form may be reconstructed in the proto language with any one (or more) of the modern meanings from which the others can arguably be derived, or with all of

the modern meanings if a principled explanation can be offered for the loss of certain meanings in certain modern languages.

So in examining modern Cariban languages, we should look for all possible modern cognates to both Set I and Set II forms. If any of the forms found in either the Set I or Set II systems have only verbal system cognates in modern languages, then those forms must be reconstructed to the Proto-Cariban verbal system. Those forms with both verbal and nonverbal cognates could logically reconstruct to either or both meanings/functions in Proto-Cariban. In order to decide which meanings/functions were prior and which derivative, we need to refer to other principles of reconstruction.

- 2) Relatively more recent developments in morphosyntax will show some syntactic or phonological evidence of their youth, whereas older forms and systems will show signs of their age. Symptoms of young morphology include relatively free forms syntactically (e.g. clitics are relatively freer than agreement affixes, TAM auxiliaries freer than TAM inflectional affixes).

This principle motivates a comparison of the function morphemes in each verbal system for age: is there an opposition between more affixal and more clitic-like personal forms, and does either set express tense or aspect with free auxiliaries as opposed to more bound inflectional affixes? These metrics will help determine which set of forms has been in a longer systematic relationship to verbs.

These two general principles are supplemented by one which is more specific to the Cariban case. This third principle is based on typological comparison of syntactic change, distinguishing between two types of change which appear similar on the surface, but which have very different motivations and associated patterns of morphosyntax. This principle is based on the difference between what Harris and Campbell (in progress) call extension and construction reanalysis.<sup>1</sup>

Extension is a relatively simple kind of historical change, whereby speakers perceive two systems as somehow analogous to each other, and thereby extend some element of one system to the other. For example, both verbal and nominal systems in a given language might require different forms for person marking — one set to mark subject for verbs and another to mark possessor for nouns. Seeing analogous personal distinctions in both systems, speakers might extend the person marking forms from one system to replace those of the other, thus simplifying the language. This kind of operation leaves no real trail to indicate that it has happened, unless a few idiosyncratic parts of the altered system retain the original set of forms.

In contrast, construction reanalysis is a more radical kind of syntactic surgery, whereby a given set of morphemes in a certain syntactic relationship to one another are reanalyzed as having a different set of functions, and perhaps as being in a different relationship to one another. Where extension moves a given form from one system to another, and thereby alters its syntactic function, construction reanalysis actually changes the syntactic function of an entire construction; all of its component parts thereby take on new syntactic functions when they occur in the reanalyzed construction. Outside of this specific construction, the individual morphological forms retain their original meaning/syntactic function — i.e. the entire construction, with all of its component morphology, is reanalyzed; the various component morphemes are not individually reanalyzed; and so when they occur individually in other constructions, they continue to operate as though the reanalysis had not occurred. Thus, construction reanalysis creates forms with multiple meanings/functions: the original meaning/function in most syntactic constructions and the reanalyzed meaning/function only in the reanalyzed construction(s).<sup>2</sup>

The patterns of evidence left by these two diachronic operations — extension and construction reanalysis — are very different. On the surface, it seems clear that in the Cariban case the introduction of a new verbal system must have been due to construction reanalysis rather than extension — i.e. extension creates one discrete change at a time (such as a change only in personal prefixes), whereas construction reanalysis simultaneously changes all morphology which occurs in a given construction. In the Cariban case, not just verb agreement forms, not just TAM suffixes, not just auxiliaries, not just word order alignment, not just case-marking, but ALL of these elements differ between the two systems. Simple extension from another system could produce any one or two of these differences between the systems, but not all of them simultaneously — the entire construction of the verb phrase has undergone radical change as a part of the move between the two sets of forms.

While simple extension of case-marking or personal agreement from one system to another need not leave traces of its movement, when construction reanalysis has taken place, at least some of the morphosyntax of the source construction will be preserved in the resulting construction; in addition, the entire set of individual forms which underwent reanalysis together will retain their individual meanings/functions when they occur in other constructions. It is this pattern of multiple meanings/syntactic functions which motivates the third principle:

- 3) Forms with multiple meanings/functions as a result of construction reanalysis will show evidence as to which meanings/functions are etymologically prior and which are derived.

The evidence will be in terms of the following patterns: (1) If several forms have unique meanings only when they co-occur in a given construction, then that construction is most likely the result of construction reanalysis and the meanings of the forms in that

construction are derivative. For example, if four different forms in a language have multiple meanings/functions, but if all four co-occur in a single construction where each of the four has one meaning/function unique to the construction in question, this confluence of evidence points to the reanalysis of the entire construction rather than to a series of individual extensions or reanalyses. (2) In order for a construction to exist to be reanalyzed, the source construction must have been interpretable, and there must be some semantic or pragmatic connection between the meaning of the source construction and the meaning of the resultant construction. For example, the modern English verb building in He is building a house had its etymological source as a nominalization in a locative predicate clause: He is on building of a house (Visser 1966). He is building a house is a case of construction reanalysis, in which the copula became an auxiliary, the nominalization building became an independent verb, and the locative and genitive prepositions were lost. Had the prepositions been retained, they would have had different meanings in the verbal construction than in other contexts. The meaning of the source construction can easily be linked to the resultant aspectual meaning: “he is located in a metaphorical space defined by the act of building a house” > “He is in the process of building a house”.

In the Cariban case, we must examine the various forms from both the Set I and Set II verbal systems, and then see if all the forms from one (or both) system(s) have additional nonverbal meanings/functions. If the forms from one verbal system have nonverbal meanings in ALL Cariban languages (remember, neither verbal system is attested in main clauses in all Cariban languages), then by principle one, we would be forced to reconstruct those forms to their nonverbal meanings. Then we would posit that these forms derived their verbal meanings (found in only a subset of modern Cariban languages) at some later time by construction reanalysis. As a check, we would like to

find evidence of an entire cognate construction prior to reanalysis to verify that the combination of the forms was interpretable with a meaning similar to the resultant tense-aspect.

Given these principles, the task now becomes to reconstruct the Set I and Set II systems and to identify the source(s) of each element from both systems. To complete the database for reconstruction, we must look outside the verbal systems in modern Cariban languages for cognates to forms from either the Set I or the Set II verbal systems. The results of this search are summarized in Chapter 4.

### Notes to Chapter 3

1 Harris and Campbell's volume is still in early stages of preparation, and hence is not available for direct quotation. I cite them based on Harris' presentation of these concepts in her course, *Diachronic Syntax*, from the 1991 LSA Institute in Santa Cruz.

2 It is exactly this kind of polysemy which Heine et al (1991) account for within their semantic theory of grammaticalization. In this particular study I will not rely heavily on Heine et al's characterization of grammaticalization, since I am focused more on the reanalysis of pre-existing morphology rather than the creation of new morphology via grammaticalization of lexical items. Although it is not so directly applicable to this study, Heine's body of work is an inspiration to me in all my studies of diachronic syntax.

## CHAPTER 4

### OVERVIEW OF THE HYPOTHESIS: FROM SET I TO MIXED TO SET II

In Chapter 2, I summarized the primary identifying characteristics of the Set I and Set II verbal systems, showed how they pattern in modern Cariban languages, and suggested three logically possible scenarios by which the two systems came to be distributed as they are in modern Cariban languages. In Chapter 3 I stated the theoretical principles which must guide diachronic study of these two systems. In this chapter, I look at the two systems again from the theoretical perspective I have outlined. The pattern of evidence fits exactly with the predictions made by scenario 2 from Chapter 2: Set I is the Proto-Cariban verbal system and the Set II system is more recently derived from nonverbal forms. This chapter summarizes the patterns of evidence, explains the mechanism by which nonverbal Set II morphology enters independent clauses, and argues against the alternative hypothesis which has been presented in the previous literature.

#### 4.1 The Pattern of Evidence

Proto-Cariban cognates to most elements of the Set I system are not found outside the verbal system in any modern languages, so by Principle 1 of Chapter 3, the Set I system must be reconstructed to the Proto-Cariban verbal system. I discuss the Set I system in detail in Chapter 5.

In contrast, cognates to all the Set II forms and syntactic patterns are found outside the verbal system in all Cariban languages: Cognates to Set II personal clitics and clitics/agreement affixes occur as possessive clitics on possessed nouns. Cognates to Set

II TAM suffixes occur as category changing derivational suffixes, deriving nouns from lexical verbs. Cognates to Set II auxiliaries function both as copulas and as complement-taking aspectual verbs (e.g. 'finish'). Cognates to the ergative suffix occur as locative postpositions.

The overall pattern of cognates is schematized in Table 3.1. The top row identifies language type as Nominative, Mixed, and Ergative respectively. The second row lists the verbal system(s) found in independent clauses for each category of language. Each subsequent row indicates the function(s) attested in each language type for a given set of cognate morphology.

Table 3.1 The Pattern of Cognates to Set I and Set II Morphemes

Language Type	Nominative	Mixed	Ergative
Verbal system	I	I/II	II
	Nmlzn	Nmlzn-T/A	Nmlzn?-T/A
	Poss. clitics	Poss/Abs clitics	Poss/Abs clitics
	lexical verbs	verbs/Aux	verbs/Aux/affixes
	oblique	oblique/erg	ergative

In Nominative Languages, all parts of the Set II system function outside of the system of verbal morphology. In Mixed and Ergative Languages, the parts of the Set II system function both inside and outside the verbal system. Since Set II forms have nonverbal meanings/functions in all Cariban languages (and do not have verbal meanings in all Cariban languages), we can reconstruct only the nonverbal meanings back to Proto-Cariban. Since the Set II forms have tense-aspect, absolutive argument, auxiliary/affix, and ergative case-marker meanings uniquely when functioning as part of the Set II verbal

system in Mixed and Ergative languages, by Principle 3, the Set II verbal system must be a result of construction reanalysis. In Chapter 6, I reconstruct the Proto-Cariban possessive clitics and possessor-possessed word order. In Chapter 7, I reconstruct some of the nominalizers (§7.1), and I discuss the etymological status of the case-marking and verb-marking patterns in nominalized clauses (§7.2-4).

#### 4.2 The Mechanism of Reanalysis

The evolutionary development of the Cariban Set II system into the verbal domain has two parts, neither of which is particularly revolutionary. What is apparently unusual is to see both parts instantiated in a single language family with a single set of cognate forms. First, Proto-Cariban nominalizations were reanalyzed as participials. Second, the participials were reanalyzed as finite Set II verbs.

In Proto-Cariban (as in modern Nominative Languages), dependent clauses were formed from nominalized verbs. Thus, complement-taking independent verbs would take as their direct object a nominalization of a lexical verb. These derived nouns were possessed by their notional absolutive arguments (i.e. S or O). In certain constructions where the independent verb was a copula or an aspectual verb like "finish" or "try", the main verb did not really convey the semantically most salient information, the concrete lexical meaning, but rather the more abstract grammatical information of tense, aspect, and/or mood. The independent communicative content of the complex sentence was the lexical meaning of the dependent verb. With the nominalized dependent verb being the most salient, and the independent verb serving primarily (or only) to bear TAM, the syntax of the complex sentence was potentially ambiguous: a child learning the language might continue to analyze the sentence as biclausal, or s/he might consider the two verbs to be part of a single predication, with the lexically most salient verb as the main verb and

the grammatically more salient verb as the auxiliary. When the second analysis is chosen, the biclausal construction is taken as monoclausal, with a nonfinite main verb and a finite auxiliary. At this point, the nonfinite verb retains the morphology of its nominal origin, but develops a new syntax to reflect its status as the main verb of an independent clause. As such, it becomes a participial in the classic sense of Jespersen (1924): “neither verb nor noun, but partaking of both”.

To argue for this reanalysis from nominalization to participle, I first document the syntactic characteristics of prototype nouns (Chapter 6), show that before reanalysis, nominalizations share these characteristics (Chapter 7), but that after reanalysis, the syntactic characteristics of the new participles differ in important ways (Chapter 8, §8.1.2).

This type of reanalysis is also attested cross-linguistically. Haspelmath (to appear) discusses the rise of participles from nominalizations in Mongolian, Finno-Ugric, and Romance languages. Also, it is precisely this type of reanalysis which gives us the Modern English nonfinite verbal inflection/participle *-ing* from the Old English nominalizer *ing/-unge* (Visser 1968, Gildea 1989a-b): in contexts where it occurs without its auxiliary, it either remains a fully nominalized form (*walking is good exercise*) or a present participle (*the walking man walks*); synchronically *-ing* as an independent clause verbal inflection requires a copular auxiliary (e.g. *he is walking*). In this sense, English is analogous to a Cariban Mixed Language, with both an older finite verbal system (past and nonpast tenses) in alternation (and combination) with a newer verbal system (i.e. historically dependent verb forms which now occur in independent clauses with auxiliaries — *be ... -ing*, *have ... -ed*, and all the modal auxiliaries with their bare infinitives).

The second stage of the Cariban reanalysis is for the participles in independent clauses to be reanalyzed as independent clause finite verbs without the need for auxiliaries. Cross-linguistically, the evolution from passive participle to finite verb in an ergative system is well-attested (Hohepa 1969, Hale 1970, Anderson 1977, Comrie 1978, Plank (ed) 1979, Givón 1979, 1984, Mallinson and Blake 1981, Estival and Myhill 1988). There is at least one clear example of a participial first being used to form a passive and then the passive construction developing into an ergative construction in the Indo-Iranian family (documented in Pirejko 1979 and John Payne 1979). Although Comrie 1978 (375-6) states that he is not aware of any cases of an ergatively organized nominalization being reanalyzed directly into an ergatively organized verbal system, he qualifies this statement by suggesting that all such developments go through a passive stage. While not all Set II tenses show a *passive* stage per se (see Chapter 11, §11.2.2), in this study I will suggest that they do go through a *participial* stage.

If we focus just on the changes that have taken place in the combination of the verb stem plus Set II morphology, the change is one from nominalization to finite Set II verb. This evolution must take as its starting point a Nominative proto-language, in which syntactic distinctions between lexical and derived nouns are minimal. In the first stage of the evolution to a Mixed Language, nominalizations become participials which continue to bear identical morphology to nouns, but which, in certain contexts, no longer share the syntax of nouns. Specifically, when they occur as complements of a copula or aspectual/modal independent verb like ‘finish’ or ‘try’, they show syntactic behavior which is different from that of lexical nouns (and more like that of verbs inflected with Set I morphology). In Ergative languages, the participial has been further reanalyzed as a finite independent verb — not because of any inherent change in its morphosyntactic behavior, but because the Nominative system, the historical finite verbal paradigm, is

lost. Thus, the only independent clause verbs which remain as candidates for the label “finite” are the nominalizations cum participials, i.e. the Set II verbs. Due to this evolution, the finite verb and the erstwhile nominalized dependent clause in Ergative Languages share in patterns of both morphology and syntax; it is only in a few small syntactic behaviors that the two can be distinguished at all (Chapters 9-10).

Figure 2 illustrates this chain of development:

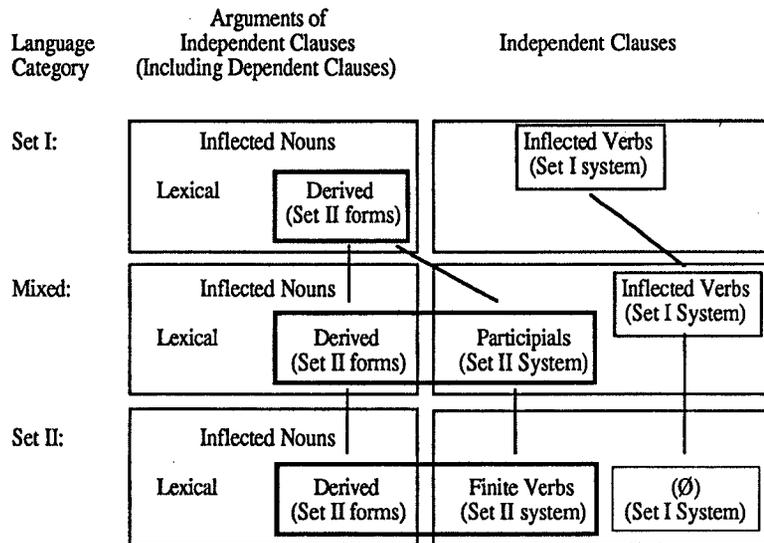


Figure 2. The Evolution of Nominalizations into Finite Verbs

In Nominative Languages, the verb of an independent clause must be inflected with Set I morphology, and verbs inflected with Set I morphology cannot occur in dependent clauses. In contrast, verbs bearing Set II morphology pattern with lexical nouns in virtually all areas of morphosyntax, heading only dependent arguments (or clauses). Thus, there seems to be a complete dichotomy in Nominative languages, with Set I verbs completely independent and Set II verbs completely nominalized, and hence

dependent. In Chapters 6 and 7 I illustrate the properties of nominalized (Set II) verbs in Nominative Languages.

In Mixed languages, verbs inflected with Set I morphology remain the prototype finite verbs, occurring almost exclusively in independent clauses.<sup>1</sup> Set II morphology continues to derive nouns from verb stems in dependent contexts. However, verb stems bearing Set II morphology have also begun to occur in independent clauses, as participials co-occurring with auxiliaries. Among the syntactic properties which distinguish participials from nominalizations is that participials can occur in independent clauses, even though they are not finite like Set I verbs. In Chapter 8 I argue from both semantic/pragmatic and also from syntactic evidence that in the Mixed Language Panare, Set II verbs now occur in independent clauses; as befits their new participial status, they no longer pattern morphosyntactically with lexical nouns. Thus, the independent clause is no longer exclusively the domain of the Set I system, but is now shared between the two systems.

In Ergative Languages, the Set I verbal system has been lost — and along with it has been lost the historical morphosyntactic definition of finite verb. The only candidate for the status of finite inflected verb is the erstwhile participial, the verb bearing Set II morphology, even though the inflection shows no more morphosyntactic characteristics of finiteness than it did as a participial in Mixed languages. Thus, in Ergative Languages, verb stems bearing Set II morphology now function at both ends of the noun-verb continuum: as derived nouns in dependent clauses and as finite inflected verbs in independent clauses. It is not that these Set II verbs have evolved so much farther, but rather that with the loss of the Set I system, much of the formal distinction between derived nouns and finite verbs has been lost. In Chapter 9 I illustrate the identity between finite and nominalized verb forms for Northern and Southern Ergative Languages (§9.1

and §9.2). I suggest (following Joseph 1983) that no morphological distinction exists between finite and nonfinite verb forms, leaving only a distinction between dependent and independent clauses, each of which utilizes the same verb forms.

#### 4.3 The Competing Hypothesis

Some correlations between the Set II verbal system and the dependent clause system of at least Nominative languages have been noted in the only previously published works on Cariban historical syntax (Derbyshire 1981, 1985, 1987, and 1991). To Derbyshire, the correlation between independent clauses in Ergative Languages and dependent clauses in Nominative Languages was taken as evidence for a different hypothesis, namely that the Set II system must have operated in both the verbal and the nominal systems in Proto-Cariban and that the Set I system is an innovation in the verbal systems of some Cariban languages (i.e. the third scenario from Chapter 3). In this section, I discuss the empirical basis for that claim, and argue that it cannot be supported.

Derbyshire's work has been very influential in the field of word order typology. Prior to 1977, typologists had claimed that since no language had shown a basic word order with the object preceding both the subject and the verb, such an order was universally impossible. Derbyshire 1977 destroyed these claims by documenting that the Set I Cariban language Hixkaryana has the basic word order object-verb-subject (OVS). Derbyshire and Pullum 1981 argued that a number of other Cariban languages also have the basic order OVS (including the Set II language Makushi). Derbyshire 1981 and 1985 then addressed the question of how this aberrant word order came to exist. In his discussion, he asserted that Proto-Cariban was probably an ergative/absolutive language with SOV order. Derbyshire 1987 and 1991 state this same conclusion more strongly. I recapitulate his reasoning as follows.

First, Derbyshire described the Nominative Language Hixkaryana, noting (1) that personal prefixes on the verb mark A, O, and S without forming either a nominative/accusative or an ergative/absolutive pattern, (2) the word order is OVA and VS, and (3) there is no nominal case-marking. He contrasted this with Ergative Language Makushi, noting that the A is sometimes marked with an ergative suffix, that the verbal prefixes mark only absolutive, and that the basic word order in Makushi is SV in intransitive clauses and about 50% AOV and 50% OVA in transitive clauses. He did not identify the full Set I and Set II systems in that his descriptions did not discuss TAM suffixes nor auxiliaries, but were restricted to person marking on the verb, case marking on nouns, and word order in the opposing systems. Given the limitations of his data — both in terms of the number of relevant elements in the competing systems and in terms of number of languages compared — Derbyshire could not reconstruct Proto-Cariban forms or systems, so he relied instead on theory to decide which system was more likely to have been conserved from Proto-Cariban and which was more likely to be innovative.

The theory Derbyshire begins with is that independent clause verbal systems tend to be innovative and dependent clause systems tend to be conservative (cf. Givón 1979:83-5, 259-61).<sup>2</sup> Since the word order in Hixkaryana dependent (i.e. nominalized) clauses is subject-object-verb (AOV), since absolutive (Set II) prefixes are found in Hixkaryana dependent clauses as genitive prefixes, and since the A NP in Hixkaryana dependent clauses always bears the oblique postposition which is cognate to the Set II Ergative suffix, Derbyshire concluded that the ergative/absolutive (Set II) person marking system, AOV word order, and the ergative case-marker are all more conservative than the independent clause (Set I) person marking system, OVS word order, and lack of case-marking. A correlate to this assumption was the assumption that the parallel ergative (Set II) system in languages like Makushi must also be more conservative than the Hixkaryana

Set I system. This assumption thus led to the conclusion that the Proto-Cariban verbal system must have been ergative/absolutive (Set II) like Makushi, with AOV word order. He then had to account for three innovations in Hixkaryana independent clauses: the loss of the ergative case-marker, addition of nominative personal prefixes to form the Set I verbal prefix set from pre-existing the Set II absolutive forms (more on this in §4.3.1), and the word order change to OVS. He explored a number of possible explanations — including the possibility that the loss of case-marking caused the change in word order — and concluded that the structural mechanism for the word order change was most likely an afterthought construction whose motivation was most likely pragmatic. He did not discuss either a mechanism or a motivation for the change in verb agreement and case-marking, but simply asserted that the change must have occurred, since the modern differences were self-evident.

Before discussing the evidence which has been presented in support of this hypothesis, I must contest the primary assumption which underlies it. It may be true that dependent clauses are typologically more conservative and that independent clauses are more innovative. In fact, my reconstruction of Proto-Cariban morphosyntax is consonant with this claim in that dependent clauses from all modern Cariban languages do conserve the Proto-Cariban dependent clause system. However, Derbyshire's assumption that dependent clauses conserve independent clause morphosyntax is not supported by either theory or the Cariban data. Instead, what what is conserved in modern Cariban dependent clauses is the Proto-Cariban dependent clause morphosyntax.

Derbyshire's claim that the independent clause system has been preserved in dependent clauses entails two specific empirical questions: first, In Proto-Cariban was there only one system, the Set II system, which initially operated in both independent and dependent clauses? Second, Has the Set I verbal system recently invaded independent

clauses in Mixed and Set I languages, with a resulting restriction of the Set II system to the nominal system and dependent clauses? The first empirical question can only be resolved by reconstructing the forms of the two systems according to the principles laid out in Chapter 3. To resolve the second empirical question, two types of evidence are needed: (1) modern nonverbal cognates to the Set I verbal system, and (2) a mechanism by which the nonverbal Set I forms were introduced into independent clauses as a system.

I have made the strong claim in §4.1 that no nonverbal cognates to the Set I system are found. However, Derbyshire (1991) and Franchetto (1990) do offer some potential nonverbal cognates to portions of the Set I personal prefix set. In §4.3.1 I account for Derbyshire's proposed nonverbal Set I cognates as the result of an earlier innovation, independent to the rise of the Set II verbal system. In §4.3.2 I argue that Franchetto's potential nonverbal cognate is in fact not cognate to a Set I person marking prefix, but is rather cognate to an idiosyncratic Set II nominalizing prefix. In §4.3.3 I summarize the almost complete lack of either cognate forms or coherent mechanism to support the alternative hypothesis.

#### 4.3.1 Nonverbal Cognates to the Set I Object-Oriented Person Markers

Based on synchronic morphosyntactic behavior, the Set I transitive person marking system can be divided into two sub-groups: A-oriented prefixes and O-oriented clitics (for definition of the terms A-oriented vs. O-oriented, and for details of the syntactic tests which distinguish the two, see Chapter 5, §5.2.1). These groups differ in both form and syntactic behavior, differences which argue for different etymologies as well. Derbyshire 1991 points out that a subset of the Set I O-oriented and the Set II absolutive clitics are the same forms:<sup>3</sup>

	Set I		Set II
	A-oriented	O-oriented	Absolutive
1	*c(i)-	*u(y)-	*u(y)-
2	*m(i)-	*a(y)-	*a(y)-
1+2	*kic(i)-	*k(i)-	*k(i)-
3	*n(i)-	—	*y(i)-

Derbyshire suggests that the Set II clitics were prior (as part of the historically conservative Set II verbal system) and that the Set I A-oriented prefixes represent recent innovations, added to the historically conservative Set II clitics to form the full Set I person-marking prefix set. Presumably the new prefixes were added by the mechanism of extension, since the only change argued for is the addition of the new prefixes. But the question arises, Extension of what and from where? Derbyshire (pc) suggests that the second and third person forms might represent reduced free pronouns (from Hixkaryana *amoro* and *noro*, respectively), and that they probably started with intransitive verbs and moved by extension into the transitive set. He offers no potential etymology for the first person singular and dual inclusive forms.

I will argue the opposing position, that the Set I A-oriented prefixes are historically prior and that the Set I O-oriented prefixes were introduced into the Set I system by extension from the set of possessive clitics (which are also the etymological source of the Set II absolutive clitics). Further, I will argue that this integration is not a recent development, but took place prior to Proto-Cariban.

The Set I A-oriented and O-oriented forms differ not just in form, but also in syntactic behavior. The A-oriented forms are obligatory agreement prefixes, whereas the O-oriented forms can be replaced with the corresponding free pronoun or full NP argument (cf. the definition of *agreement* and *clitic* in Chapter 3). I take these differences to reflect different etymologies: the A-oriented prefixes appear to be older (they are more

bound to the verb in that they are obligatory) and their etymological source has been lost (Greenberg 1987 suggests that a form \**m* '2' existed as far back as Proto-Amerind). The O-oriented forms appear to be younger (syntactically less bound as clitics in complementary distribution with free pronouns and full NPs) and the Proto-Cariban possessive clitics are the transparent etymological source (I present the data to support this argument in Chapter 5, §5.2.1).

When the O-oriented clitics were extended into independent clauses to join the older A-oriented prefix set, no other cognates to parts of the Set II system accompanied them: they occur with Set I word order, Set I case-marking, Set I T/A inflectional suffixes, and no auxiliaries. Thus, the mechanism by which forms identical to the Set II absolutive clitics entered the Set I person-marking system must have been localized, something like simple extension. Since all Set I systems found in modern Cariban languages already contain the O-oriented portion of the prefix set, the extension must have happened by the time of Proto-Cariban. In sum, while the O-oriented Set I forms arguably do originate outside the verbal system, this is better accounted for by simple extension of the forms from possessive clitics into the Set I system than by considering the entire Set II verbal system to be the historical antecedent to the Set I system.

#### 4.3.2 The Potential Nonverbal Cognate to the Set I Prefix \**n*- '3A3O/3S'

Franchetto (1990) describes the southern Brazilian Cariban language Kuikúro as ergative/absolutive with the exception of a certain set of more "nominative" moods. She labels the prefix which triggers the shift from absolutive to nominative agreement in these moods the de-ergativizing prefix. The de-ergativizing prefix is a nasal *g-/ñ-* [ŋ- /ñ-], which Franchetto takes to be cognate to the non-ergative Set I prefix \**n*- '3A3O/3S' (cf. Table 2.1, Chapter 2; this same form is called the 3A prefix in the preceding section and

in Chapter 5, §5.2.1.1). Franchetto thus concludes that the purportedly prior ergative system represented by Kuikúro is just beginning the change to the more nominative Set I system, a change which is completed in the “more innovative” Nominative Languages.

Kuikúro is clearly an Ergative Language, as shown in Chapter 9 (§9.2.1), so Franchetto’s claim represents a threat to the hypothesis I have laid out above. However, closer inspection shows that the Kuikúro de-ergativizing prefix is not related to the Set I \*n- ‘3A3O/3S’ prefix at all, but rather is an extremely innovative descendent of a Proto-Cariban derivational prefix \*n(i), which is an O nominalizer (i.e. when attached to a verb stem, it derives a noun which refers to the notional O of that verb). In Chapter 7 (§7.4), I present the comparative evidence for reconstructing the de-ergativizing prefix as the Proto-Cariban O nominalizer. In Chapter 8 (§8.1.3), I show that this idiosyncratic O nominalizer has evolved into a marker of A focus in Panare; in Chapter 9 (§9.2.3), I discuss the innovative new nominative system (which rises in the midst of the already innovative ergative system) in Kuikúro and Kalapalo.

#### 4.3.3 On the Lack of a Coherent Mechanism for the Alternative Hypothesis

Derbyshire (1981, 1985, 1987, and 1991) has claimed that the Proto-Cariban system of verbal person-marking, nominal case-marking, and word order was all ergatively organized, and that this ergativity was preserved in modern languages like Makushi and Kuikúro. By focusing on only these three aspects of the competing verbal systems, Derbyshire was able to state his hypothesis without positing a specific mechanism by which a systemic reorganization presumably took place: the loss of the ergative case-marker could have been due to simple erosion, independent of any other systemic change; the change from preverbal to postverbal subject placement is explained as the grammaticalization of an afterthought construction (although the difference

between the presumably Proto-Cariban absolute word order alignment versus the innovative OVS nominative alignment in Hixkaryana and the SOV nominative alignment in Carib of Surinam is not explained); and the change in the person marking set is simply seen as the introduction of the A-oriented prefixes alongside the pre-existing absolute (O-oriented) markers. Each of these individual changes is plausible in the abstract. Derbyshire asserts that, taken together, they are sufficient to account for the differences between Set I and Set II languages.

However, the alternative hypothesis needs to account for much more than these three pieces of the change. The entire Set I and Set II systems are different: nominative versus absolute word order alignment; personal agreement prefixes with only partial etymologies versus absolute clitics with clear etymology as genitive clitics; TAM suffixes with no clear etymologies versus TAM suffixes which double as nominalizers; and the absolute exclusion of auxiliaries versus optional auxiliaries with any inflected verb. Finally, there is no clear scenario by which Set II could have been the verbal system in Proto-Cariban, then have been restricted to dependent clauses, and finally have been restricted to just the nominal system in Nominative Languages — by what mechanism could presumably finite Set II verb forms have been reanalyzed as derived nominals with no addition or loss of morphology? And in the absence of nonverbal etymologies for either the Set I T/A suffixes or the Set I A-oriented personal prefixes, we cannot even begin to construct a scenario by which the Set I system could have entered independent clauses after Proto-Cariban.

In contrast, the mechanism by which the Set II system entered independent clauses is clear: construction reanalysis. In the balance of this study I offer a detailed study of the various stages of reanalysis: from Proto-Cariban as a Set I Language with nominalized dependent clauses (Chapters 5, 6, and 7), to the reanalysis of nominalized

verbs into participials in independent clauses in Mixed Languages (Chapter 8), to the final reanalysis of these forms as finite verbs in Set II languages (Chapter 9).

Although the reconstructable history of the Cariban language family forces me to the conclusion that the nominative Set I verbal system is older, and that the ergative Set II system is a more recent innovation (one which is still in progress), I must add that I agree with Derbyshire (1987, 1991) when he suggests that there is long history of ergativity in the South American language area, and that at some point in the ancestry of modern Cariban languages we should find ergativity. If nothing else, the ergative organization of nominalizations in Cariban languages suggests that ergativity is a central notion in grammar of the family.

The grammar of independent clauses is constantly cycling through new systems, as opposed to the relatively stable grammar of subordinate clause systems. The modern system of subordination (i.e. ergatively organized nominalizations) could easily have descended without undergoing significant change since well before Proto-Cariban. The independent clause verbal system might have gone through several cycles of new morphosyntax in that same time span. I suspect that the older ergative system proposed by Derbyshire almost certainly has existed at least once — and maybe more than once — since the subordinate system took its current shape. However, reconstructable history shows only the last two cycles: from the Set I system to the Set II system, and now in Kuikúro and Kalapalo, the beginnings of a new Set II nominative cycle. A deeper reconstruction may be possible someday (perhaps comparing Proto-Cariban to reconstructions of Proto-Jê or Proto-Tupán), but likely the subordinate verbal systems will reconstruct more readily, and the hypothesized older ergative system will likely be either lost or unrecognizable in the modern descendents of this Proto-Cariban-plus language.

#### Notes to Chapter 4

1 The sole exceptions that I am aware of are three relativizing suffixes in Panare (Gildea 1989a) and a single relativizing suffix in Pemóng (Armellada 1943a). These appear to be independent recent innovations (they are not cognate, and source forms for the relativizers are still attested as free pronouns), idiosyncratic to these two languages.

2 This theory originated from discussions of German word order, where the historically conservative SOV order is found in subordinate clauses and the innovative SVO order in main clauses. For his historical Cariban studies, Derbyshire expands this theory to include case-marking and verbal morphology.

3 These reconstructions are my own from Chapter 5 — Derbyshire (1991) only notes the resemblance between the synchronic forms in Carib of Surinam, Hixkaryana, and Makushi.

## PART II: THE PROTO CARIBAN VERBAL AND NOMINAL SYSTEMS

In Part II of this study, I present my reconstruction of Proto-Cariban as a Nominative Language. Although I am confident about the paradigmatic oppositions which I reconstruct, the forms which I posit for Proto-Cariban represent only tentative hypotheses to be tested — I have data from roughly half of the Cariban family, but the various forms differ enough that a firm reconstruction could only be obtained by first reconstructing intermediate proto-branch languages. In the following chapters, I present the comparative evidence for reconstructing the Set I system itself as a coherent entity; i.e. I consider the entire system to be cognate amongst the various languages despite some variation in component forms within the modern descendents of the Proto-Cariban Set I system. In Chapter 5, I reconstruct elements of the Set I verbal system. In Chapter 6, I reconstruct the morphosyntax of possession (the antecedent to the Set II absolutive verbal proclitics and ergatively aligned word order). In Chapter 7, I reconstruct the nominalizing suffixes which evolve into Set II verbal TAM suffixes, show the ergative morphosyntax associated with most nominalizations and the nominative morphosyntax associated with one idiosyncratic O nominalizing prefix.

## CHAPTER 5

## SET I AS THE PROTO CARIBAN INDEPENDENT CLAUSE VERBAL SYSTEM

The Set I verbal system reconstructs back to Proto-Cariban independent clauses; in a comparison of modern Cariban languages, cognates to the parts of the Set I system are found only within the Set I system in independent clauses. Since these cognate forms are part of a complete Set I system in each modern language where they are found, I reconstruct the entire Set I system back to Proto-Cariban independent clauses. This chapter presents the comparative evidence which leads to these conclusions. Each section begins with a characterization of the part of the Set I system in question, followed by illustration of that part of the system with examples from as many languages as possible. Because the paradigmatic oppositions are virtually identical in all the Cariban languages, the tables of comparative prefix sets include all synchronic forms which instantiate the oppositions (including some apparent non-cognate forms). However, since the Set I TAM suffixes show very little paradigmatic similarity, I restrict the tables of comparative suffixes to apparent cognate forms.

A Set I system is found in Apalaí, Bakairi, Carib, Carijona, Chayma, Cumanagote, De'kwana, Hixkaryana, Kapóng, Panare, Tamanaco, Tiriyo, Waiwai, Wayana, and Yukpa (see Tables 1.1-1.3 in Chapter 1 for proposed genetic connections amongst these languages).

I divide the Set I system into three parts: nominal word order and verbal prefixation facts (§5.1), personal prefixes (§5.2), and TAM suffixes (§5.3). Since personal prefixes are sometimes dependent on word order, discussion in §5.1 and §5.2

overlaps to some degree. Nominals are not case-marked, nor are auxiliaries attested, in any modern Set I system. The lack of these two features is illustrated by examples throughout the chapter.

### 5.1 Word Order and Verbal Prefixation

In modern Set I systems, transitive word order varies mainly between OVA and AOV, although VAO and AVO have been attested in one language (Panare, cf. Gildea 1989a, Payne, Payne, and Gildea in process), and all possible orders have been attested in others (Carib of Surinam, cf. Hoff 1991; De'kwana, cf. Hall 1988). The OV order is fairly rigid in most Set I systems, with most variation in order being on the part of the A nominal. In all Set I systems for which we have evidence, the A may occur either preceding or following the OV unit. For Carib of Surinam, Hoff (1978) argues convincingly that the more neutral order is preverbal: AOV. For Hixkaryana, Derbyshire (1977, 1985, and 1986) argues convincingly that the more neutral order is postverbal: OVA. In each of these languages, the S patterns with the A: SV for Carib and VS for Hixkaryana. It is based on this sort of identity between A and S nominals that I label the Set I system "nominative". In the following subsections, I illustrate word order variation in the modern Cariban languages.

Hoff (1978, 1991) and Derbyshire (1981, 1985) have pointed out the strong nature of the bond between a preverbal O and the verb in the languages they study (Carib of Surinam and Hixkaryana). The evidence for this bond comes from co-occurrence phenomena and word order restrictions when the A is third person (i.e. when the O-oriented prefixes listed in Chapter 4, §4.3.1, occur):

- (1) When a free pronoun or full NP O precedes the verb, Set I prefixes do not occur (i.e. the preverbal O nominal is in complementary distribution with the O-oriented Set I prefixes).

- (2) In several Cariban languages, the O nominal can only occur preceding the independent verb, and other nouns cannot be inserted between the two.

These facts are not well described for all Cariban languages, but the majority of the languages in my corpus show some evidence of following these same patterns, and only four show any evidence of counter-examples. The O-oriented Set I prefixes (which are in complementary distribution with the nominal O) are \*ɪ- '3A1O', \*ɛ- '3A2O', \*k(i)- '3A1+2O', and they are joined as well by the A-oriented prefix \*n(i)- '3A3O'. Although the personal prefixes do not co-occur with a preverbal O, in a subset of Cariban languages a prefix ɣ- remains on the verb in this environment. In this same subset of languages, an identical ɣ- prefix occurs between possessor and possessed vowel-initial noun. In virtually all of the Cariban languages, a ɣ- prefix occurs between a vowel initial verb and \*ɪ- '3A1O' or \*ɛ- '3A2O' and between a vowel initial possessed noun and the possessor prefixes \*ɪ- '1' or \*ɛ- '2' (i.e. the allomorphs are ɪ-/ɪɣ- and ɛ-/ɛɣ-). In Gildea (1989c), I reconstruct this ɣ- prefix to a genitive morpheme in the Proto-Cariban nominal system; in Gildea (1991a) I reconstruct it to an inverse marker in the Proto-Cariban verbal system. In this chapter, I will first illustrate the occurrence of this prefix with a preverbal O nominal (§5.1.2), then I will illustrate its occurrence in the verbal prefix set (§5.2.1). At that point, I will argue that it should be reconstructed independently from the personal prefixes. In Chapter 6, I offer parallel illustration and argumentation to separate the \*ɣ- morpheme from the personal possessive prefixes.

I divide the remainder of this section as follows: first I illustrate word order for those languages which have retained no trace of the \*ɣ- morpheme between a preverbal O and the verb (§5.1.1), next for those which retain a synchronic ɣ- (§5.1.2), and finally for those in which the personal prefixes are not in complementary distribution, but co-occur, with preverbal O nominals (§5.1.3).

5.1.1 Languages in Which Prefixes Alternate with  $\emptyset$ -

The languages for which third person \*n(i)- alternates with  $\emptyset$ - are Apalaí, Carib, Carijona, Wayana, Yukpa, and possibly Tiriyo.

For Apalaí, Koehn and Koehn (1986:34) suggest that the basic order in transitive clauses is OVA (14), but they note that AOV is also possible (15b). A lexical O can only occur immediately preceding the verb, in which case the 3A3O personal prefix does not occur (14, 15b); if A is first or second person, then the 1A or 2A prefix remains despite a preverbal O (16 for 2A). In intransitive clauses, the order is either SV (17a) or VS (17b), with no prefix alternation and no claim as to which is basic.

## (14) Apalaí main clause basic order, OVA

O	V	A	
<u>kalkuxi</u>	$\emptyset$ - <u>etapa-ã</u>	<u>toto</u>	<u>papa</u> <u>tomo</u>
jaguar	$\emptyset$ -kill-T/A	3Pl	father 3Pl
‘They killed a jaguar, father’s group.’ (p. 33)			

## (15) Alternation between 3A3O prefix and preverbal O

a.	A	V	b.	A	O	V
	<u>aimo</u>	<u>n-anỹ-no</u>		<u>aimo</u>	<u>kana</u>	$\emptyset$ - <u>anỹ-no</u>
	boy	3-lift-T/A		boy	fish	$\emptyset$ -lift-T/A
	‘The boy caught it.’ (p. 108)			‘The boy caught the fish.’ (p. 108)		

## (16) Co-occurrence of 2A3O prefix with preverbal O

taky m-ekaro-ase ey-a  
bow 2-give-T/A 3-DAT  
‘You gave the bow to him.’ (p. 85)

## (17) Word order variation in intransitive clauses.

a.	S	V	b.	V	S
	<u>papa</u>	<u>n-otuh-no</u>		<u>taro-ino</u>	<u>kỹ-yto-ne</u> <u>toto</u> <u>kāpo</u> <u>pona</u>
	father	3-eat-T/A		here-from	3-go-T/A 3Pl airstrip to
	‘Father ate.’ (p.34)			‘From here they went to the airstrip.’ (p. 41)	

Hoff (1978, 1991) gives a definitive treatment of word order in Carib of Surinam.

The basic order is AOV and SV, but all possible orders are attested. A preverbal O nominal is in complementary distribution with a verbal prefix only when A is third person

(Hoff 1978:13-4, note 5, 19-20 below). With a non-third person A, the prefix does not alternate with a preverbal O (18c-d). Carib is typical of the family in that 1, 2, and 1+2 free pronouns can serve as the O nominal which replaces a verbal prefix (illustrated with the 2Sg pronoun amooro in 19b).<sup>1</sup> Since the preceding O nominal may be any person, Hoff (1991) analyzes the  $\emptyset$ - prefix as marking ‘3A’ and indicating nothing about O except that the NP precedes the verb. When both A and O are third person, the only way for the O nominal to occur overtly is immediately preceding the prefixless verb (20b-c), in which case the 3A3O prefix n(i)- cannot occur (20d).

## (18) 2A both with and without overt A NP

a.	V	b.	A	V		
	<u>m-eene-i</u>		<u>amooro</u>	<u>m-eene-i</u>		
	2A-see-T/A		2Sg	2A-see-T/A		
	‘You have seen him.’		‘You have seen him.’			
c.	[ O ]	V	d.	A	[ O ]	V
		<u>moxko</u> <u>peeru</u> <u>m-eene-i</u>		<u>amooro</u>	<u>moxko</u> <u>peeru</u> <u>m-eene-i</u>	
		that dog 2A-see-T/A		2Sg	that dog 2A-see-T/A	
		‘You have seen that dog.’		‘You have seen that dog.’		

## (19) 2O prefix both with and without overt O NP

a.	V	b.	O	V
	<u>ay-eene-i</u>		<u>amooro</u>	$\emptyset$ - <u>eene-i</u>
	2O-see-TNS		2Sg	$\emptyset$ -see-TNS
	‘S/he has seen you’		‘S/he has seen you’	

## (20) 3A3O prefix both with and without overt O NP

a.	[ A ]	V	b.	[ A ]	[ O ]	V
	<u>moxko</u>	<u>peeru</u> <u>n-eene-i</u>		<u>moxko</u>	<u>peeru</u> <u>moxko</u> <u>paaka</u> $\emptyset$ - <u>eene-i</u>	
	that dog	3A3O-see-T/A		that dog that cow	3-see-T/A	
	‘The dog has seen him/her/it.’			‘The dog has seen the cow.’		
c.	[ O ]	V	[ A ]			
	<u>moxko</u> <u>paaka</u>	$\emptyset$ - <u>eene-i</u>	<u>moxko</u> <u>peeru</u>			
	that cow	$\emptyset$ -see-T/A	that dog			
	‘The dog has seen the cow.’					
d.	*[ O ]	V				
	* <u>moxko</u> <u>paaka</u>	<u>n-eene-i</u>				
	that cow	3A3O-see-T/A				
	(S/he has seen the cow)					

In his three works on Carijona, Robayo (1987, 1989, 1991) provides a preliminary look at word order and morphosyntactic variation in Carijona. The surface orders SV and VS are both attested (21), as are the orders VO, SOV, and OVS (Robayo 1991 gives the chart in 23 without illustrative examples). According to the chart and the examples in 24a-b, when both A and O are third person and an overt O nominal precedes the verb, the personal prefix is lost. As seen in 22, with a non-third person A the personal prefix co-occurs with a preverbal O nominal. In the illustrative example of 24a, Robayo does not record the pause described in 23c, nor does he discuss the possible syntactic significance of either this pause or the OV “pseudo-incorporation”.

- (21) (S) V (S)  
 (mure) ni-onik-i (mura)  
 boy 3S-sleep-T/A boy  
 ‘The boy, he slept.’ (1991)
- (22) ëmëřë nëřë mi-haka-i  
 2Sg 3Sg 2A-hit-T/A  
 ‘You, him, you hit him.’ (1991)
- (23) a. VO (with prefix on verb)  
 b. OV (With third person arguments, there is a “pseudo-incorporation” between O and V, with the loss of the verbal prefix)  
 c. (A) OV (A) (there is also a pause between the OV block and A)
- (24) a. A O V b. O V  
ernesto moto Ø-wa-Ø aña Ø-wa-Ø  
 ernesto lombric Ø-search-T/A 1+3 Ø-search-T/A  
 ‘Ernesto searched for lombric.’ (1987:64) ‘S/he searched for us (excl).’ (1987:66)

The scant data on the Set I system in Kapóng come from Adam’s (1893) inclusion of the dialect “Accawai” in his comparative grammar, and from six examples found in a text appended to Edwards’ (1972) morphological description of dialect Akawaio (which does not mention the Set I system at all). The only material in Adam (1893) which shows more than the verb word shows the order VA (25a-b). Of Edwards’ (1972) examples,

the three intransitives all show the order SV (26a-b), one transitive shows the order AOV (27a) and in the other two transitives the A nominal does not occur overtly, leaving only the order OV (27b). In 27a-b, the O nominal precedes the verb, hence the personal prefix does not occur.

- (25) a. V A b. V A  
s-eyga-ma-i yura s-enno-iai yura  
 1A-say-CAUS-T/A 1Sg 1A-send-T/A 1Sg  
 ‘I said it.’ (p. 56) ‘I sent it.’ (p. 56)
- (26) a. S V b. S V  
tok neediibidi piiyaikma niyeebi  
 tok n-eediibidi-i piiyaikma n-iyeebi-i  
 they 3-get.frightened-T/A giant 3S-come-T/A  
 ‘They got frightened.’ ‘The giant came.’
- (27) a. A O V [ Locative ]  
piiyaikma tok arö timörö iiwiktak  
 piiyaikma tok Ø-arö-i timörö Ø-iwik-tak  
 giant they Ø-carry-T/A 3Refl Ø-house-into  
 ‘The giant, carried them into his, house.’
- b. O V [ Nominalized Adverbial Clause ]  
tok achii tok abirimi korotau  
 tok Ø-achi-i tok Ø-abirimi-Ø korotau  
 they Ø-hold-T/A they Ø-escape-Nominalizer Loc  
 ‘He caught them while they were escaping’  
 (lit. ‘He held them at their escaping.’)

For Tiriyo, neither Leavitt (1971) nor de Goeje (1909) offer full sentence examples with both 3A and 3O. In a separate manuscript (Leavitt 1972, a lengthy prayer in both Tiriyo and English), Leavitt offers one example with a 1+3A and 3O, in which the order is OAV (28).<sup>2</sup> In de Goeje (1909), I found examples only of AV (29a-b) and OV (30a-b). Note the loss of the 3A3O prefix when the verb is preceded by the O nominal (30b).<sup>3</sup>

- (28) O A V IO  
meinjare irë ainja n-epcka-yac ë-ya  
 now that 1+2 3A3O-ask-T/A 2-DAT  
 ‘Now, that is what we ask of you.’ (Leavitt 1972)

- (29) a. A V  
wéi at-ipuma-i  
sun 2O-burn-T/A  
'The sun burned you.' (p. 189)
- b. A V  
iluku y-éka-ne  
snake 1O-bite-T/A  
'A snake bit me.' (p. 191)
- (30) a. O V  
tuna w-éni-ñai  
water 1A-drink-T/A  
'I drink water.' (190)
- b. O V  
sakola Ø-seka-kö  
chacola Ø-drink-T/A  
'He drank chacola.' (190)

For Wayana, the scanty evidence illustrates only the OVA order. Jackson 1972 includes only the following two examples of 3A3O sentences with overt O pronouns, and only one of these has an overt A pronoun as well. In both examples, the verbal prefix *n-* does not co-occur with the overt O pronoun (cf. 31c, where the prefix occurs instead of a preverbal O). I found no clear full sentence examples in de Goeje (1946).

- (31) a. O V  
emna Ø-ene-ya tot  
1+3 Ø-see-T/A Pl  
'Us they see' (1972:53)
- b. O V A  
emna Ø-ene-ya mëhë  
1+3 Ø-see-T/A 3Sg  
'This one sees us.' (1972:51)
- c. n-ene-Ø  
3-see-T/A  
'He just saw (third person object already defined by context)' (1972:50)

In Yukpa, the orders AOV, OVA, AVO, and OAV are possible (with the appropriate prefix variation on the verb indicating whether or not the immediately preceding nominal is the O — 32a-d); neither verb-initial order was accepted in elicitation (32e-f). I have only examples of SV in intransitive clauses (33), but the lack of VS may represent a gap in my data rather than a grammatical restriction.

- (32) a. A O V  
pero kipa Ø-éseka-Ø  
dog man Ø-bite-T/A  
'The dog bit the man.'
- b. O V A  
kipa Ø-éseka-Ø pero  
man Ø-bite-T/A dog  
'The dog bit the man.'
- c. A V O  
pero n-éseka-Ø kipa  
dog 3A3O-bite-T/A man  
'The dog bit the man.'
- d. O A V  
kipa pero n-éseka-Ø  
man dog 3A3O-bite-T/A  
'The dog bit the man.'
- e. \* V A O  
\*n-éseka-Ø pero kipa
- f. \* V O A  
\*n-éseka-Ø kipa pero

- (33) a. S V  
o n-é-to-Ø  
3Sg 3S-go-T/A  
'He went.'
- b. S V  
amora mi-tó-to  
2Sg 2S-go-Pl  
'You (Pl) went.'

This concludes my illustration of the subset of modern Set I systems in which preverbal O replaces the 3A3O prefix and a *Ø-* prefix occurs on the verb. In the next section, I illustrate the subset of languages where the *Ø-* prefix has a *y-* allomorph when it precedes a vowel.

### 5.1.2 Languages in Which Prefixes Alternate with *Ø-/y-*

The languages for which \**n(i)-* alternates with *Ø-/y-* are Hixkaryana, Panare, Tamanaco, and maybe Chayma and Cumanagote.

Derbyshire (1977, 1979, 1981, 1986, 1991) has documented the word order and verbal prefix facts for Hixkaryana. The basic orders are VS (34a) and OVA (34c), with both S and A preposed under identifiable discourse conditions (Derbyshire 1985, Chapter 7 and 1986 *inter alia*). The O nominal only occurs immediately preceding the verb, and only 3O is allowed to occur as a free form (i.e. free pronoun forms for 1O, 2O, and 1+2O do not occur — and thus are not in complementary distribution with the 1A3O, 3A2O, and 3A1+2O bound prefixes, as free pronouns are in other languages). Note that when the third person nominal precedes a vowel initial verb, the *Ø-* prefix has an allomorph *y-* (34c).<sup>4</sup> When the A is not third person, a personal prefix co-occurs with a preverbal O nominal (35).

(34) Hixkaryana independent clause verb agreement and word order (repeated from 1)

- a. V S  
n-eweh-yatxhe woris-komo komo  
3S-bathe-T/A woman-COLL COLL  
'The women are taking a bath.' (1985:31)

- b. V A  
n-ahosi - ye kamara  
 3A3O-grab-T/A jaguar  
 'The jaguar grabbed him.' (1985:32)
- c. O V A  
toto y-ahosi - ye kamara  
 man Ø-grab-T/A jaguar  
 'The jaguar grabbed the man' (1985:32)
- d. A V  
kamara n-ahosi - ye  
 jaguar 3A3O-grab-T/A  
 'The jaguar grabbed him.' (1985:32)

- (35) o-hetxe wya woto w-imi-no enmahiro  
 2-wife to meat 1A-give-T/A early-in-the-day  
 'I gave the meat to your wife early in the day.' (1985:75)

The Panare Set I system is described briefly in Gildea (1989a-b), and at greater length in Payne, Payne, and Gildea (in process). Word order in Panare is clearly nominative, with VS and either OVA or VAO basic. In 36a I illustrate the preferred VS order, and in 36b the pragmatically conditioned SV order (? indicates that the sentence was not automatically accepted by the informant in the context of elicitation). The two preferred word orders (VAO and OVA) are illustrated in 37a-b, then the other possibilities (AVO and AOV) in 37c-d. Notice that in both cases where the O nominal precedes the verb with a 3A, the personal prefix does not occur and the primary accent in the verb shifts to the left (the accent shift is indicated morphemically as  $\underline{\text{a}}$  'Preceding Object (PO)'). With a consonant initial verb, there is no prefix (cf. the  $\underline{\text{Ø}}$  in 37d); with a vowel initial verb, the prefix  $\underline{\text{y}}$  occurs between the verb and the object (37b). In 38, the preverbal object does not trigger loss of the 1A prefix, but the accent does shift as in the 3A3O examples.

- (36) a. V S b. S V  
mi-ña-vaj amën ?amën mi-ña-vaj  
 2-fall-T/A 2Sg 2Sg 2-fall-T/A  
 'You fell.' 'You fell.'

- (37) a. V A O  
ni-karka-vaj yutakon karnicha  
 1+2A3O-tear-T/A 1+2Pl shirt  
 'We tore the shirt'
- b. O V A  
amën y-<sup>Λ</sup>a-kapa-vaj toman  
 2Sg Ø-PO-called-T/A Thomas  
 'Thomas called you.'
- c. A V O  
toose ni-karka-vaj karnicha  
 Toose 3A3O-tear-T/A shirt  
 'Toose tore the shirt.'
- d. A O V  
toose karnicha Ø-<sup>Λ</sup>karka-vaj  
 Toose shirt Ø-PO-wash-T/A  
 'Toose washed the shirt.'
- (38) kamënton t-<sup>Λ</sup>a-kapa-vaj yu  
 3.Distal.PI 1A-PO-call-T/A 1Sg  
 'I called them.'

The Tamanaco data are all from Gilij (1987 — a Spanish translation of the original, which was published in Italian in 1780). I follow Girard (1972:185-9) in converting Gilij's orthographic sequence  $\underline{\text{e}}$  to the phonemic glottal stop  $\text{ʔ}$  (as described by Gilij in the original work, quoted in Girard 1972). For the most part, Gilij restricts his description to morphology; however I found one full-sentence example in his section on nouns (40a). The rest of the full sentence examples all come from a short text: "Reasoning in Tamanaco about the creation of man" (pp. 178-9). For intransitive clauses, I found only the order VS (39). For transitive clauses, I found only one example with both A and O as overt nominals, in the order AVO (40a). In the remaining transitive clauses, A does not occur overtly. The order VO occurs in 40b and the order OV in 41a. The preverbal O triggers the loss of the 3A3O prefix  $\underline{\text{n}}$ , with the vowel-initial verb then taking the  $\underline{\text{y}}$  prefix instead of simply  $\underline{\text{Ø}}$  (41a). However, the complementary distribution between preverbal O and the prefix  $\underline{\text{n}}$  '3A3O' is not absolutely certain in Tamanaco — the text continues from 38a to include three potential counter-examples (i.e. 41a-e are

contiguous sentences in the text). Cognates to the Tamanaco word *aʔchaketpe* ‘two’ are not nouns in other Cariban languages, and hence 41c is probably not a counter-example. Similarly, the syntactic status of *apalike* ‘male’ (41d) and *aicá* ‘woman’ (41e) is not clear — if they are nouns, then Tamanaco behaves more like De’kwana, where the preverbal O need not result in loss of the 3A3O prefix (§5.1.3 below). If they are non-nominal modifiers (which seems likely, given the case of 41a), then Tamanaco behaves according to the typical Cariban pattern, where the *n-* ‘3A3O’ prefix occurs only in the absence of a preverbal O noun.

(39) 

V	S
<i>moreretpepé n-epú-ine</i>	<i>Tiochi</i>
after this 3-come-T/A	God
‘After this, God came.’ (pp. 178-9)	

(40) a. 

A	V	O
<i>pare n-ene-i</i>		<i>a-mata-ri</i>
padre 3A3O-see-T/A		2-country-POSS
‘The Padre has seen your country.’ (1987:156)		

b. 

V	IO	O
<i>moreretpepé n-ene-po-ine</i>		<i>ite-uva-ʔne yeve-yepéru</i>
after this 3A3O-see-Caus-T/A	3-Dat-Pl	fruit
‘After this, he showed them a fruit.’		

(41) a. 

O	V
<i>morevarai paké</i>	<i>kikemó y-amané-ine</i>
for this before 1+2Pl	Ø-make-T/A
‘For this, (long ago) he made us.’	

b. 

<i>tane itóto an-amane-pra</i>
many people Neg-make-Neg
‘He didn’t make many people.’

c. 

<i>aʔchaketpe n-amené-ine</i>
two 3A3O-make-T/A
‘He made two.’

d. 

<i>apalike n-amané-ine atani taro-tepo</i>
male 3A3O-make-T/A Adam named
‘He made a male named Adam.’

e. 

<i>aicá n-amané-ine Eva eteidjeiti</i>
woman 3A3O-make-T/A Eve her name
‘He made a woman, Eve her name.’

In addition to the relatively clear cases of Panare, Hixkaryana, and Tamanaco, there is partial evidence from Chayma and Cumanagote which suggests the *y-* prefix in alternation with *n-* ‘3A3O’. Unfortunately, my examples come from Adam’s 1893 comparative lists, in which the verb form occurs out of its sentence context, and so I cannot correlate the variation in prefix with a variation in syntax. Despite this limitation, I present the relevant examples here:

(42) Chayma (Adam 1893:50)

a. 

<i>n-echeka-n</i>	b. <i>y-eperuca-n</i>
3-bite-T/A	3-eat-T/A
‘He bit it.’	‘He ate it.’

(43) Cumanagote (Adam 1893:50):

a. 

<i>n-achimia-n</i>	b. <i>y-eperuca-n</i>
3-sew-T/A	3-harvest-T/A
‘He sews it.’	‘He harvests it.’

This concludes my illustration of the *Ø-/y-* allomorphy when the verb is preceded by an O nominal. In the next section, I show the idiosyncratic languages, and those for which the data is insufficient to make any claims.

### 5.1.3 Languages Which Do Not Fit Either Pattern

Languages which do not obviously fit into either of the two subcategories above are Bakairi, De’kwana, Pemóng, and Waiwai.

The material for Bakairi is incomplete, and may reflect an innovation within the Set I system. De Abreu (1895:217) suggests that the word order varies freely between OVA, AVO, and AOV “when logically there is no possible confusion”. However, his illustrative sentences — given below as 44 — do not show the expected Set I prefix *n-* ‘3A3O’, nor the expected prefix variation depending on whether or not the free O nominal immediately precedes the verb. The verb in these illustrative sentences appears to be cognate to a derived adjectival/adverbial form in other Cariban languages, formed

by prefixing an invariant \*t(i)- 'Adjectival' to the verb stem (cf. the Hixkaryana t(i)- 'Adverbializer' prefix, Derbyshire 1985:239, the Carib t(i)- category, Hoff 1968:195-200 and Hoff 1991, the Apalaŋ t(y)- adverbializer, Koehn & Koehn 1986:87). Later in his paper, de Abreu divides the Set I prefixes (which differ from this invariant t-) into "agent" and "patient" sets, more or less according to the same division I make for Proto-Cariban (cf. §5.2.1). Souza (1991) makes no statements about word order, but her examples show the orders AVO (45), AOV (47), OV (46, 47), and SV (48). Unlike other Set I systems, the personal prefixes always occur on the verb, regardless of the person of A or the occurrence of the O nominal (both are underlined in 45-48):

(44) O V A A V O A O V  
pohi tayuhe poceka ~ poceka tayuhe pohi ~ poceka pohi tayuhe  
 grass eat pig pig eat grass pig grass eat pig  
 'The pig eats grass.' (de Abreu 1895:217)

(45) A V O  
maria n-eka-dai aroi  
 maria 3A3O-request-T/A rice  
 'Maria requested rice.'

(46) O V  
ěta mā-ka-jile  
 clothing 2A3O-sew-T/A  
 'You are sewing the clothing.' (Souza 1991, ex. 21)

(47) A O V  
maria t-ipenari ŷ-ěda-kile  
 maria 3Ref1-leg 3A3O-scratch-T/A  
 'Maria is scratching her leg.' (Souza 1991, ex. 22)

(48) S V / O V  
ugondo n-egasea-agi seruseru n-apiogua-agi  
 man 3-go out-T/A pig 3A3O-beat-T/A  
 'The man went out and beat the pig.' (Souza 1991, ex. 27)

Hall (1988) discusses De'kwana word order at length, concluding that SV and AOV are the basic orders, adding that variants VS, AVO, OVA, and OAV are also allowed. It appears that the Set I prefixes in De'kwana are similar to those of Bakairi in that with a 3A and a preceding O nominal, they are not obligatorily deleted (cf. 50b-c).

In a later section on person marking, Hall states "when third person is both agent and patient, a zero prefix occurs indicating an unmarked status for the third person patient." She continues parenthetically: "(In texts, the use of the third person patient prefixes [n- and kün- S.G.] is based on the speaker's decision to highlight the patient role for particular discourse functions)" (p. 152). However, in the three appended texts, I found no cases of the zero prefix (meaning that there are apparently no cases of unmarked third person patient in the texts). In a scan of the entire work, I found no full sentence example of a verb with the zero prefix, and hence cannot document any correlation with syntactic factors such as preverbal object. If such a correlation were to exist, De'kwana would join the subset of languages which does not take a y- prefix even on vowel initial verbs (cf. 51b,d).

(49) S V  
wayaamu kün-kana'ka-i yaawo  
 box turtle 3-win-T/A Verification  
 'The box turtle won.'

(50) a. O A V b. A O V  
danwa siina n-e'ka-Ø siina danwa n-e'ka-Ø  
 dog man 3/3-bite-T/A dog man 3/3-bite-T/A  
 'The dog is attacking the man.' 'The dog is attacking the man.'

c. A O V d. A V O  
wodi danwa n-ene'ma-Ø wodi n-ene'ma-Ø danwa  
 woman man 3/3-see-T/A woman 3/3-see-T/A man  
 'The woman sees the man.' 'The woman sees the man.'

(51) Alternation between 3A3O n- and Ø- (from p. 155)

a. n-edant(ö)-a b. Ø-edant(ö)-a  
 3/3-meet-Pres 3/3-meet-Pres  
 'He meets her.' 'He meets her.'

c. nāaa n-edant(ö)-a d. nāaa Ø-edant(ö)-a  
 1+3 1+3/3-meet-T/A 1+3 3/1+3-meet-T/A  
 'We (excl) meet him/her.' 'He meets us (excl).'

The scant data on the Pemóng Set I verbal system come from Armellada (1943a:188) and Tuggy (1989). Both sources are primarily concerned with morphology,

and hence examples of syntax are not easily found. The one example I have comes from Tuggy (1989), with a 2A and an overt 3O noun before the verb. However, as in other Cariban languages, this is a syntactic environment in which the verbal prefix is retained.

- (52) a-po-n mö-koka-tai  
 2-clothes-Poss 2A-wash-T/A  
 'You washed your clothes.'

According to Hawkins (1991b), in Waiwai the preverbal O noun never alternates with the 3A3O prefix — both occur together, as in 53. The prefix n- '3A3O' does alternate with a zero form, but this alternation is phonologically conditioned, with n- occurring on vowel initial verbs (54a) and ∅- occurring on consonant initial verbs (54b). As in other Cariban languages, a preverbal O noun does not affect the 2A3O prefix, m-

(55).

- (53) O V  
ooti n-anim-ce ha mi okrez  
 fish 3A3O-catch-T/A ? ? ?  
 'They evidently caught some fish, wonderful.'

- (54) a. n-etapa b. ∅-paraxka  
 3A3O-hit 3A3O-stab  
 'He hit it/them.' 'He stabbed it/them.'

- (55) O V  
∅-kanapa-n m-ahka-y kica  
 1-mirror-Poss 2A-break-T/A disgust  
 'You broke my mirror, and I'm disgusted with you.' (1991a, expl 33)

#### 5.1.4 Summary of the Syntactic Comparison

The preceding examples have illustrated Set I systems in 15 modern Cariban languages. Only four of these 15 languages have been the subject of detailed word order studies: Carib, De'kwana, Hixkaryana, and Panare. In each of these four, the S and A nominals have patterned together (preverbally for Carib and De'kwana, postverbally for Hixkaryana and Panare). In 11 of these 15 languages, when the A is third person, a preverbal O nominal is in complementary distribution with the personal prefix on the

verb. Based on these limited facts, we cannot reconstruct a basic word order for the Proto-Cariban Set I system. However, the complementary distribution between preverbal object and personal prefix is consistent enough — and idiosyncratic enough — to reconstruct to Proto-Cariban, suggesting OV ~ Prefix-V as the Proto-Cariban pattern.

In five of the 11 languages where the preverbal O is in complementary distribution with a verbal prefix, vowel initial verbs take an additional morpheme y- when preceded by an O nominal (i.e. the ∅- has an allomorph y-). Given only these five cases, this y- does not appear particularly significant. However, in allomorphy in a subset of the personal prefixes, there is additional evidence for a historical morpheme \*y- which has been retained between verb stem and object clitic. I discuss this issue further in §5.2.2 (and a parallel form for possessed nouns in Chapter 6, §6.1.2).

Simple inspection of the examples presented in §5.1 indicates that the verbal systems in these 15 languages are descended from a single source system. Most share the morphosyntactic pattern of OV versus Prefix-V (only when the A is third person), the word order aligns according to a nominative pattern, there is no case-marking on S, A, or O, and no auxiliaries are attested. These facts all point to the Set I verbal system. In addition, the personal prefixes and TAM suffixes are themselves cognate amongst these 15 languages. In the next section, I explore the complications of reconstructing the personal prefixes of the Proto-Cariban Set I system.

## 5.2 Personal Prefixes

Set I personal prefixes have been described in different ways by different linguists. Hoff (1968), Derbyshire (1985), and Koehn and Koehn (1986) describe them as marking S, and as portmanteau forms marking both A and O. Franchetto (1990:417) describes the Set I prefixes as a "split nominative" system, where sometimes the agreement is simply nominative, but for some persons it shows a "tripartite" system of

agreement, meaning that the same person takes a different prefix form to mark A, O, and S. Derbyshire (1987:316-7) characterizes the Cariban Set I systems of Hixkaryana and Apalaf as belonging to a class of South American languages with “accusative (or neutral) case-marking and/or agreement systems.” Later in the same paper (p. 319) Derbyshire mentions that the verb agreement systems show “partial patterning” along a person/agentivity hierarchy: “first person outranks second, second outranks third; when the higher-ranked person in a transitive clause is the subject, the nominative-accusative pattern is followed; when the higher-ranked person is the object, the pattern is ergative-absolutive.” Derbyshire (1991) illustrates this hierarchy for Hixkaryana and for the Set I system in Panare. Hoff (1991) describes the Set I system of Carib as “morphologically ergative”, but syntactically nominative-accusative. Finally, Payne, Payne, and Gildea (1992) describe the Panare Set I system of verb agreement as an inverse, and Gildea (1991a) extends the inverse analysis to Carib of Surinam.<sup>5</sup>

Regardless of which characterization one chooses, it is clear that the Set I person marking prefixes form a cognate set in all languages in which they occur. Table 5.1 shows all the personal categories which must be reconstructed for the Set I prefix set; the phonological forms represent fairly tentative hypotheses, and further research will doubtless lead to changes. There appear to be two separate sets of S forms, one of which parallels A forms, the other O forms. As such, S forms appear in two separate parts of the table: those that parallel A occur in a column to the right of the transitive prefixes; those that parallel O occur in a row underneath the transitive forms.

Table 5.1. The Set I Personal Prefixes

	O	1	2	1+2	3	S
A	1		*k(i)-		*c(i)-	*w(i)-
	2	*k(i)-			*m(i)-	*m(i)-
	1+2				*kic(i)-	*kic(i)-
	3	*u(y)-	*a(y)-	*k(i)-	*n(i)-	*n(i)-
	S	*u(y)- *a(y)- *k(i)-				

It should be clear from the preceding that the Set I prefixes do not fall into a convenient category for the purposes of labeling. The parallel between S forms and A/O forms involving third persons allows for a great deal of interpretation on the part of the analyst: if one focuses on the similarity between the row of 3A forms and the S forms below them (cf. Hoff 1991), the system appears more ergative/absolutive; if you focus on the similarity between the column of 3O forms and the S forms beside them, the system appears to be more nominative/accusative (cf. Gildea 1989a); Hall (1988) focuses on both similarities and concludes that De'kwana shows an active/stative split in intransitive verbs. At this early stage of data collection, it appears that these different analyses in fact represent synchronic differences in the languages in question, as I will discuss further below. Given that the personal prefixes in synchronic languages have been variously described as “ergative”, “nominative”, and “active-stative”, among the questions to explore is which, if any, of these patterns might be best reconstructed to Proto-Cariban.

I distinguish two issues in describing the Set I prefixes as a whole: (1) what is the nature of the Set I transitive prefixes? and (2) what is the relationship between transitive and intransitive prefixes? If the transitive prefixes are portmanteau forms, then the

relationship between transitive and intransitive prefixes cannot be either ergative/absolutive or nominative/accusative. However, if the transitive prefixes break down into separate subsets of prefixes which reference A versus O participants, then it is possible to seek out correlations between A and S (nominative) or O and S (absolutive). To that end, I first discuss the transitive prefixes (§5.2.1), then the intransitive prefixes (§5.2.2), and I conclude with a discussion of the relationship between the two systems (§5.2.3).

### 5.2.1 Transitive Prefixes

Virtually all linguists who have worked with the Set I system have noted the uniqueness of transitive sentences with third person A: (1) the prefixes can be replaced by free nominals (cf. the preceding section) and (2) most prefixes which at first glance express a portmanteau of “3A plus some other O” are identical to possessive prefixes — 3A1O and 1Poss \*u(y)-, 3A2O and 2Poss \*a(y)-, 3A1+2O and 1+2Poss \*k(i)- (cf. discussion in §4.3.1). Only the 3A3O prefix \*n(i)- does not have an identical possessive form (the 3Poss form is \*y-). Both of these facts are nicely accounted for by treating “3A1O”, “3A2O”, and “3A1+2O” prefixes as marking only 1O, 2O, and 1+2O, and by considering the 3A portion of the “portmanteau” to be a zero form (or perhaps better, as not being marked on the verb). I label the 1O, 2O, and 1+2O prefixes the “O-oriented Set I prefixes”, and illustrate the cognate sets in §5.2.1.2.

Sentences involving third person O can also be treated as a unique subset of Set I prefixes: (1) these prefixes can never be replaced by free nominals — either A or O — and (2) most are closely related to Set I intransitive prefixes (which leads me to tentatively propose a pre-Proto-Cariban nominative system): “3A3O” and 3S are both \*n(i)-, “2A3O” and 2S are both \*m(i)-, “1+2A3O” and 1+2S \*ki- have evolved apart in most modern languages, and the relationship between 1A3O \*l/w- and 1S \*ʔ/w- is

unclear. I will return to the subject of the relationship between transitive and intransitive prefixes in §5.2.3 — I mention it here only to help motivate forming the subset of “A-oriented Set I prefixes” which I discuss further in §5.2.1.1.

The status of the 3A3O form \*n(i)- is in question, since it could logically be analyzed as belonging to either the A-oriented or O-oriented subset. Hoff (1991) treats Carib n(i)- as an O-oriented prefix because (like other O-oriented prefixes) it is in complementary distribution with a preverbal free O pronoun or full NP O. Gildea (1991a) treats Carib n(i)- as an A-oriented prefix because (1) the O-oriented prefixes can be reconstructed to possessive clitics, but n(i)- cannot, (2) the other O-oriented prefixes arguably co-occur with a historical morpheme \*y-, which n(i)- probably does not, and (3) like the A-oriented prefixes, \*n- occurs in both the transitive and intransitive prefix sets, apparently as a Pre-Proto-Cariban nominative. While I recognize the synchronic validity of Hoff’s argument, since the present work is a historical study, I include \*n(i)- in the A-oriented subset as ‘3A’.

The only forms which do not involve third person as either A or O are the 1A2O and 2A1O prefixes. These two prefixes thus form a subset of their own, which I treat in §5.2.1.3.

#### 5.2.1.1 The A-Oriented Set I Transitive Prefixes

I reconstruct the A-oriented Set I transitive prefixes as shown at the top of Table 5.2, based on the cognate sets shown below in Table 5.2.

Table 5.2. Comparative Set I A-Oriented Prefixes

Language	*c(i)- '1A'	*m(i)- '2A'	*kic(i)- '1+2A'	*n(i)- '3A'
Apalaí	i-/Ø-	m(i)-	s(i)-	n(i)-/kín(i)-
Bakairí (Steinen)	s-/z-/dj-	m-	n-	n-
Bakairi (Abreu)	c-	m-	kɣi-	n-
Bakairi (Souza)	s-/kã-/Ø-	m(a)-/s-/m(ã)-	ki(z)-/s-	n-/i-/y-/Ø-
Carib (Hoff)	s(i)-	m(i)-	kis(i)-	n(i)-
Carib (Mosonyi)	s-	m-	kVs-	kVn(i)-/n(i)-
Carijona	i-	m(i)-	kít(i)-	n(i)-
Chayma	i-/y-/gu-/ch-/t-/z-	m(V)-		mVn-/n(u)-/y-
Cumanagote	i-/y-/hu-	m(V)-		mVn-/n(V)-/y-
De'kwana	w-	m-	k-	n-
Hixkaryana	w-/i-	m(i)-	t(i)-	n(i)-
Kapóng (Adam)	s(i)-/ši-/çi-	m(V)-		no-
Panare	t(i)-	m(i)-	n(i)-	n(i)-
Pemóng (Arm.)	Ø-	m(e)-	n(e)-	n(e)-
Pemóng (Tuggy)		m(ö)-		
Tamanaco	t-	m-	kek-	n-
Tiriyo (Goeje)	w(i)-	m(i)-	k-	n(i)-
Tiriyo (Leavitt)	w-	m-	k-	n-/kín-
Waiwai	w-/Ø-	m-	tî-/tî-	n-/Ø-
Wayana (Goeje)	w(i)-/Ø-	m(i)-	k-/kut-/?	n(i)-
Wayana (Jacks.)	w-/Ø-	m-	k-/kut-/h-/s-	n-/kun-mën-
Yukpa	Ø-	m-	Ø-	n-

The conservative second person form \*m(i)- is easily reconstructed, with the only variation found in Souza's (1991) prefix tables. The 3A form reconstructs fairly easily to \*n(i)- with the additional ki- and më- which are found in several languages most likely coming from extra morphology (cf. Hoff 1968 and Mosonyi 1982 for analyses of kín(i)- /kíin(i)- as the third person prefix in Carib, then Hoff 1986 for a re-analysis of this form as ki-n(i)- 'Evidential-3'). The 1A and 1+2A prefixes are less transparent to reconstruct. At this preliminary stage, I posit a single form for each, with the majority of the forms in Table 5.2 plausibly descendents. However, I recognize that many of the forms in Table 5.2 (especially for 1A) are non-cognate, and as such must be reconstructed to the various intermediate proto-branch languages before a reliable reconstruction can be made for Proto-Cariban. Following Girard's (1971) analysis of Proto-Cariban phonology as having

an alveolar aspirate \*ç — which descended into modern Cariban languages as t, s, and ç, depending on both language and phonetic environment — I posit the proto forms \*c- '1A' and \*kic- '1+2A'.

### 5.2.1.2 The O-Oriented Set I Transitive Prefixes

I reconstruct the O-oriented Set I transitive prefixes as shown across the top of Table 5.3, based on the cognate sets which appear below in Table 5.3.

Table 5.3. Comparative Set I Transitive O-Oriented Prefixes

Language	*u(y)- '1O'	*a(y)- '2O'	*k(i) '1+2O'
Apalaí	y(i)-	o-	k(i)-
Bakairi (Steinen)	y-		
Bakairi (Abreu)	ie-/i-/u-	a-/ã-/i-/e-	kɣ-
Bakairí (Souza)	y-	Ø-	ki(?)
Carib (Hoff)	Ø-/y-	a(y)-/o-	k(i)-
Carib (Mosonyi)	dü-	ad-	k-
Carijona	yi-	ëyi-	k(i)-
Chayma	u(y)-	e(y)-/a(y)-/o-	
Cumanagote	Ø-/y-	a-/ad-/ay-	
De'kwana	Ø-/y-	ö(d)-	k(i)-
Hixkaryana	r(o)-	o(y)-	k(i)-
Kapóng (Adam)			
Kapóng (Edwards)			
Panare	Ø^-/y^-	a(y)-	n(i)-
Pemóng (Armellada)			
Pemong (Tuggy)			
Tamanaco			
Tiriyo (Goeje)	y-/yiy-	a(t)-	
Tiriyo (Leavitt)			
Waiwai	o(y)-	a(w)-	k-
Wayana (Goeje)	y-/i-	?-/ëw-/aw-	
Wayana (Jackson)	y-/i-	ë(w)-	k-
Yukpa	y-	oy-	

At least the 1O and 2O forms involve a y-/d-/t- formative which occurs between the O prefix and the verb stem in many languages. The phonological conditioning environment for this formative is preceding a vowel-initial verb. This is exactly the

environment where a  $y_$ - prefix occurs on the verb when the A is third person and the verb is preceded by a free O nominal (§5.1.2, 5.1.4). These two clues together point to a hypothesis about how the O-oriented prefix set was formed (internal reconstruction of Pre-Proto Carib). This hypothesis in turn helps in understanding (1) the formal identity between O-Oriented Set I prefixes and possessive prefixes, and (2) the otherwise unmotivated allomorphy found in both prefix sets. The hypothesis assumes the following historical sequence of stages:

- (1) When A is third person, the verb bears a prefix  $*y_$ , and the O (pro)noun obligatorily precedes the verb.
- (2) The set of free O pronouns reduces into a set of prefixes, trapping the prefix  $*y_$  between themselves and the verb.
- (3) A number of phonological changes lead to loss of  $*y_$  in most phonological environments. These changes are as follows (i-iv describe the changes in the context of bound pronouns; v-vii in the context of free O nominals):
  - (i)  $*y_ > \emptyset / C \_ V, V \_ C$
  - (ii)  $*y_ > i / C \_ C$
  - (iii)  $*y_ > y- / V \_ V$  (for most modern languages)
  - (iv)  $*y_ > d- / V \_ V$  (Cariña, De'kwana, Cumanagote?)
  - (v)  $*y_ > \emptyset / NP \_ -C$  (for all modern languages)
  - (vi)  $*y_ > \emptyset / NP \_ -V$  (for most modern languages)
  - (vii)  $*y_ > y- / NP \_ -V$  (Hixkaryana, Panare, Tamanaco, Chayma, Cumanagote)

Rules i-iv account for the synchronic O-oriented prefix allomorphy:

Pre-Proto Carib	___-V	___-C	
$*u-y-$ '1-?-'	uy-	uy-	base forms
	uy-	u-	Rules i, iii (Proto-Cariban)
	y-	$\emptyset$ -	$u > \emptyset / \# \_ \_$ (all except Chayma)
$*a-y-$ '2-?-'	ay-	ay-	base forms
	ay-	a-	Rules i, iii (Proto Cariban)
	ad-/at-	a-	Rule iv
$*k-y-$ '1+2-?-'	ky-	ky-	Base forms
	k-	ki-	Rules i, ii (Proto-Cariban)

Rules v-vii account for the occurrence of  $y_$  between the O nominal and verb in Hixkaryana, Panare, Tamanaco, and maybe in Chayma and Cumanagote.

The question then arises: What was the meaning or function of this  $*y_$  morpheme in Proto-Cariban? One explanation is that it expresses 3A, and that the  $*n(i)_$  form which I reconstructed for 3A is actually a 3O form (cf. Hoff's 1991 synchronic analysis as well). As a historical analysis, this has two weaknesses: (1) a parallel  $*y_$  must be reconstructed for the possessive construction (and prefix set), where 3A is not a possible analysis; and (2) we have already posited that the form  $*n(i)_$  represented 3A in Proto-Cariban. If we take this  $*y_$  to be 3A, then we must find some alternative source for the  $*n(i)_$  prefix which is attested in all modern Set I systems. There is a little evidence for a  $*n(i)_$  '3' free pronoun which could serve as a source for a '3O' and 3S prefix  $*n(i)_$ : the most likely source for the object nominalizing prefix  $*n(i)_$  (Gildea 1991f, Chapter 7, §7.4) is an old third person or indefinite pronoun, and Derbyshire (pc) has argued that a third person pronoun like Hixkaryana *norq* could easily reduce to  $n(i)_$ . However, these potential sources are quite nebulous compared to the possessive personal prefixes which we see as sources for the rest of the O-Oriented prefixes, so for now, I prefer not to

analyze \*y- as '3A' (although I acknowledge that further research might support that hypothesis).

In Gildea (1991a) I argued that this \*y- was a historical inverse morpheme, reanalyzed from an extension of a genitive marker \*y- (cf. the parallel \*y- reconstructed for the possessive system in Chapter 6). This analysis is particularly appealing since the modern Set I system lacks only an inverse morpheme to be a prototype case of a structural inverse (i.e. the verb always marks Speech Act Participants as opposed to third person referents regardless of grammatical relation), and presumably the existence of this \*y- as an inverse marker would have made the pre-Proto-Cariban Set I system a prototype inverse. However, as pointed out in Gildea (1991a), a prototype inverse goes beyond the person hierarchy — when both A and O are third person, the inverse construction interacts with the passive to mark the relative topicality of A and O. In essence, a very topical A and a nontopical O (a prototypical clause) correlates with the direct construction; a non-topical A and a topical O correlates with the passive; and a topical A in combination with a topical O correlates with the inverse construction (cf. Thompson 1989). Although the Set I system is clearly sensitive to the person hierarchy found in most inverse systems of the world, it is not sensitive to relative topicality of referents in a clause with third person A and O (Gildea 1991a).

The problem with the inverse analysis is that the Set I system does not have two different third person personal prefixes, but rather the n(i)- '3A' (or '3 Direct') is in opposition with a free (pro)noun (cf. §5.1). Since the pre-Proto-Cariban clause with a free (pro)noun O also takes the putative inverse marker \*y- on the verb, we would have to consider such a clause to be the instantiation of the inverse when both A and O are third person. Further, in most Cariban languages, the O cannot occur as a free noun in the direct construction — i.e. an O noun cannot co-occur with the prefix n(i)-. This sets up the following functional dilemma: the topicality hierarchy calls for the 'inverse'

construction when the O is topical, and for the 'direct' construction when the O is nontopical; however, in order to identify an O referent for the first time, or in a case of potential ambiguity (regardless of topicality), the O must occur as a full noun, which means it must occur in the 'inverse' construction (if A is also third person). As shown in Gildea 1991a, the distribution of 'inverse' versus 'direct' constructions in Carib of Surinam discourse is fully accounted for in terms of referent identifiability, and the topicality hierarchy plays no part. As Hoff (pc) has pointed out, all comparative evidence suggests that the \*y- morpheme has always required a free pronoun or full nominal O with 3A3O clauses, and the co-occurrence of free O forms with the \*n(i)- prefix appears to be innovative in those few languages which allow it. As such, even in the earliest possible internal reconstruction of pre-Proto-Cariban, the \*y- could not have marked inverse for clauses where both A and O are third person.

Although there is no question that the form must be reconstructed, further research is in order to develop a fully satisfying account of the function of pre-Proto-Cariban \*y-.

### 5.2.1.3 The Non-Third Person Prefixes: 1A2O and 2A1O

I reconstruct both the 1A2O and the 2A1O prefixes to the same Proto-Cariban form: \*k(i)- (which is homophonous with the 1+2O prefix), based on the forms in Table 5.4. Most synchronic variations on this pattern of identical marking are cases where the 1A2O form is supplemented or replaced by a 2O form (Panare, Tiriyo, and Yukpa) or where the 2A1O form is replaced by a 2A form (Hixkaryana, Panare). In two cases, the 2A1O form is replaced by a 1O form (Bakairi, Yukpa), and in other cases the two semantic configurations appear to have been disambiguated by the addition of other material to (at least) one of the prefixes (Chayma, Cumanagote, Kapóng?, Wayana).<sup>6</sup>

Table 5.4. The 1A2O and 2A1O prefixes

Language	*k(i)- '1A2O'	*k(i)- '2A1O'
Apalaf	k(i)-	k(i)-
Bakairi (Steinen)		y-
Bakairi (Abreu)		
Bakairi (Souza)	∅-	y-
Carib (Hoff)	k(i)-	k(i)-
Carib (Mosonyi)	k(i)-	k(i)-
Carijona	k(i)-	k(i)-
Chayma	kVn-/k-	k(V)-/kad-
Cumanagote	k(en)-/kVd-/kVy-	k(V)-
De'kwana	mön-	kò-
Hixkaryana	k(i)-	m(i)-
Kapóng (Adam)	koen-	
Panare	k(i)-/a(y)-	m(i)-
Pemóng		
Tamanaco		
Tiriyo (Goeje)	k-/aw-	k(e)-
Tiriyo (Leavitt)		
Waiwai	k(i)-	
Wayana (Goeje)	ku(w)-	k(ut)-
Wayana (Jackson)	kuw-	k-
Yukpa	oy-	auy-

### 5.2.2 Set I Intransitive Prefixes

The modern Set I intransitive prefixes do not reconstruct to a single unified set of forms (cf. Table 5.1, with a column of S prefixes parallel to the A-Oriented transitive prefixes, and a row of S prefixes parallel to the O-Oriented transitive prefixes). In most of the best-described languages, two sets of forms alternate depending on the status of the intransitive verb. All intransitive verbs which are derived from transitive verbs take a particular set of prefixes (which resembles the A-oriented subset of transitive prefixes, cf. §5.2.1.1). Inherently intransitive verbs may take either this same set of prefixes or a different set (which resembles the O-oriented subset of transitive prefixes, cf. §5.2.1.2). For now, I label these sets  $S_A$  and  $S_O$  based on their similarity to the A- and O-oriented transitive prefixes. However, in many Cariban languages (Bakairi, Chayma, Cumanagote, Tamanaco, Tiriyo, Waiwai, Wayana, Yukpa), syntactic information is not

available to help identify the two sets; in two (Panare and Carijona) there is only one intransitive prefix set. As such, I have divided the intransitive prefixes from all 15 languages into two sets based on formal similarity to A- and O-oriented transitive prefixes in the same languages. The forms in question are presented in Tables 5.5 and 5.6:

Table 5.5. The  $S_A$  Prefixes

Language	*w- '1 $S_A$ '	*m(i)- '2 $S_A$ '	*kic(i)- '1+2 $S_A$ '	*n(i)- '3 $S_A$ '
Apalaf	∅-/i-	m(i)-	s(i)-	n(i)-/kin(i)-
Bakairi (Steinen)		m-		n-
Bakairi (Abreu)		m-	k <sub>Y</sub> V-	n(e)-
Bakairi (Souza)		m-/∅-	kize-	n(i)-
Carib (Hoff)	∅-	m-	küt-	n(i)-
Carib (Mosonyi)	v-	m-	kVt-	kVn-/n-
Carijona		m(i)-	küt(i)-	n(i)-
Chayma		m-		men-
Cumanagote				mVn-/y-
De'kwana	w-	m-	k-	n-
Hixkaryana	k(i)-/i-	m(i)-	t(i)-	n(i)-
Panare	w(i)-	m(i)-	n(i)-	n(i)-
Pemóng (Armellada)	∅-	m-	n-	n-
Tamanaco		m-		
Tiriyo (Goeje)	w-	m-	k-	n-/ken-
Tiriyo (Leavitt)			k-	n-/k-/k'in-
Waiwai		m(i)-	t̃-/t̃i-	n-/∅-
Wayana (Goeje)			kut-	mēn-/n-
Wayana (Jackson)	w-	m-	kut-	n-/mēn-/kun-
Yukpa		m(i)-	n(i)-	n(i)-

Like the related transitive A-oriented forms, the 2 $S_A$  and 3 $S_A$  prefixes reconstruct easily to \*m(i)- '2 $S_A$ ' and \*n(i)- '3 $S_A$ '. The 1+2 $S_A$  prefixes present similar variation to the 1+2A prefixes, and I suspect they will reconstruct to the same form: \*kic- '1+2 $S_A$ '. The first person data is more limited, and from the few forms that are available, '1 $S_A$ ' would probably be better reconstructed as \*w- than as \*∅-.

Like the transitive O-oriented prefixes, the  $S_O$  prefixes are restricted to 1, 2, and 1+2 persons (i.e. there is no unique third person form). The \*y- formative also occurs

with the 1S and 2S forms (which argues against the \*y- '3A' hypothesis discussed in §5.2.1.2). Although the stock of comparative forms is reduced, in the absence of evidence to the contrary I reconstruct the S<sub>O</sub> prefixes to the same forms as the O-oriented prefixes: \*u(y)- '1S<sub>O</sub>', \*a(y)- '2S<sub>O</sub>', and \*k(i)- '1+2S<sub>O</sub>'.

Table 5.6. The S<sub>O</sub> Prefixes (Where They Differ from s<sub>A</sub>)

Language	*u(y)- '1S <sub>O</sub> '	*a(y)- '2S <sub>O</sub> '	*k(i)- '1+2S <sub>O</sub> '
Apalaí		o-	
Bakairi (Steinen)			
Bakairi (Abreu)	yö-		
Bakairi (Souza)	u-/y-	ø-	
Carib (Hoff)	ø-/y-	o-/a(y)-	k(i)-
Carib (Mosonyi)	dü-	a(d)-	k-
Carijona	yi-		
Chayma	u(y)-	a(y)-	
Cumanagote	ø-/y-	a(y)-	
De'kwana	ø-/y-	ð(d)-	k(i)-
Hixkaryana		o(w)-	
Panare			
Pemóng			
Tamanaco	u-		
Tiriyo (Goeje)		ay-/öy-	kít-?
Tiriyo (Leavitt)	y(i)-	ë-	kí-/kít-
Waiwai			
Wayana (Goeje)	i-/y-	a(w)-/ëw-	k-/kut-/h-
Wayana (Jackson)	i-/y-	ë(w)-	k-/kut-/h-
Yukpa	y(i)-		

Dual intransitive prefix sets in modern Cariban languages have been analyzed in a number of ways: Koehn and Koehn (1986) for Apalaí and Derbyshire (1985) for Hixkaryana have the variation only for second person, and hence do not consider the variation as systemic, but merely note it in passing. Variation which extends across the entire system is described only for Carib and De'kwana. Hoff (1968:167) analyzes the duality in Carib as a function of the phonological shape of the verb root: verbs that begin with /w/ take the s<sub>A</sub> prefix set, and those which begin with any other phoneme take the S<sub>O</sub> prefix set. By Hoff's analysis, the prefixes which derive intransitive verbs from

transitive verbs all begin with /w/, hence triggering the s<sub>A</sub> prefix set. Hall (1988:136ff) for De'kwana analyzes the split according to an active/nonactive distinction, in which verbs which subcategorize for semantically more agentive S arguments (or the recipients of reflexive action) take the s<sub>A</sub> prefix set, and those which subcategorize for a semantic patient, experiencer, or other non-agentive case role take the S<sub>O</sub> prefix set. No studies have demonstrated any corresponding syntactic distinction between nominals in an s<sub>A</sub> versus S<sub>O</sub> relation to an intransitive verb (i.e. despite the morphological division of S into s<sub>A</sub> and S<sub>O</sub> prefixes, syntactically, the S nominal patterns with the A nominal in all ways).

The relationship between the transitive and intransitive prefix sets is clear: the A-oriented transitive prefixes correspond to s<sub>A</sub> intransitive prefixes and the O-oriented transitive prefixes correspond to the S<sub>O</sub> intransitive prefixes. In those languages where both sets of intransitive prefixes are productively used, the result is something that might be called an Active/Inactive system (cf. Hall 1988); in those languages which utilize only one or the other of the intransitive sets, depending on which intransitive forms are used (and on whether one considers n(i)- to be '3A' or '3O'), the system will look more nominative/accusative or ergative/absolutive. At this point, it is premature to try to reconstruct any one of these patterns of prefixation to Proto-Cariban — although the reconstructed forms given in Table 5.1 are each attested in a number of synchronic Cariban languages, the overall Split-S pattern is attested in only two languages synchronically. Given both the extensive variation synchronically, the lack of evidence for specific mechanisms of change, and typological evidence that any one of the three systems (i.e. nominative, absolutive, active-stative) can evolve into both of the others (cf. Harris 1985, 1990), it is premature to suggest which of these is prior in Cariban, and which are innovative.



Further descriptive research (and more internal reconstruction along the lines of Gildea 1991d) might provide the comparative material to show that many modern Set I TAM suffixes (most of which are not listed in Table 5.7) are formed by composition of two (or more) forms.

#### 5.4 Summary

In this chapter I have tried to support the claim that all modern Set I systems are descended from a single Proto-Cariban Set I system. To this end, I have compared the component syntax, verbal personal prefixes, and a few of the TAM suffixes which constitute the Set I system in fifteen modern languages. Although some individual morphemes and syntactic patterns vary from language to language, the overall morphosyntactic patterns in the 15 languages are so consistent that they can most easily be explained as having descended from a single proto-system.

#### Notes to Chapter 5

<sup>1</sup> Although the combination does not occur in the text material in Hoff (1968), Hoff (1978) reports that, in elicitation, his informant allows a preverbal 1, 2, or 1+2 free pronoun O to co-occur with the personal prefix for first and second person:

amooro ay-eene-i  
2Sg 2O-see-T/A  
'S/he has seen you.'

This is not attested in other Cariban languages. I will argue in §5.2.1 that these three prefixes have been created by a historical process of pronoun reduction. As such, these Carib examples represent a further innovation, making the pro-clitic look more like clitic-agreement (as defined in Chapter 3).

<sup>2</sup> However, since the order AV is required for 1+3A in several Cariban languages (both those with otherwise OVA and those with otherwise AOV orders), this example cannot be taken as representative for orders of other combinations of A and O.

<sup>3</sup> Note also, however, that the Ø- form occurs on a consonant-initial verb, so the possibility remains that the Ø- prefix takes the y- allomorph preceding a vowel.

<sup>4</sup> Derbyshire considers this Ø-/y- prefix to be a part of the referential person marking system, with a value of 3A3O when it occurs on verbs, and a value of 3 Possessor when it occurs on nouns. Based on only the Hixkaryana data, this analysis makes sense — the only time such a prefix occurs is when a free O nominal precedes the verb or a free possessor nominal precedes a possessed noun, and the only free O or possessor nominals in Hixkaryana are third person. However, by comparison to the other Cariban languages for which we have data, this same Ø- prefix (with the same y- alternation in some languages) occurs with free O and possessor nominals of any person. Although the scope of this Ø- is restricted to third person in Hixkaryana, to enhance comparability I gloss it as 'Ø-' rather than as Derbyshire's '3A3O'.

<sup>5</sup> Based on similar patterns in main clause morphosyntax, D. Payne (1990) characterizes the Tupí-Guaraní family as having an inverse system. Dahlstrom (1986) characterizes what I take to be a prototype inverse in Plains Cree and other Algonquian languages.

<sup>6</sup> It is possible that the extreme variation seen in prefixes for Chayma and Cumanagote are functions of the analysis rather than the language data. These forms were originally transcribed in 1680, then re-transcribed and categorized by Adam 1893. These morpheme divisions are not necessarily representative of those which a modern linguist would make. In future work, I hope to check Adam's analysis against the original seventeenth century materials.

## CHAPTER 6

## THE MORPHOSYNTAX OF POSSESSION IN PROTO CARIBAN

Possessive constructions in Cariban languages for which I have information share the following basic characteristics:

- i) the possessor (pro)noun is not marked for genitive case
- ii) the possessor (pro)noun precedes the possessed noun
- iii) the possessed noun may alter in some lexically determined way, by either
  - a. taking a possession-marking suffix (of which there are several),
  - b. undergoing vowel ablaut,
  - c. changing idiosyncratically, or
  - d. it may not change at all (i.e.  $\emptyset$  suffix)
- iv) the possessor (pro)noun is in complementary distribution with (i.e. may be replaced by) a personal possessive prefix.

Since the personal possessive prefixes are in complementary distribution with free (pro)noun possessors, possessive prefixes are clitics as defined in Chapter 3 (§3.1). Since these four characteristics are shared by all modern languages for which I have information, I reconstruct all to Proto-Cariban. I illustrate the alternation between a possessor nominal and a possessive prefix in §6.1 and I reconstruct the forms of the possessive prefixes in §6.2.

6.1 Word Order and Possessive Prefixation

The pattern of possessor-possessed is parallel to — but much clearer and more consistent than — that of O-V in the Set I system. Without exception, when a free possessor occurs, it precedes the possessed noun. In Bakairi, a third person free form possessor can co-occur with a personal possessive prefix, and in Bakairi, Carib, De'kwana, and Yukpa, the first and second person free pronouns can co-occur with personal possessive prefixes. These exceptions aside, free (pro)noun possessors are not allowed to co-occur with personal possessive prefixes. In the absence of the personal possessive prefix (i.e. when preceded by a free (pro)noun possessor), a consonant initial possessed noun takes no additional prefix.<sup>1</sup> In eight languages (Apalaí, Bakairi?, Carib, Carijona, De'kwana, Kuikúro, Wayana, and Yukpa), a vowel-initial noun takes no prefix when preceded by a free noun possessor; in five (Hixkaryana, Makushi, Panare, Pemóng, and Waiwai) a vowel-initial noun takes a  $y_-$  prefix when preceded by a free noun possessor; in the remaining languages (Chayma, Cumanagote, Kalapalo, Kapóng, Tamanaco, and Tiriyo), I could find no evidence to support either pattern.

Clearly we can reconstruct the order possessor-possessed to Proto-Cariban, along with the suffixal marking of the possessed noun. I will argue in §6.2 that we can also reconstruct a prefix  $*y_-$  to Proto-Cariban as a marker of the possessor-possessed relationship. Based on the complementary distribution between possessive prefixes and free noun possessors, and also based on the occurrence of the prefix  $y_-$  between the possessive prefixes and the possessed noun, I reconstruct the personal prefixes to a set of pronouns in Pre-Proto-Cariban, and I posit that the reduction of these pronouns into prefixes trapped the  $y_-$  even in languages where it has since been lost altogether with a free noun possessor (cf. the exact parallel to Set I O-Oriented prefixes, §5.2.1.2).

For ease of exposition, I treat separately the languages which, when preceded by a free (pro)noun possessor, take no prefix (i.e. a  $\emptyset$ -) on the possessed noun (§6.1.1), as opposed to those which take a  $y$ - prefix on the possessed vowel-initial noun (§6.1.2).

### 6.1.1 Languages in which Prefixes Alternate with $\emptyset$ -

The languages in which possessive prefixes alternate with  $\emptyset$ - when there is a free (pro)noun possessor are Apalaf, Carib, Carijona, De'kwana, Kuikúro, Wayana, and Yukpa. I illustrate each in turn.

In Apalaf Koehn & Koehn (1986:85) report that the possessor precedes the possessed, and that the possessed is marked with an additional suffix. As seen in 59a-b, a possessive prefix is in complementary distribution with a free noun possessor. Although personal free pronouns are not normally used to mark possession (except for *yna* '1+3'), it is possible to replace a possessive prefix with a personal pronoun, as seen in 60a-b.

- (59) a. i-kyry-ry  
3-thing-Possession  
'her/his possession' (p. 85, 270b)
- b. nohpo  $\emptyset$ -kyry-ry  
woman  $\emptyset$ -thing-Possession  
'the woman's possession' (p. 85, 270a)
- (60) a. y-kyry-ry  
1-thing-Possession  
'my thing' (p. 97, 339)
- b. ywy  $\emptyset$ -tapyi-ny  
1SG  $\emptyset$ -house-POSSN  
'my house (emphatic)' (p. 96)

In Bakairi, the evidence is scant, but the few examples appear to show that the noun can retain its personal possessive prefix when preceded by a free (pro)noun possessor. De Abreu (1895:220) shows the possessor preceding the possessed, with the possessed taking both a prefix *i-* and a suffix *-ri* (61a-c). In all cases, the possessed noun begins with a consonant, the free form possessor is third person, and the noun takes what

appears to be the third person personal possessive prefix *i-*. Abreu presents no examples with vowel-initial nouns, nor with other persons of possessor. Von den Steinen (1892:332) shows the vowel initial noun *éti* '?' bearing the first person *y-* when preceded by the first person pronoun (62a) and bearing no prefix when preceded by a third person pronoun (62b — this lack of a prefix could be an allomorph of the third person possessive prefix or it could be the absence of the third person possessive prefix).

- (61) a. pima iwepiri  
pima i-pepi-ri  
capitan ?-canoe-Poss  
'the captain's canoe'
- b. iramúdo iwayakúru  
iramudo i-mayaku-ru  
boy ?-basket-Poss  
'the boy's basket'
- c. piahi idunatari  
piahi i-tunáta-ri  
healer ?-bathtub-Poss  
'The healer's bathtub.'
- (62) a. úra y-éti b. máka  $\emptyset$ -eti  
1Sg 1-? 3Sg  $\emptyset$ -?

In Carib of Surinam, Hoff (1968:214-20) describes two classes of nouns which (in strict structuralist fashion) he labels "Syntactic Category A" and "Syntactic Category B". It is clear from his discussion that Category A represents an unmarked, basic form of a noun and Category B is the morphologically-marked possessed noun. The possessed noun may bear a personal possessive prefix, or conversely it may be possessed by means of an overt possessor noun which immediately precedes it.<sup>2</sup> In 63a, the noun toopu 'stone' bears the third person prefix *i-* and the harmonized version *-ru* of the suffix *-ri* 'Possessed'. In 63b, the noun kuriyara bears the suffix *-ri* 'Possessed' and is preceded by the possessor noun phrase moxko yaawo 'uncle'.

- (63) a. i-toopu-ru  
3-stone-Possessed  
'his stone'
- b. moxko yaawo  $\emptyset$ -kuuriyara-ri  
that uncle  $\emptyset$ -boat-Possessed  
'uncle's boat'

Hoff (1968:219-20 & note 92) discusses the fact that the possessor and possessed noun cannot be separated by any intervening words, and that the only phonetic material of any kind that can be placed between the two is a suffix on the possessor noun. I understand this to mean that when a free noun possessor occurs, the possessive prefix may not intervene, i.e. may not appear between the possessor noun and the possessed noun. However, in personal correspondence, Hoff provides data from his local informant, Mr. Robert Kiban, which shows that first and second person personal possessive prefixes are required whether or not the free pronoun possessors co-occur (64a-b), and the first person inclusive (1+2) free pronoun is simply not allowed to occur as a possessor (cf. the similar, but broader exclusion in Hixkaryana, §6.1.2).

(64) Non-third person free pronoun possessors

- |   |  |
|---|--|
| a. (aawu) y-ooŋi-ri<br>1Sg 1-object-Poss<br>'my object' | b. (amooro) ay-ooŋi-ri<br>2Sg 2-object-Poss<br>'your object' |
|---|--|

Finally, Hoff (1968:218, 222) lists three idiosyncratic nouns for which the possessed form contains an additional y- prefix, and in personal communication he adds two more nouns to this list (65). Although the y- prefix is not productive synchronically, such semantically diverse examples indicate that it might once have been.

(65) basic form	Possessed form	gloss
angŋiisa	y-arŋiisa-ri	'scarf'
oruuko	y-oorukoo-ri	'worm'
araabo	y-aayaboo-ri	'eel-like fish'
ori'no	y-oori'no-ri	'clay'
asiikaru	y-aasikaaru	'sugar'

For Carijona, Robayo (1991:15) shows that the possessor (with no genitive case-marking) precedes the possessed noun (66); Robayo (1987:42) shows that the possessed noun is marked with -ri (64, 65a) or -Ø (65b). Free pronouns can also serve to possess nouns, as in 66c. In lieu of the preceding possessor noun, the possessed noun may take a prefix indicating the person of the possessor (67a-b).

- |         |  |    |  |
|---------|--|----|--|
| (66) a. | <u>pedro</u> Ø-iwasa-ri<br>Pedro Ø-machette-Poss<br>'Pedro's machette' (1991:15) | b. | <u>aña</u> Ø-kanawa-ri<br>1+3 Ø-canoe-Poss<br>'our (excl) canoe' |
|---------|--|----|--|

- c. ëmërë  $\emptyset$ -haru-rí  
2Sg  $\emptyset$ -banana-Poss  
'Your banana' (1987:41)

- (67) a. yi-minë-rí  
1-house-Poss  
'my house'
- b. i-ye  
3-mother  
'his mother'

For De'kwana, Hall (1988:287) states that possessed nouns are marked with a suffix, usually -dii or -i, but sometimes -tí, -hó, -ní, -nó, -toho, -mó, or idiosyncratic forms, and that they further bear a prefix referring to the person of the possessor. If a free-form possessor occurs, it always precedes the possessed noun. It appears that a free-form possessor does not co-occur with the personal possessive prefix, but this is not completely certain in the case of first person singular and dual inclusive possessors.

- (68) a. önñá  $\emptyset$ -e'kudu  
corn  $\emptyset$ -juice  
'corn juice' (p. 77, 34a)
- b. i-mma-i  
3-house-Poss  
'his (unspecified) house' (p. 294)

Hall also provides examples of free pronouns as possessors, but the examples are ambiguous as to the status of the possessive prefix when the free pronoun occurs. Hall states (pp. 293-4) that the 1SG possessive prefix is í- when the stem of a possessed noun begins with /y/; the possessed form of the stem for 'pet' is listed (p. 291) as ye'künü. Thus, the first person possessed form should be í-ye'kü-nü '1Sg-pet-Poss', or 'my pet'. If I am following Hall's rules correctly in composing this possessed form, then the form yekünü 'pet' in 69a is correctly marked as having a  $\emptyset$ - instead of a possessive prefix.

- (69) a. With the 1Sg pronoun íwí  
íwí  $\emptyset$ -yekünü 'my pet' (p. 97, 1b)
- b. With the 1Sg pronoun íwí marked as optional  
(íwí)  $\emptyset$ -yekünü 'my pet' (p. 97, 2b)
- c. With the 1+2 pronoun künwanno  
(künwanno) k-ökünü-komo 'our pet' (p. 97, 2b)

However, in her next examples (given above as 69b-c), Hall shows the same construction, except that the free pronouns are marked as being optional. In 69b the possessed noun does not take a personal possessive prefix, but in 69c the possessed noun does take the possessive prefix k- '1+2'. If the personal possessive prefix really is not in complementary distribution with the free pronoun possessor, then De'kwana resembles Carib of Surinam in allowing the two to co-occur.

For Kuikúro, Franchetto (1986, 1990) does not explicitly describe the system of possession. However, her examples (Franchetto 1986:160-1) indicate that the possessor precedes the possessed and that no additional prefix occurs, even on vowel-initial possessed nouns.

- (70) a. Kanatu  $\emptyset$ -limo  
Kanatu  $\emptyset$ -children  
'Kanatu's children'
- b. Aharátá  $\emptyset$ -ótomo  
Aharátá  $\emptyset$ -people  
'Aharátá's people'

For Wayana, de Goeje (1946:§14) indicates that possessors precede possessed nouns, and that the former can be indicated with either free nouns or pronouns. The possessed may be marked with -ri/-re/-ru/-r, -li/-le/-lu/-l, -n or  $\emptyset$ . De Goeje suggests that the -n might mark inalienable possession and the -ri/-li complex alienable, but the data do not support such a categorial analysis. Jackson (1972) does not address questions of syntax, but in his examples I found the order possessor-possessed with an additional suffix on the possessed.

- (71) a. kaikui  $\emptyset$ -poti-li  
dog  $\emptyset$ -snout-Poss  
'The dog's snout'
- b. tutpö  $\emptyset$ -opata-r  
gourd  $\emptyset$ -hole-Poss  
'the hole of the gourd'
- c. mohere  $\emptyset$ -pire- $\emptyset$   
3Sg  $\emptyset$ -arrow-Poss  
'his arrow'

For Yukpa, de Vegamián (1978:68) characterizes the possessive construction as "the governed word, postposed to the governing" [the possessed, postposed to the possessor — SG]. The examples taken from my own field notes indicate that the second



e. k-hyaka-nye  
1+2-to-Collective  
'to us (inclusive and collective)'

f. \*kwyamo hyaka

So in Hixkaryana the alternation between personal possessive prefix and free (pro)noun possessor is limited to third person possessors. Thus, the  $\emptyset$ -/y- prefixes only co-occur with third person free (pro)noun possessors (the 1+3 pronoun always patterns with third person), and Derbyshire therefore analyzes  $\emptyset$ - and y- as allomorphs of the third person possessive prefix. However, the facts of Hixkaryana are also consistent with a family-wide analysis, where the possessive prefix goes to  $\emptyset$ -/y- whenever a free (pro)noun possessor occurs. Hixkaryana differs from the other Cariban languages only in that the 1Sg, 2Sg, and 1+2 pronouns are not allowed to act as full NP possessors.

In Makushi, Williams (1932), Carson (1982), and Abbott (1991) all report that the possessor precedes the possessed noun, and that the possessed noun may take a suffix (-ri, -ki, -ri, -ni, -ka, or -no), but that not all possessed nouns do so. While neither Williams (1932) nor Carson (1982) discusses the possibility of a free (pro)noun possessor co-occurring with a possessive prefix, Abbott (1991:85) states explicitly that a possessed noun "has the possessor prefix, unless a free-form possessor occurs"; examples from all three authors support Abbott's claim. Williams (1932:137) lists one paradigm where personal possessive prefixes alternate with free (pro)nouns, indicating that any noun (including 1Sg and 2Sg pronouns) may replace personal possessive prefixes (76).<sup>4</sup> When a free (pro)noun possessor occurs preceding a consonant-initial possessed noun, no prefix occurs between the two (76). However, when a free form possessor occurs preceding a vowel-initial possessed noun, the prefix y- occurs between the two (77a-b). All three Makushi linguists treat this y- differently. Abbot (1985, 1991) considers it as a part of the stem of the possessed noun, Carson (1982) doesn't mention it at all, and Williams (1932) treats it as independent, neither as a part of the possessed noun nor of any possessor form.

Williams' approach is the most useful from a historical perspective (cf. Chapter 5, §5.2.1.2 and §6.2 below).

(76) Williams' (1932) paradigm for mbo/mópo 'back'

u-mbo 'my back'	úra $\emptyset$ -mópo 'my back'
a-mbo 'your back'	améra $\emptyset$ -mópo 'your back'
	ána $\emptyset$ -mópo-to-nónḡon
	1+3 $\emptyset$ -back-PL-PL
	'our backs'

(77) Free noun possessors with vowel initial nouns:

a. From Williams (1932:139)

ána y-esá 'our dead bodies'

b. From Abbot (1985:264)

anna wífi síriri presidente y-ewí ta  
1:EXCL go S.I. president  $\emptyset$ -house to  
'We are going to the president's house to talk.'

In Panare the possessor precedes the possessed, and the possessed noun is marked with -n, -e, or - $\emptyset$ . Personal possessive prefixes may be replaced by any free pronoun or noun. When a free (pro)noun possessor replaces a possessive prefix, primary accent in the possessed noun may shift to the left. This phenomenon is recorded as  $\Delta$  'FP' (Free Possessor).<sup>5</sup> In 78a the consonant initial noun mata 'shoulder' is possessed by personal possessive prefixes; in 78b by the corresponding free pronoun possessors.<sup>6</sup> Although the accent of the possessed noun does shift with a free (pro)noun possessor, no prefix intervenes between the possessor NP and the possessed NP, as indicated by  $\emptyset$ -. When a free (pro) noun possessor precedes a vowel initial noun, a y- prefix occurs between the two (79).

(78) Personal possessive prefixes versus free pronoun possessors with mata 'shoulder'

a.	mátan	$\emptyset$ -mata-n	'my shoulder'
	amatan	a-mata-n	'your shoulder'
	yimatan	yi-mata-n	'his/her/its shoulder'

- b. yímatan yu-Ø<sup>^</sup>-mata-n 'my shoulder'  
amën mátan amën Ø<sup>^</sup>-mata-n 'your shoulder'  
měj mátan měj Ø<sup>^</sup>-mata-n 'his/her/its shoulder'

(79) Full NP possessor with ywěj 'house'

Toman yúwěj Toman y<sup>^</sup>-uwěj 'Tom's house/place'

In Pemóng, Armellada (1943a:88) states that the "genitive case" is indicated by word order, with the genitive noun followed by the possessed. He treats the y- which occurs on vowel-initial possessed nouns as a part of the stem.

- (80) a. kaikuse y-ema-ri b. waikin Ø-pipue  
tiger Ø-path-Poss deer Ø-skin  
'The path of the tiger' 'skin of the deer'

In Waiwai, Hawkins (1991b) states that the possessive construction is composed of "two nouns right together in which the first is the possessor and the second is the object possessed", and that "if the second noun begins with a vowel, it takes a y- prefix". Possessed nouns are marked by a possession suffix, most commonly -ni, but including also -ri, -fi, -ci, -Ø, or stem irregularities.

- (81) ewka y-osokmu-ru  
Elka Ø-knee-Poss  
'Elka's knee'
- (82) ewka Ø-mumu-ru owi  
Elka Ø-son-Poss 1Sg  
'I am Elka's son.'

### 6.1.3 Summary of the Syntactic Pattern

There is not sufficient evidence to document a pattern of possession in Chayma, Cumanagote, Kalapalo, Kapóng, Tamanaco, or Tiriyo. In those languages for which there is evidence, without exception, when a free (pro)noun possessor occurs, it immediately precedes the possessed noun. The possessor is not marked, but the possessed usually bears a suffix to mark its status as a possessed noun. With the

exceptions of first and second persons in Carib and Yukpa, and 1, 2, and 1+2 in De'kwana, and apparently first and third persons in Bakairi, personal possessive prefixes do not co-occur with a free (pro)noun possessor. In the absence of the personal possessive prefix, consonant-initial nouns take no additional prefix, but vowel-initial nouns in five languages take an additional prefix \*y-.

Clearly we can reconstruct the order possessor-possessed to Proto-Cariban, as well as possession marking on the possessed noun and the lack of genitive case-marking on the possessor. As is the case for Set I transitive clauses with third person A, the nonpersonal prefix \*y- occurs in a small enough subset of languages to be of questionable status. However, as I show in the next section, we must reconstruct a Proto-Cariban nonpersonal \*y- in order to account for allomorphy in the set of personal possessive prefixes. Interestingly enough, although historically we must reject the gloss of third person sometimes given to this y-, we must also reconstruct the Proto-Cariban third person possessive prefix to the form y-. I will argue for both of these points in the next section.

## 6.2 Personal Possessive Prefixes

Based on the forms in Table 6.1, I reconstruct five Proto-Cariban personal possessive prefixes and one nonpersonal possessive prefix:

- \*i- '1'
- \*a- '2'
- \*k- '1+2'
- \*y- '3'
- \*i- '3 Reflexive'
- \*y- 'Nonpersonal Possessive'

Table 6.1 Comparative Cariban Personal Possessive Prefixes

Language	*u- '1'	*a- '2'	*k '1+2'	*y- '3'	*t- '3REFL'
Apalaï	i-/y-	o(i)-	kĩ-	i-/y-/Ø-/z-	t̃-
Bakairi (Stein.)	i-/y	a-/o-/ó-	kχ(V)-	i(y)-/y-/fit-	t(V)-
Bakairi (Abreu)	i-/y-/fie-	i-	kχi-e-	i-/e-	t-
Bakairi (Souza)					t-
Carib (Hoff)	Ø(y)-	a(y)-/o-	k(i)-	i-/Ø-	t(i)-
Carib (Moson.)	dü-/ü-	a(d)-	k(i)-	i-/Ø-	t(i)-
Carijona	yi-/Ø-	ëyi-	kĩ-	i-	t(i)-
Chayma	u(y)-	a(y)-/o-/e(y)-	k-/ku(y)-	i(y)-/t-/z-	t(i)-/tu-
Cumanagote		a-	k(i)-	i-/y-/t-/z-	t(i)-/tu-
De'kwana	i-/Ø-	a-/o-/ë(d)-	kĩ-	i-/d-	t(i)-
Hixkaryana	ro-	a(y)-/o(y)-	ki-	Ø-	t(i)-
Kalapalo	u-/w-	a-/e-	ku-	i-/Ø-	t(i)-/ñ-
Kapóng (Adam)	u-/wi-	a(i)-/ a(w)-	ki-/ko-	i-	t(i)-/tu-
Kapóng (Edw.)	uu-	a-	kĩ-ii-	i-	t̃-
Kuikúro	u-	a-/o-/e-/Ø-	ku(k)-	i-/Ø-	t-
Makushi	u(y)-	a(y)-	?	i(i)-	t(i)-
Panare	Ø(y)-	a(y)-	Ø...-to	yi-/t(y)-	t̃-
Pemóng (Arm.)	u(y)-	a(y)-	ki-	i-	t̃-
Tamanaco	Ø(y)-	a(v)-	k(i)-	i(t)-	?
Tiriyo (Goeje)	y(i)-/ye-	a(w)-/ð-	ku-/ki-/ke-	i-/e-	t-
Tiriyo (Leavitt)	y(i)-	ë	k(i)-	i-	t(i)-
Waiwai	o(y)-	a(w)-	kĩ-	y(i)-	t(i)-
Wayana (Goeje)	u(y)-/i(w)-	a(w)-/ë(w)-	ku(w)-	i-	t(i)-
Wayana (Jack.)	ĩ(w)-/y-	ë(w)-	k(u)(w)-	i(w)-/Ø-/a(w)-	t(i)(w)-
Yukpa	au-	am-/o-	ki-	ye-/oo-	t̃-

The first point to be made about these cognate sets is that many of the prefixes are morphologically complex forms. That is, like the Set I Transitive O-Oriented prefixes (§5.2.1.2), they are historically a combination of a personal prefix plus a \*y- element, which I consider a marker of the genitive relationship between a possessor and a possessed noun. This is the same y- element which is retained synchronically between free (pro)noun possessors and vowel-initial possessed nouns in Hixkaryana, Makushi, Panare, Pemóng, and Waiwai (§6.1.2). In the prefix sets, this \*y- is retained as y- only between vowels (i.e. between \*u- '1' and vowel initial nouns and between \*a- '2' and vowel initial nouns); it is possibly retained between consonants as the high central vowel *i* (but this is equally likely an epenthetic vowel, to avoid a consonant cluster at the start of

a word). Given this historical scenario, the y- portion of the first and second person allomorphy may be extracted and the general picture becomes much clearer.

The 1+2 and 3Reflexive forms are easily reconstructed, as the only real variation in Table 6.1 comes from languages which have lost the prefixes altogether (Panare and Makushi for 1+2, Panare for 3Reflexive). The 2 form is fairly easy to reconstruct given that a- is present in the paradigms for almost every language; the Ë- [ə-] could be derived via unconditioned raising or centralization, and the o- could be derived from a combination of Proto-Cariban \*a- '2' plus an unidentified element \*w- seen in the second person forms for Tiriyo, Waiwai, and Wayana (the sequence a- '2' plus w- 'Intransitive' in Panare yields the phoneme o- '2S' on nominalized intransitive verbs, and it is likely not a coincidence that Waiwai has a(w)- '2' as the most common form while closely related Hixkaryana has o(y)- '2' as the most common form).

The reconstructions of \*u- '1' and \*y- '3' deserve more comment. The first person forms u(y)- are common enough to give a good indication that \*u- must be reconstructed at least to some fairly high branch level of the family. The problem is that there are three other types of synchronic first person marker which must be accounted for: the Ø- which alternates with y- (cf. Carib, Panare, and Tamanaco), the y(V)- which does not alternate with Ø- (cf. Apalaï, Bakairi, Yiriyo, and Wayana), and a number of idiosyncratic markers (cf. Carib d(i)-, Carijona with both yi- and Ø- where the alternation is lexically (rather than phonologically) conditioned, Hixkaryana ro-, Panare y(i)-, and Yukpa au-). The Ø-/y- alternation is due to loss of the vowel u word-initially (cf. §5.2.1.2 for the same phenomenon in Set I Transitive O-Oriented prefixes). I suggest that the other variations are functional compensations for this same phenomenon.

As an example, take the situation in Panare. In Gildea (1989a-b) I show that the apparent first person prefix y(i)- is actually from a different syntactic category as the rest of the possessive prefixes, and must be recently derived from the free pronoun yu. The

other way to show first person possession in Panare is with a  $\emptyset$ - prefix (which, as the internally-reconstructed older form, is the only form I put in Table 6.1). I argued that since the  $\emptyset$ -/y- '1' prefix is ambiguous with the  $\emptyset$ -/y- prefix which goes between free noun possessors and their possessed nouns, there is functional pressure to introduce a new first person marker. I suggest that the range of idiosyncratic first person markers found in Table 6.1 represents the result of exactly that sort of pressure: the Proto-Cariban  $*\underline{u}$ - went to  $\emptyset$ - and the new forms were derived from elsewhere (most likely free pronouns) to disambiguate the morphological form of the possessed noun with a first person possessor from the possessed noun with a preceding free noun possessor.

As a second case study in support of this scenario, consider Carijona. Although Robayo (1987, 1989, 1991) considers the prefix  $\underline{yi}$ - '1' to be the basic form in the language, he also documents an irregular possession paradigm for some nouns (Robayo 1991:4):

- |      |    |                       |   |
|------|----|-----------------------|---|
| (83) | a. | <u>tami</u> 'tobacco' | $\emptyset$ - <u>dami-ri</u> 'my tobacco' |
|      | b. | <u>kaka</u> 'wound'   | $\emptyset$ - <u>gaka-ri</u> 'my wound'   |
|      | c. | <u>hura</u> 'paddle'  | $\emptyset$ - <u>bura-ri</u> 'my paddle'  |

These irregular forms have a first person  $\emptyset$ - prefix synchronically, and the phonemic variation in the first consonant of the root is easily accounted for by positing a historical first person prefix  $*\underline{u}$ -. The steps of the historical change would be as follows: (1) the historical forms of the nouns began with the voiceless stops  $*\underline{t}$ ,  $*\underline{k}$  and  $*\underline{p}$  respectively. (2) Proto-Cariban  $*\underline{p}$  > Carijona  $\underline{h}$  except when adjacent to another labial phoneme (cf. the prefix  $*\underline{u}$ - '1'; this rule is parallel to Girard's (1972:136) Rule 4 for deriving modern Carijona phonology from Proto-Cariban). (3) Voiceless stops are voiced between vowels (cf. between the  $*\underline{u}$ - prefix and the first vowel of the root. (4) The  $*\underline{u}$  >  $\emptyset$  word initially (as in so many other Cariban languages). Given that the idiosyncratic forms retain evidence of the Proto-Cariban form  $*\underline{u}$ - '1', the prefix  $\underline{yi}$ - '1' must be considered a more recent innovation.

The fact that in these two languages, Panare and Carijona, the new first person prefix is of the form  $\underline{y(V)}$ - leads me to suggest that the same scenario likely applies to all the other first person  $\underline{y(V)}$ - forms (i.e. in Apalaf, Bakairi, Tiriyo, and Wayana). The same process clearly applies to Yukpa, but with a different source form: the  $\underline{au}$  '1' prefix is a reduction of the current first person free pronoun aawi(r) (and is hence in free variation with less contracted forms as well (de Vegamián 1978:73 offers extensive illustration of the various degrees of reduction recorded amongst various dialects). In Hixkaryana,  $\underline{ro}$ - '1' is probably derived from uro '1SgPronoun'. I leave an account of the the  $\underline{i}$ - '1' prefixes (De'kwana, Wayana) for future research.

The preponderance of  $\underline{i}$ - '3' in the chart makes it seem counter-intuitive to reconstruct the third person prefix as the consonantal  $*\underline{y}$ - rather than vocalic  $*\underline{i}$ -. Nevertheless, I reconstruct  $*\underline{y}$ - '3' because the synchronic patterns of allomorphy are otherwise inexplicable. That is, the same rules which generate synchronic  $\underline{u}/\underline{uy}$ - '1' and  $\underline{a}/\underline{ay}$ - '2' from Proto-Cariban vocalic prefixes  $*\underline{u}$ - '1' and  $*\underline{a}$ - '2' would be expected to generate  $\underline{i}/\underline{iy}$ - '3' from Proto-Cariban  $*\underline{i}$ - '3': i.e. the synchronic pattern should be  $\underline{i}$ - affixed to consonant initial nouns and  $\underline{iy}$ - affixed to vowel initial nouns. We do find  $\underline{i}$ - affixed to consonant initial nouns, but  $\emptyset$ - to vowel initial nouns in a significant subset of languages: Apalaf, Carib, Hixkaryana, Kalapalo, Kuikúro, and Wayana. This pattern of allomorphy is better accounted for by assuming (1) the Proto-Cariban form is a consonant,  $*\underline{y}$ - '3', which then follows the pattern  $\underline{yi}$ - '3' for consonant initial nouns and  $*\underline{y}$ - '3' for vowel initial nouns; (2) the high central vowel in  $\underline{yi}$ - '3' assimilates to the palatal onset (>  $\underline{yi}$ -); then (3) the phoneme  $\underline{y}$  is lost word initially (a rule for which we have ample evidence from the loss of the Proto-Cariban genitive prefix  $*\underline{y}$ - between free noun possessors and possessed nouns). The resulting pattern of prefix allomorphy is then exactly what we find in these languages:  $\underline{i}$ - affixed to consonant initial nouns and  $\emptyset$ - affixed to vowel initial nouns.

Further evidence in favor of this scenario comes from the conservative synchronic forms found in Waiwai and Panare. In Waiwai, the prefix for consonant-initial possessed nouns is yɪ- '3' and for vowel-initial possessed nouns it is y- '3'; in Panare, the prefix for consonant-initial possessed nouns is yɪ- '3', and for vowel-initial verbs in the Set II verbal system (etymologically derived nouns) the prefix is y- '3' (Gildea 1989a-b).

I take the remaining cases to be further developments after the reduction of yɪ- to i-. Perhaps by extension, Bakairi and Chayma have developed the i(y)- allomorphy (although neither case is well documented), Makushi and Tamanaco have apparently extended the i- '3' marker back to vowel initial nouns and inserted an additional t element between the i- '3' vowel and the initial vowel of the noun.

This concludes my illustration of the Proto-Cariban possessive construction, and the prefixes which arose from that construction.

### Notes to Chapter 6

1 Hoff (pc) has pointed out that the pattern of vowel lengthening in Carib changes when a noun is possessed by a preceding free noun. He suggests that this vowel length pattern is consistent with a word which once had an additional syllable — such as would be given by a vowel prefix. Such a historical “extra syllable” could also account for the Panare accent shift phenomenon. This is exactly the type of evidence from which Gildea (1991g) argues for the existence of a historical first person prefix where now both Panare and Carib have a first person zero form. More detailed research into stress patterns in remaining Cariban languages might offer further support for the notion that the Proto-Cariban \*y- was a vowel in the environment preceding consonant-initial possessed nouns.

2 In personal correspondence, Hoff points out that the Ø- prefix which I mark in 61b is not so simple as it might appear, since there are prosodic effects on the possessed noun: the first vowel of the possessed noun often lengthens, changing the vowel length pattern for the entire word (cf. the word kuriyara ‘boat’ becomes kuuriyaara-ri ‘boat-Possessed’ when preceded by a free possessor). This pattern of vowel lengthening corresponds to a pattern of accent shift in Panare (§6.1.2), and to a pattern of vowel lengthening/accent shift with first person Ø-/y- in both languages. These variations will need to be explained in future research (cf. Gildea 1991g for a preliminary explanation of the first person variations in terms of metrical stress assignment, and the preceding note for speculation on a possible etymological nonpersonal possessive prefix).

3 The examples in 72c-f do not transparently contain possessive prefixes — Derbyshire argues that all subordinate clause constructions in Hixkaryana are actually cases of nominalized verbs, which are then possessed by the underlying absolutive. I will discuss subordination, nominalization, and the possession of nominalized verbs at greater length in Chapter 7. For now, I accept that the examples he offers, those in 72, are equally representative of the facts for nonderived possessed nouns.

4 The form of the possessed noun also changes, but this change appears to be due to the genitive being a free noun rather than a prefix: the altered form also appears when the 1+3 pronoun is the free noun possessor.

5 Accent shift is not always noted, but it occurs a significant percentage of the time, and in some cases, it is the one feature which disambiguates between different persons in the genitive. In Gildea (1989a-b) the accent shift is treated as a morpheme,  $\Delta$  ‘PP’ for Preceding Possessor. Since Set II prefixes are essentially ‘preceding possessors’ as well, but they do not trigger this accent shift, I am modifying the terminology to better reflect the distinction associated with the accent shift—namely a Free (pro)noun Possessor.

6 The first person pronoun is becoming the new first person possessive prefix, and it is actually much more commonly used to denote 1Sg possession than the Ø- $\Delta$  prefix which I show in 75a. However, in Gildea (1989a) I demonstrate that the new 1SG clitic does not pattern with the older possessive clitics in other areas of the grammar, and so I treat it as a free pronoun genitive rather than as a personal possessive prefix in 75b.

## CHAPTER 7

## PROTO CARIBAN NOMINALIZING MORPHOLOGY

Most nominalizers in Cariban languages are suffixes. I illustrate the forms of the suffixes in §7.1, lay out the ergative morphosyntax of nominalized clauses in §7.2, and discuss the syntactic evidence for — and consequences of — the nominalization analysis in §7.3. In §7.4 I discuss the lone exception to the generalizations given in §7.1-3, the idiosyncratic O nominalizing prefix \*n- (mentioned earlier in Chapter 4, §4.3.2).

## 7.1 The Nominalizing Suffixes

Although there are many nominalizing suffixes, only a small subset of these are relevant for the discussion in this study, i.e. those which evolve into Set II TAM markers. These suffixes are \*ne 'A Nominalizer', \*tupu 'O or Action Nominalizer, Past Tense', \*sapo 'O Nominalizer, Past Tense', \*mi 'S or Action Nominalizer', \*ni 'Action Nominalizer', \*∅ 'Action Nominalizer', and \*ri 'Action Nominalizer'. These forms are reconstructed based the cognate sets given in Table 7.1.

Table 7.1 Comparative Nominalizing Suffixes

Language	*-ri	*-tipu	*-sapo	*-ne	*-mi	*-ni	*-∅
Apalaf	-ri	-hpi-ri		-ne			
Bakairi (Abreu)		-dibi					
Carib (Hoff)	-ri	-xpo		-neŋ	-ŋ		-∅
		:-po					
Carib (Moson.)	-ri	-ho		-ne	-mü		-∅
Carijona	-ri	-hë			-mĩ		
Chayma	-r	-tupur		-ne(y)			
Cumanagote	-r	-tpur		-ney			
De'kwana	-di	-ho/-hë				-nõ	
Hixkaryana	-ri	-thiri	-saho	-nye	-mi	-ni-ri	
Kalapalo				-iñe			
Kapóng (Adam)			-za(k)	-nin			
Kapóng (Leav.)							
Kuikúro	-rã/-lã	-pi					
		-pãrã					
Makushi (Will.)		-pə	-sa				
Makushi (Cars.)		-pi	-sa				
Makushi (Abb.)		-pi	-sa'	-nen		-n/-ni	-∅
Panare		-hpë	-sa'	-ñe(n)	-n	-n/-ni	-∅
		-hë					
Pemóng (Arm.)		-pue					
Tamanaco	-ri	-tpe		-ney			
Tiriyo (Goeje)	-ri/-li/-l	-tipõ				-nõ	-∅
		-tupõ					
Tiriyo (Leavitt)	-ri	-hpë		-ne			-∅
Waiwai	-ri	-thiri		-ñe	-mu	-ni	
		-tho					
Wayana (Goeje)	-li	-tpë		-ne			
Wayana (Jacks.)		-tpë/-tpi		-ne			
Yukpa				-ñe(n)			

The suffixes \*ri, \*ni, and \*∅ have been fairly conservative phonologically, and hence are quite easily reconstructed. The other forms are arrived at through the application of four phonological rules:

- (1) Proto-Cariban \*p > h in many modern Cariban languages;
- (2) the vowel from either the final or the penultimate syllable of any word is first weakened (i.e. becomes the high central vowel [i]), and then is elided in many Cariban languages (cf. Girard 1972, Mattéi-Muller 1981, Gildea 1991b);

- (3) when vowel elision brings together two consonants, the first of those two often reduces — first to a pharyngeal fricative or glottal fricative/stop, and then to length on the preceding vowel (Girard 1972, Gildea 1991b,d).
- (4) when a consonant becomes the final segment of a word, it often debuccalizes, falling back in the oral tract to velar position, then to glottal, and sometimes is lost altogether (Girard 1972, Mattéi-Muller 1981, Gildea 1991d).

Given these rules, and the possibility of combining certain morphemes, the other forms reconstruct fairly easily.

Proto-Cariban *\*-sapo* is attested as Hixkaryana *-saho* (Rule 1: *\*p > h*), as Kapóng *-zak* (Rules 2 and 4: *\*CV > k*), as Panare and Makushi *-sa'* (Rules 2 and 4: *\*CV > ʔ*), and finally as Makushi *-sa*, with the entire final syllable lost.

Proto-Cariban *\*-tupu(-ri)* is attested in its most conservative forms as Chayma *tupur*, Tiriyo *-tipò/-tupò*, and as Bakairi *-dibi*; with simple vowel elision (rule 2) it is attested as Cumanagote *-tupr*, Tamanaco *-tpe*, and Wayana *-tpë*. After this, it becomes more complicated. In at least two languages where *\*p > h*, the consonant cluster has been retained: Hixkaryana *-thiri* and Waiwai *-thiri*, *-tho*; in Carijona and De'kwana the consonant cluster *\*th* has reduced further to *h* in the forms *-hë* and *-ho*. In the other languages, the *t* in the consonant cluster *\*tp* reduced (rule 3), first to a velar/pharyngeal fricative or glottal stop in Apalaf *-hpiri*, Carib *-xpo*, Makushi *'pi*, Panare *-hpi*, and Tiriyo *-hpë*, then in a more advanced stage to length on the preceding vowel as Carib *-:po* and *-ho*, Kapóng *-hë*, Kuikúro *-pârâ*, Makushi *-pi/-pë*, Panare *-hë*, and Pemóng *-pue* [pi] (cf. Gildea 1991b for a preliminary reconstruction of this suffix in the context of explaining the vowel elision and consonant cluster reduction rules for five Cariban languages).<sup>1</sup>

Proto-Cariban *\*-ne* is conserved in Apalaf, Carib, Chayma, Cumanagote, Tiriyo, and Wayana. The nasal *\*n > ñ / \_\_\_e* in Hixkaryana *-nye*, and Panare, Waiwai, and

Yukpa *-ñe*. An additional nasal segment *-ŋ/-n* is attested in Carib, Kapóng, Panare, and Yukpa. I hypothesize that this nasal element is the addition of *\*-mi* 'General Nominalizer' to Proto-Cariban *\*-ne* (cf. Gildea 1991d for this internal reconstruction in Carib). The final vowel is elided and the bilabial nasal of *\*-mi* debuccalizes to *ŋ* by Rule 4 above.<sup>2</sup>

Proto-Cariban *\*-ni* is conserved in at least De'kwana, Hixkaryana, Makushi, Panare, Tiriyo, and Waiwai. In Panare and Makushi, *\*-ni* has become conflated with a 1+2 personal morpheme, such that in Makushi, the suffix *-ni* is ambiguous between 1+2 possession and nominalization. In Panare, the full form *-ni* is restricted to nominalizations possessed by 1+2; the reduced form *-n* [ŋ] is used in all other contexts.

Proto-Cariban *-Ø* as a nominalizer is perhaps less clear. The zero suffix is a Set I past tense inflection in Bakairi, Carijona, Waiwai, Wayana, and Yukpa, but it is an action nominalizer in Carib, Makushi, Panare, and Tiriyo. In Kapóng and Pemóng, the descriptions mention a Set II inflection *-Ø*, but do not discuss the nominalizing use of *-Ø* (I suspect this is simply an omission rather than an indication that the dual function does not exist, cf. Chapter 9, §9.1.3 for the cognate form in closely related Makushi).

One of the difficulties with identifying this class of morphemes as category changing is that sometimes two of the morphemes co-occur on the same verb. In particular, *\*-tipi* is obligatorily followed by a reflex of *\*-ri* in six modern languages, and *\*-ne* is followed by a reflex of another nominalizer *\*-mi* in five modern languages. This synchronic fusing of two morphemes which could otherwise both be reconstructed as nominalizers indicates a perhaps deeper etymology for *\*-tipi* and *\*-ne* as deriving something like a participial, which then took an additional nominalizing suffix — these additional nominalizers *\*-ri* and *\*-mi* have since become redundant, and are lost in most modern languages. However, for the purposes of this study, the key is that this class of morphology creates a word which, in each of the languages in question, can be identified

syntactically as a noun. The morphosyntax of these derived nouns is presented in the next section.

### 7.2 The Ergative Morphosyntax of Cariban Nominalizations

The point to be made in this section is that the Cariban system of nominalization is ergatively organized, with the sole genitive relationship to the nominalized verb being claimed by the verb's notional absolutive argument (S and O) and the notional ergative argument (A) being therefore forced into oblique status. Both of these points are stated clearly for Hixkaryana by Derbyshire (1985:38), where first he notes that all of what translate as English subordinate clauses are nominalizations in Hixkaryana; these nominalizations occur either as complements of the independent verb, or as objects of a postposition in adverbial phrases. He continues with a nice synopsis of what I consider to be the system of subordination in Proto-Cariban:

Apart from the nonfinite form of the verb, the subordinate clause differs syntactically from the main clause in the ways in which the underlying subject and direct object are expressed:

- (i) The subject of the intransitive and copula, and the object of the transitive [i.e. the absolutive -- SG], normally function as possessor of the derived form in a possessed noun phrase relationship; and
- (ii) the subject of the transitive is usually expressed by means of a separate PP governed by the Relator [postposition — SG] *wya* 'to, by' [<Proto-Cariban \**uya* — SG].

In Table 7.2 I illustrate the comparative forms from which I reconstruct the Proto-Cariban Goal/Dative/oblique A marker \**uya*. In northern Ergative Languages Makushi, Pemong, and Kapóng, the Goal/Dative function of this morpheme has been lost, leaving only the ergative A-marking function. In southern Ergative Languages Kuikúro and Kalapalo, a different form *-heke* / *-feke* (<\*peke) marks the A of a dependent clause and no trace remains of the Proto-Cariban Goal/Dative \**uya*.

Table 7.2. Comparative Goal/Dative/Ergative Postpositions

Language	*uya 'Goal/Dative'
Apalaf	-a
Carib (Hoff)	:wa/ʔwa
Carib (Mosonyi)	'wa/'via
Carijona	ya
Chayma	uya/oya
Cumanagote	uya/vya
De'kwana	wō
Hixkaryana	wya
Kapóng (Adam)	-wia/-ia
Kapóng (Edwards)	-ya
Makushi (Williams)	-ða
Makushi (Carson)	-ya
Makushi (Abbott)	-(u)ya
Panare	uya
Pemóng (Armellada)	-ya
Pemóng (Edwards)	-ya
Pemóng (Tuggy)	-ða
Tamanaco	uya
Tiriyo (Goeje)	ya
Tiriyo (Leavitt)	-ya
Waiwai	wya
Wayana (Goeje)	(u)ya
Wayana (Jackson)	ya

I turn to the question of the syntactic evidence for the nominalization analysis after illustrating Derbyshire's second point, the ergative organization of nominalizations. I illustrate this in two separate sections, §7.2.1 for Nominative Languages, where the nominalizations are found only in dependent clauses, and §7.2.2 for Mixed and Ergative Languages, where the same morphosyntax is characteristic of both independent and dependent clause verbs.

#### 7.2.1 The Ergative Organization of Nominalized Clauses In Nominative Languages

Hoff (1968) eschews the use of terms like 'nominalization', but it is clear from a review of his grammar that the morphological behavior of all subordinate verbal forms is identical to that of possessed nouns. In 84a the notional S *pandiira* 'flag' possesses the

nominalized intransitive verb. In 84b the notional O kiyeere 'cassava' possesses the nominalized transitive verb. In 84c, moxko kari'na 'the Carib', dative recipient of the verb 'tell', is the object of postposition 'wa 'Dative''. And in 84d the notional A of the nominalized transitive verb is realized as a first person prefix i- '1' on the same dative postposition, 'wa 'DAT''.

- (84) a. pandi:ia Ø-wofixto-xpo \_\_\_\_\_ ipookoro  
flag 3-descend-PFCT:NMLZR following:it  
 'It has been followed by the lowering of the flag.' (p. 139)  
 lit: 'The flag's lowering followed it.'
- b. moxkaaro kiyeere Ø-iika \_\_\_\_\_ kinixsaŋ  
 moxkaaro kiyeere Ø-iika-Ø \_\_\_\_\_ kin-wiito-ya-ŋ  
 they cassava Ø-dig-Nominalizer 3-go-T/A-Evidential  
 'They went to dig out cassava.' (p. 350)  
 (lit. 'They went digging of cassava.')
- c. kingaano moxko kari'na Ø-'wa moxko kuruupi  
 he:said 3.ANIM Carib 3-DAT 3.ANIM Kuruupi  
 'Kuruupi said to the Carib.' (p. 298)
- d. ayaura Ø-eta-xpo \_\_\_\_\_ ke i-'wa eero sukuusa  
 your:words 3-hear-PFCT:NMLZR INST 1-by, this I.know  
 'Because your words have been heard by me, I know this.' (p. 121)  
 (lit. 'With the hearing of your words by me, I know this.')

In Carijona, Robayo (1987,1989, 1991) does not discuss the morphosyntax of nominalization directly, but examples taken from texts illustrate the same morphosyntax as in the other Cariban languages. In 80a the notional S hihi 'brother' possesses the nominalized verb, and in 84b the notional O mèrè edu 'that tree trunk' possesses the nominalized verb with the first person A occurring as the object of the allative (both locative goal and dative) postposition.

- (84) a. hihi Ø-eci-hě  
 brother Ø-leave-Result  
 'brother's having left' (1991:text, 13)
- b. ětina mèrè edu Ø-akorokarě yiya  
 ětina mèrè edu Ø-akot-roka-rě yi-ya  
 then that tree trunk Ø-cut-?-Nmlzr 1-allative  
 'Then that tree trunk is cut by me.' (1989:195, 17)

In De'kwana, Hall (1988:341) divides subordinate verb forms into the categories of nominalized, subjunctive, participial, and complex verbs with an auxiliary. She does not discuss the syntactic criteria on which she bases this division; a survey of her examples shows that both the nominalizers and participial markers are cognate to Proto-Cariban nominalizers,<sup>3</sup> and the morphosyntax appears identical for both classes. In 85a the notional S mado 'tiger' possesses the nominalized verb and in 85b the notional O motto 'worms' possesses the nominalized transitive verb. I have no examples with the A in an oblique phrase.

- (85) a. mado Ø-etaadawa'ko-ho  
 tiger Ø-work-Participial  
 'the tiger's working' (p. 342, 42c)
- b. motto Ø-ti'kaa-dii  
 worms Ø-dig-Nmlzr  
 'digging of worms' (p. 341, 40a)

Derbyshire's 1985 characterization of Hixkaryana was presented at the beginning of this section. To illustrate, in 86a the notional S is realized as a possessive prefix ro- 'my', possessing the nominalized intransitive verb. In 86b the notional O is realized as a free nominal possessor honyko 'peccary'. In 86c the first person recipient of the verb 'give' is marked by the Dative postposition wya 'to, by'. And in 86d the notional A of a nominalized transitive verb is realized as a free pronoun amna '1+3', bearing the same dative postposition, wya 'to, by'.

(86) Hixkaryana subordinate clause morphosyntax (Derbyshire 1985)

- a. terewwero rowanota-ni -r \_\_\_\_\_ me \_\_\_\_\_ kewehyaha  
 loudly I-sing-Nominalizer-Poss Denominalizer I-take-a-bath  
 'I take a bath singing loudly' (45b, p. 38)
- b. honyko Øwo-ni -r \_\_\_\_\_ xe \_\_\_\_\_ wehaha. Waraka wya  
 peccary Ø-shoot-Nominalizer-Poss desirous-of I-am Waraka by  
 'I want Waraka to shoot Peccary.' (45g, p.39)

- c. yawaka yimnyako biryekomo rowya (rowya)  
axe he-gave-it boy to-me (1SG-DAT)  
'The boy gave the axe to me.' (41a, p.35)
- d. amna nomokyako. amna wya isna ipatxowi Ø-ka-txhiri hona  
1+3 came 1+3 by to-there let-us-go 3-say-NMLZN.PAST to  
'We (excl) came to where we said we were going.' (52b, p. 43)

For Tiriyo, de Goeje (1909:192, 194) presents examples of what he calls the "infinitive" and the "gerund", which are cognate to nominalized forms in other Cariban languages. In 87a, the complement of the verb 'to want' is nominalized, and possessed by the first person notional S: y-itō-Ø '1-go-Nominalizer'. In 87b the transitive verb weri 'kill-Nominalizer' is possessed by the notional O, pakfra 'peccary'. In 87c, the verb eni-to 'drink-Nominalizer' is nominalized in a form which does not allow possession, but it illustrates that the first person notional A occurs as object of the postposition ya 'by'.

- (87) a. y-itō-Ø se-pa wai  
1-go-Nominalizer want-Negative 1.be  
'I don't want to go.' (lit. 'I am not wanting my going.') (p. 192)
- b. pakfra Ø-wé-ri u-te-j  
peccary Ø-kill-Nominalizer 1-go-T/A  
'I'm going to kill peccaries.'
- c. tuna so wai-rō eni-to u-ya  
water want 1.be-Nominalizer drink-Nominalizer 1-by  
'I want water so that I may drink.' (p. 192)  
(lit. 'Water I being wanting for drinking by me')<sup>4</sup>

For Wayana, Jackson (1972:69-70) lists a number of nominalizing suffixes and gives examples which show that nominalized verbs are possessed by their notional absolutive arguments. In 88a, the nominalized verb əhalë 'go' is possessed by its notional S, kuw- '1+2'. In 88b the nominalized verb əpa 'teach' is possessed by its notional O əmna '1+3'. However, neither of these examples shows the oblique A. De Goeje (1946) also does not discuss the ergative organization of nominalizations, but his examples with a nominalization followed by the instrumental postposition do illustrate the phenomenon. In 89a the verb eri 'bite' is nominalized and then followed by kə

'Instrumental'; the first person notional O possesses the derived nominal, and the third person A mahak 'mosquito' bears the dative postposition uya. In 89b de Goeje illustrates the dative use of uya, and in 89c the locative use of uya.

- (88) a. kanawa Ø-ənep-kë. kuw-əhalë-top-ko-me  
canoe Ø-bring-Imperative, 1+2-go-Nominalizer-Plural-Purpose  
'Bring the canoe, in order for us all to go.' (p. 69)
- b. əmna Ø-əpa-tpi  
1+3 Ø-teach-Past.Nominalizer  
'the former teaching of you all and me (by another)' (p. 70)
- (89) a. ...mahak-uya y-eri-Ø-kə  
mosquito-Dative 1-bite-Nominalizer-Instrumental  
'...(because of ) my being bitten by mosquitos.' (p. 117)  
(lit. '...with the biting of me by mosquitos.')
- b. w-ene-po-yai Yalukana-ya  
1A-see-Causative-T/A Yalukana-Dative  
'I show it to Yalukana.' (p. 113)
- c. t-imok-he wai ẽ-uya  
T/A-arrive-T/A 1.be 2-Dative  
'I have arrived at your house.' (lit. 'to you')' (p. 113)

For Waiwai, examples from Hawkins (1991b) illustrate the ergative organization of nominalizations: in 90a the notional S rikomo 'child' possesses the nominalized intransitive verb and in 90b the notional O marari 'field' possesses the nominalized transitive verb, with the first person A occurring as a dative.

- (90) a. rikomo y-eirka-rí w-eeñe-Ø  
child Ø-fall-Nominalizer 1A-see-T/A  
'I saw the child fall.' (lit. 'I saw the child's fall.')
- b. ...marari y-ama-cho o-wya  
field Ø-cut-Nominalizer.Purpose 1-Dative  
'...in order that I might cut a field.'  
(lit. ... for the cutting of a field by me.)'

## 7.2.2 The Ergative Organization of Subordination in Ergative and Mixed Languages

In Ergative and Mixed Languages, dependent clause verbs are not transparently of a different morphosyntactic category from independent clause verbs — i.e. some Proto-Cariban nominalizers are reanalyzed as independent clause verb inflections in these languages; when these markers occur (with their etymological nominalizing function) in dependent clauses, it is not clear synchronically whether they should be analyzed as nominalizations or as finite verbs occurring in subordinate clauses. Different linguists approach the problem in different ways. In this section, I merely point out that regardless of whether dependent clause verbs are considered synchronic nominalizations or synchronic finite verbs, dependent clauses are still organized according to the same ergative alignment as the cognate nominalized clauses illustrated in the preceding section for Nominative Languages.

For Mixed Language Apalaí, Koehn and Koehn (1986:73) offer essentially the same description of subordination as Derbyshire does for Hixkaryana (including the analysis that all dependent clauses are nominalized). In 91a, the first person notional S possesses the nominalized verb. In 91b the free noun O *karao* ‘bird’ possesses the nominalized verb and the first person notional A occurs prefixed to the dative postposition *a* ‘to/by’. In 91c *a* ‘to/by’ is shown with its dative function.

- (91) a. i-oe-py-ry eraxima-ko  
1-come-Nmlzr wait-Imperative  
‘Wait for my coming.’ (p. 89, 293)
- b. karao Ø-apoi-ry y-a  
bird Ø-catch-Nmlzr 1-by  
‘my catching the bird...’  
(lit. the catching of the bird by me...’ (p. 89, 294)
- c. oseh-ko y-a  
come-Imperative 1-to  
‘Come to me.’ (p. 96, 338a)

For Ergative Language Kalapalo, Basso (1992) provides examples 92a-b. In 92a the nominalized verb is *tufilú* ‘their walking’, which then bears the ergative suffix *-feke* and serves as the A of the independent clause. The third person reflexive possessive prefix *tu-* refers to the notional S of the nominalized intransitive verb. In 92b the nominalized verb *kukweale* ‘in order to kill us again’ bears the 1+2 possessive prefix *ku-*, referring to the O of ‘kill’.

- (92) a. akita tu-fi-lu-feke  
tiredness 3Refl-walk-T/A-Ergative  
‘They were tired from their walking.’
- b. kaigafa i-ge-ta-fa ku-kwea-le  
Christians 3-bring-T/A-Connective 1+2-kill-again  
‘He brought (led) the Christians in order to kill us again.’

For Ergative Language Kuikúro, Franchetto (1990b:61ff) discusses at length how absolutive nominals relate to the finite verb in exactly the same morphosyntactic way that a possessor relates to its possessed noun. She points out that the same relations hold in subordinate clauses, and illustrates with the examples in 93a-b. In Franchetto (1991) she points out that the inflected verb in an independent Set II ergative clause, with no further nominalizing morphology, can also function as a nominal argument (90).

- (93) a. u-ágká-lá-ti u-i-cará  
I-sleep-Punctual-Desiderative 1-be-Continuative  
‘I am wanting to sleep’ (lit. ‘I am wanting my sleeping’) (p. 62:
- b. torokiré Ø-igi-námigo u-héke u-itirá Ø-há-tómi e-héke  
cotton Ø-bring-Future 1-Erg 1-hammock Ø-make-Fin 2-Erg  
‘I will bring cotton for you to make my hammock.’  
(lit. ‘I will bring cotton for my hammock’s making by you.’<sup>5</sup>
- (94) Kahurá-heke u-iguhe-pârá cici te-lá-ki  
Kahura-Erg 1-teach-Perfective cici go-Punctual-Instrumental  
‘It was Kahura who taught me to unfold (*desenrolar*) the cici (a ritual), or  
‘The teaching of Kahura about the unfolding of the ritual.’  
(lit. ‘By Kahura my being taught with the cici’s going’)

For Ergative Language Makushi, Abbott (1991:67-70) discusses the minimal distinctions between independent and dependent nominalized clauses, including (p.70)

the fact that inflected finite verbs can also function as derived nominals. The nominalized clauses are organized according to the same ergative system as independent clauses, with the notional S and O possessing the nominalized verb and the A occurring in the oblique ergative case marked by *-ya* 'Erg'.

- (95) e-erepami-Ø pe \_\_\_\_\_ e'ma arakkita ewaronpami-'pī  
 3-arrive-Noml<sub>z</sub> Denominalizer path middle become.night-T/A  
 'As he arrived in the middle of the path, it became night.' (p. 70:227)
- (96) t-ekkari Ø-arefi'ka-sa'-tīu-ya yai aw-enna'po-'pī  
 3.Refl-food Ø-finish-Noml<sub>z</sub>-3Refl-Erg at 3-return-T/A  
 'When he finished his food, he returned.' (p. 70:229)  
 (lit. 'At the finishing of his<sub>i</sub> food by himself<sub>i</sub>, he<sub>j</sub> returned.')

For Mixed Language Panare, T. Payne (1990, 1991) and Payne, Payne, and Gildea (in process) describe Panare as having no natural division between 'subordinate' and 'main' clauses. Unlike in Nominative Languages, in Panare morphological marking on the verb does not decisively indicate status of a word as nominal versus verbal (since some Proto-Cariban nominalizations have been reanalyzed as main clause verbs). Payne, Payne, and Gildea make the division based on functional grounds, with independent clauses being those which "are fully grounded in time and space by verb-internal morphology", and dependent clauses as those which "depend for their temporal, and sometimes spatial grounding and/or the reference of one of their primary participants on the independent clause." For the purposes of this study, it is sufficient to note that all of what Payne, Payne, and Gildea describe as dependent clause verbs are cognate to what are called nominalizations in other Cariban languages, and that they are organized according to the same ergative principles.

In 97a the intransitive dependent clause verb bears the absolutive (etymologically the possessive) prefix *y-* '3'; in 97b the transitive dependent clause verb bears the same *y-* '3' prefix, this time referring to the O; the first person A is expressed in an oblique phrase, as the object of the dative postposition *uya*.

- (97) a. mēn y-an-sa' \_\_\_\_\_ [y-u-tē-sejpi-nkē]  
 it Ø-take-Passive, 3-Intransitive-go-Dependent-also  
 'It<sub>i</sub> is taken, and then he<sub>j</sub> goes also.'
- b. y-owopataka-n wēiki ij-chawo \_\_\_\_\_ [y-uwē'-se'ñape yu-uya]  
 3-come.out-T/A deer bush-Locative 3-kill-Dependent 1Sg-Dative  
 'The deer came out of the woods and (it) was killed by me.'

### 7.3 The Syntactic Argument for, and Effect of, Nominalization

The ergative organization of dependent clauses in Nominative languages is clear from the preceding examples. The claim that the verb forms in dependent clauses are syntactically nominals flows primarily from morphological properties: they take possessive prefixes and suffixes.

One syntactic property reinforces the nominalization analysis: if the A argument of a dependent clause occurs at all, it must be as an oblique. This is due to the nature of possession in Cariban languages. When a verb is fully nominalized, the semantic arguments of that verb can no longer bear the syntactic relationships of subject or direct object to the derived nominal — nouns don't have such relations to other nouns.<sup>6</sup> The two types of grammatical relations by which one noun can be connected to another syntactically are as possessor-possessed and as a head noun modified by an oblique noun (i.e., as a noun contained in an adpositional phrase). In Cariban languages, there is only one syntactic construction which expresses the genitive relationship (unlike English, which has both the direct 'Saxon' genitive and the indirect 'Romance' genitive, mediated by a preposition). The statement that nominalizations are ergatively organized is an abstraction from the fact that the S of intransitive and the O of transitive (the absolutive) both claim this single genitive relationship to the nominalized verb.

When the O has already claimed the genitive relationship to a nominalized transitive verb, the A is essentially left out — it cannot also form a genitive relationship to the nominalization because the only genitive slot is already taken. The only means for

the A to be expressed is by the mediation of an adposition. The adposition which has been conventionalized for this function in Hixkaryana and Carib (and other Set I and mixed languages) is the Goal / Dative form \*ɣya. Thus, the “ergative” marker on the transitive A follows directly from two syntactic facts: (1) the verb is fully nominalized and (2) the absolutive claims the sole genitive relationship which is available, leaving the A only an oblique means to express its semantic association with the nominalized verb.

#### 7.4 The Idiosyncratic O Nominalizing Prefix n-

Until this point, I have addressed solely the ergatively organized portion of the system of nominalization. Although the ergative organization is relatively dominant, there is one idiosyncratic O nominalizer (i.e. an affix which, when attached to the verb, derives a noun which refers to the notional O of the nominalized verb). It differs from the other Proto-Cariban nominalizers in that (1) it is a prefix, (2) it can co-occur with various other nominalizers, and (3) the resulting derived nominal is obligatorily possessed by the notional A of the verb rather than by the notional O. In Gildea (1991f) I suggest that this prefix reconstructs to Proto-Cariban as a nominalizer. Hoff (in personal correspondence) has suggested that in Carib of Surinam (and perhaps in other languages) this prefix is not itself a nominalizer, but rather it always co-occurs with a nominalizing suffix. By Hoff’s analysis, n- has only the personal function of giving the genitive slot to the A. In Carib, it is important to note that the derived nominal does not always refer to the notional O of the nominalized verb, but can sometimes refer to the action itself. Where this is true, there is little point in linking n- to O at all. However, in most Cariban languages, the addition of n- to a derived nominal changes the meaning such that the derived nominal refers to the notional O; in at least two languages, Panare and Wayana, the n- prefix nominalizes a verb which bears no other nominalizing morphology. As such, I maintain my use of the term “O nominalizer”.

I illustrate the O nominalizer in each language in turn. For some languages, I offer more discussion simply because more material is available to me. Relative to the overall study, the key point I make in this section is that the n- prefix is a part of the system of nominalization in all languages for which it has been described (as opposed to a nascent part of the Set I system, cf. the etymological discussion in Chapter 4, §4.3.2).

Koehn and Koehn (1986:91) describe a combination of nominalizing morphology as follows: “-ny-...-ry [is] Object resulting from an action. This occurs with transitive stems only. The -ny- is preceded by possessor person markers.” The ny- [ni-] can also occur with the past tense nominalizer -hpyry. In 98a, the stem mero ‘write’ is sandwiched between a ny- ‘O.Nmlzr’ prefix and a -ry ‘Nmlzr’ suffix. The agent is expressed as the first person possessive prefix y- preceding the derived nominal. In 98b, the same verb with the nominalizing prefix takes the past tense nominalizing suffix and is possessed by the second person notional A.

- (98) a. y-ny-mero-ry  
 1-O.Nmlzr-write-Nmlzr  
 ‘the thing I am writing’ (K&K’s 309, p. 91)  
 (lit. ‘my writee [written thing]’)
- b. o-ny-mero-hpyry  
 2-O.Nmlzr-write-Nmlzr+Past  
 ‘the thing you have written’ (K&K’s 310, p. 92)  
 (lit. ‘your [past] writee [written thing]’)

Hoff (1968:137-8) describes a nasal prefix in Carib of Surinam which he labels the ‘ni- category’. It is found only with transitive verbs, deriving a nominal which is possessed not by the usual “who or what undergoes the action”, but rather by “who or what performs it”. Hoff further states that the derived nominal “can refer both to the action and to the person or thing undergoing it.” Although in Carib, the derived nominal bearing the ni- prefix does not always refer to the notional O, since that is one of the synchronic functions, I continue to gloss it as such in the examples. The ni- prefix in



nominalizing suffixes are listed as co-occurring with the -ni- 'object resulting from action' prefix:

<u>-ni-</u> ri	'Present'
<u>-hi</u> to-ri	'Negative'
<u>-thi</u> -ri	'Past'
<u>-hi</u> to-ri tho	'Negative Past'

In 102, the verb nyake 'send' bears the ni- prefix, the action nominalizing suffix -ni-, the possessive suffix -ri-; it is possessed by the preceding noun Waraka.

- (102) Manawasi hona Waraka Ø-ni-nyake-ni-ri \_\_\_\_\_ uhutwehe  
 Manaus to Waraka 3-O.Nmlzr-send-Action.Nmlzr-Possession I-know-him  
 'I know the one whom Waraka sent to Manaus.' (Derbyshire 1985:49, 65b)  
 (lit. 'I know Waraka's sendee to Manaus.')'

Kuikúro is the first of the languages considered here where a verb bearing the n- prefix has been reanalyzed for use as a main clause verb (cf. Chapter 4, §4.3.2 and Chapter 9, §9.2.1). Thus, Franchetto (1990:412) is speaking of a part of the main clause verbal system as she describes the now-familiar morphosyntax associated with the n- prefix:<sup>7</sup>

...de-ergativization applies to inherently transitive verbs and results in the verb agreeing with the actor or agent of the event described by the verb. De-ergativization is formally marked by the verbal prefix ñ- or g- [ŋ]; the prefixed verb occurs immediately after the unmarked subject. The [de-ergative--SG] prefix can be considered a general object marker or an object agreement marker... the patient associated with a de-ergativized verb does not appear in an oblique case, and retains all other syntactic properties of transitive patients.

Among the functions which Franchetto lists for the de-ergative prefix is that of forming object relative clauses. She gives one example, reproduced here as 103. The relative clause appears at the end of the main clause, separated from the noun it modifies by the rest of the sentence. The verb ame 'take' bears the the prefix g- ([ŋ] cognate to the n- prefixes we have seen elsewhere), the perfective nominalizer suffix -pâra, and the plural suffix -ko. The second person notional A possesses the derived nominal by means

of the prefix g- '2'. Franchetto points out that 103 "could be translated literally as 'you will bring your taken water'."

- (103) tugá igi-nâm-ígo \_\_\_\_\_ e-heke-ni a-g-ame-pâra-ko  
 water bring-Punctual-Future 2-Erg-Plural 2-DeErg-take-Perfect-Plural  
 'You will bring the water that you will take.'

Franchetto further describes how synchronically a "de-ergativized" verb is required in all pragmatically marked constructions in which the direct object is questioned, and also how it functions to mark main clause 'interactive moods'. Further research is needed to understand the motivation for extending the ni- object nominalizer into all of these functional areas.

For Makushi, Carson (1982:126) lists ni- as the object relative pronoun in a restrictive relative clause, but her examples corroborate Abbott's (1991:95) analysis of ni- as an object nominalizer. In 104, Carson shows the verb eramá 'see' bearing the n- prefix and the -pi 'Perfective' suffix, then being possessed by the first person notional A via the prefix u- '1'. In 105a-b, Abbott shows the n- prefix occurring on the verb tiri 'give', with the zero suffix in 105a and with the past tense suffix -pi in 105b. In both 105a-b, the first person notional A possesses the derived nominal.

- (104) pemónkón u-n-eramá-pi \_\_\_\_\_ wuti-pi \_\_\_\_\_ wit-tá  
 man 1-Rel-see-Perfective go-Perfective home-Directional  
 'The man whom I saw went home.' (Carson 1986:126)

- (105) a. u-n-tiri  
 1-O.Nomlzl-give  
 'what I give'
- b. u-n-tiri-pi  
 1-O.Nomlzl-give-Past  
 'what I gave'

In Panare, like in Kuikúro, verbs bearing the n- prefix have been reanalyzed for use as verbs in main clauses (see also Chapter 8, §8.1.3). In Gildea (1991e) I argue that this reanalysis has allowed an analogical extension of the Set I tense suffixes to co-occur with the n- prefix (106b). Thus far, Panare appears to be the only Cariban language

where the n- prefix can co-occur with Set I tense suffixes. Even so, the morphosyntax associated with the n- prefix in Panare is the same as that already described for the other languages: in 106a, the verb ikitiĕ 'cut' bears the n- prefix, the perfect inferential nominalizing suffix -ipĕ, and is possessed by second person a-. In 106b, the n- prefix occurs on the verb petyúma 'hit', which also bears the Set I past tense suffix -yaj. This derived noun then bears the nominal suffix -nĕj and is possessed by the second person free pronoun amĕn.

## (106) Panare

- a. a-n-ikiĕ-ipĕ  
2-O.Nmlzr-cut-Perfect.Inferential  
'the one that you cut'
- b. amĕn nĕpetyúmayaanĕj  
amĕn Ø-<sup>^</sup>n-petyúma-yaj-nĕj  
2Sg Ø-Free.Possessor-O.Nmlzr-hit-T/A-Animate  
'the one who you hit' (lit. 'your hittee')

Armellada (1943a:125) describes the n- prefix as a means of forming object relative clauses, and, like Carson (1982) for Makushi, he considers the n- to be a relative pronoun. In 107 the verb amue 'roof' bears the n- prefix, the Set II past tense suffix -pue, and is possessed by the first person prefix u-. The notional O tapui 'house' also occurs, as a free noun in apposition to the derived nominal (with which it is coreferential).

## (107) Pemóng (Armellada 1943:125)

tapui u-n-amue-pue  
house 1-O.Nmlzr-roof-Past  
'The house that I roofed.'

Adam (1893) includes the following Tamanaco example in his list of verbs which bear two personal indices (i.e. the A possessor and the O n-). The verb ene 'see' bears the n- prefix, the nominalizing suffix -ri, and is possessed by the second person prefix a-.

## (108) Tamanaco

a-n-ene-ri  
2-O.Nmlzr-see-Possessed  
'that which you see' (Adam 1893:51)  
(lit. 'your seen one')

For Tiriyo, Leavitt (1971) gives several paradigms of what he calls relative clauses, showing how the addition of the n- prefix changes them from being possessed by the notional O to being possessed by the notional A. From those paradigms, I have extracted two with the verb ekarama 'give'. In 109a, the verb bears the n- prefix with no suffix, and the resultant derived nominal is possessed by third person i-. In 109b, the verb bears the n- prefix, the past tense nominalizer -hpĕ, and then is possessed by second person ĕ-.

## (109) Tiriyo (Leavitt 1971)

- a. i-n-ekarama  
3-O.Nomlzl-give  
'what he is giving'
- b. ĕ-n-ekarama-hpĕ  
2-O.Nmlzr-give-Past.Nmlzr  
'What you gave'

For Wayana, both Jackson (1972) and de Goeje (1946) give examples of the n- O nominalizer. In both works, n- occurs with a zero suffix, which is also described as a Set I past tense inflection in Wayana (see Chapter 5, §5.3). When n- co-occurs with a zero suffix, there is no sense of past time, but rather the glosses reveal a present continuous or habitual meaning. This corresponds well to the meaning of the zero suffix which is an action nominalizer in other Cariban languages (Chapter 7, §7.1), so perhaps in Wayana a zero verbal suffix belongs to both the Set I and Set II systems. In 110a, the verb epa 'teach' bears the n- prefix with a zero suffix, and is possessed by i- '1'. In 110b, the verb ili 'make' bears the n- prefix, the past tense nominalizing suffix -tpi, the plural marker -kom, and is possessed by ku- '1+2'. In 111, de Goeje (1946) shows the verb ili 'make'

bearing the n- prefix with a zero suffix, possessed by ẽ- '2'. The derived noun is the predicate noun of a predicate nominal clause, with the subject being the demonstrative pronoun sin 'this'.

(110) Wayana (Jackson 1972:58-9)

- a. i-n-epa  
1-O.Nmlzr-teach  
'the one that I am teaching.'
- b. ku-n-ili-tpi-kom  
1+2-O.Nmlzr-make-Past.Nmlzr-Plural  
'the thing we made; our former making'

(111) Wayana (de Goeje 1946:109)

ẽ-n-ili \_\_\_\_\_ sin?  
2-O.Nmlzr-make this  
'Is this your work?'

For Waiwai, Hawkins (1991b) illustrates the n- prefix via the clause in 112: the verb ekĩ 'bring' bears the n- prefix and the past tense nominalizer -tho, then is possessed by the preceding noun paranakari 'white man'.

(112) Waiwai (Hawkins 1991b)

krapa weeñasi paranakari ñekĩtho  
krapa we-eña-sĩ paranakarĩ Ø-ñ-ekĩ-tho  
bow 1-see-T/A white.man Ø-O.nmlzr-bring-Past.Nmlzr  
'Let me see the bow which the white man brought.'

This concludes my presentation of the comparative morphosyntax of Cariban dependent clauses. Having established in Part II that Proto-Cariban independent clauses used the Set I system of verbal inflection, and that the Proto-Cariban systems of possession and nominalization contain cognates to much of the Set II verbal system, in Part III I present the mechanism by which the Proto-Cariban dependent verbal system invaded independent clauses, creating the independent clause Set II verbal system.

## Notes to Chapter 7

1 Hoff (1968) definitely records vowel length preceding this reduced form of the suffix, but none of the other sources discusses prosody. With further research, I suspect that evidence of compensatory lengthening on the preceding syllable will be found in the other languages as well.

2 The final n in Panare, Makushi, and Yukpa is phonetically [ŋ], but since it is a predictable allophone of /n/ and /m/ word finally, it is written orthographically as n.

3 This is not as clear as it might be because Hall's (1988:342) examples 42a-b are both cases of nominalized verbs as objects of a postposition. That is, there is no internal morphosyntactic distinction between participials and nominalizations as defined by Hall — the difference lies in their function in the matrix clause, where what Hall calls nominalizations occur as complements of the matrix verb, and what she calls participials occur as objects of a locative postposition. The example which I give as 85a is the sole example she presents of a verb being nominalized by a suffix -ho.

4 This particular example illustrates another interesting point about Tiriyo independent clauses: as pointed out by de Goeje (1909:192, 194) the nonfinite form of the verb also serves in independent clauses as a present indicative verb. The independent clause verb wai-rõ '1.be-Nominalizer' is nonfinite by morphological tests, but stands alone as the only candidate for main verb of this independent clause. Such use of nonfinite forms as independent verbs is seen in Apalaf and Carib as well (cf. Chapter 8). I take this to be an indication that Tiriyo is beginning to move into the category of Mixed Languages, although in the absence of text data, the evidence is too weak to make such a categorical statement here.

5 Franchetto does not give a full gloss for the suffix -tomi 'Fin'; as such, I leave her gloss as in the original. This suffix appears to be cognate to the Proto Cariban purposive nominalizer \*-to followed by the denominalizing suffix \*-pe (which is realized synchronically in several Cariban languages — including Hixkaryana and Carib — as -me).

6 Of course this is true only for the type of nominalization which derives a nominal from the verb word itself (the only type found in Cariban languages). This statement is not true for verb phrase nominalizations, those where the complex unit verb plus direct object together are nominalized, such that the A must relate to the nominalized verb phrase as one noun to another (usually as a genitive possessing the VP), but internal to the nominalized VP the verb retains its O argument. For example, the agent of steal is a genitive, and the patient is the accusative in the following English verb phrase nominalization:

[ His [stealing [my hubcaps]] really annoyed me.  
[ V [Direct Object]]  
[ VP ]  
[GEN [ NP ]]

7 While other linguists have suggested that cognates to *n-* be thought of as generalized object markers (Williams 1932 and Carson 1982 each analyze the cognate form in Makushi as an object relative pronoun, as does Armellada 1943a for the cognate in Pemón), Franchetto's use of the term "object agreement marker" seems unusual in that there is no sense in which this prefix "agrees" with any semantic features of the object (it is invariant).

### PART III: THE CHANGE: SUBORDINATE VERBS ENTER MAIN CLAUSES

In Part III of this study, I show how Proto-Cariban nominalized dependent clause verbs entered independent clauses as complements of copulas and aspectual/modal complement-taking verbs. These biclausal constructions were reanalyzed as unclausal in Mixed languages, with the etymological complement-taking verb becoming an auxiliary and the etymological nominalized complement verb becoming the new main verb. The surface sequence of forms does not look different from that of the biclausal construction, but the fact of reanalysis is seen in both semantic/pragmatic changes and also in syntactic patterns associated with the new unclausal structure of the reanalyzed forms.

Since I argue for the reanalysis in this part of the dissertation, I briefly review here the types of arguments which may be brought to bear. The source construction is biclausal, with one independent predicate and one dependent predicate, and the resultant construction is monoclausal, with one independent predicate consisting of a main verb plus an auxiliary. The evidence of reanalysis lies in (1) changes in meaning or syntax associated with the etymological independent verb, (2) changes in meaning or syntax associated with the etymological dependent verb, and (3) changes in morphosyntax which indicate the presence of only one predicate rather than two (e.g. loss of arguments, changes in case-marking, loss of syntactic boundaries). I apply these tests to Mixed Language Panare in Chapter 8.

In some Ergative Languages, the Set I system has been lost entirely, and as such the fact of reanalysis is not open to debate. This means that auxiliaries (when they occur) bear Set II inflectional morphology. Some of the aspectual/modal complement-taking

verbs have been integrated into the verb word as affixes, and even the copular auxiliaries have been analyzed as inflectional suffixes by some linguists. In Chapter 9, I review the Ergative Languages which have been described in the literature to date.

## CHAPTER 8

### MIXED LANGUAGES: THE EARLY STAGES OF CHANGE

In Mixed Languages the Set I system remains as a primary way of expressing past tense(s), but the verbs bearing Set II morphology are used to express a number of other TAM distinctions. The one Mixed Language for which the evolution of the Set II system is best documented is Panare (Gildea 1989a-b, d-e, 1991e, T. Payne 1990, 1991, Payne, Payne, and Gildea in process). Other Mixed Languages can be recognized by the splits in their tense/aspect paradigms, but detailed syntactic tests have not been carried out to determine whether their Set II tenses and aspects are actually monoclausal constructions, or whether they remain biclausal synchronically. I begin the illustration of Mixed Languages with the case study of Panare.

#### 8.1 The Case Study of Panare

In Panare, most verbs with Set II affixes have at least two syntactic functions, one nominal and one verbal. In the Panare main clause verbal system described in Payne, Payne, and Gildea (in process), 13 of the 17 main clause declarative TAM suffixes are Set II forms. The Set I verbal system is instantiated by only four past tense suffixes (called past-perfective, to distinguish them from some Set II past-oriented perfect suffixes); all other main clause tenses and aspects in the language are expressed with Set II inflections. All linguists who have described Panare main clauses take for granted that the Set II verb forms are fully finite, and exemplify main clause grammar accordingly (Tosantos 1977:29ff., Mattéi-Muller 1974:11 and 1981:65, Price 1989 inter-alia, Gildea 1989a:39ff

and 1989b:176ff, T. Payne 1990, 1991, and Payne, Payne, and Gildea in process). Of all these linguists, only Gildea 1989a-b addresses the possibility that there is a potential nonverbal analysis for these nonpast inflections, but rejects the nonverbal analysis based on both semantic and syntactic facts (which I summarize below).

When viewing Panare as an isolated synchronic language — with neither the comparative context nor an eye to internal reconstruction — there is no debate as to the synchronic status of independent clause verbs bearing Set II affixes: since they are semantically and pragmatically independent clause verbs, there is no reason to question their syntactic status as independent clause verbs. I present the semantic and pragmatic arguments for the verbal status of the Panare Set II verbs in §8.1.1, and the syntactic arguments in §8.1.2.

### 8.1.1 Pragmatic and Semantic Evidence for Reanalysis

Essentially three semantic and pragmatic characteristics lead to the synchronic analysis of the Panare Set II inflections as marking finite verbs: first, native speaker intuition is that the forms are verbs, as shown in translations of all of the forms. Second, Set II verbs occur in independent clauses with very high frequency, carrying the main lexical content of the sentences in which they occur — in certain discourse genres, the entire collected corpus of clauses contains only Set II verbs. Third, for paradigmatic consistency we must treat the Set II forms as verbs, because otherwise only past tense/perfective aspect is expressed with verbs, and all other tenses and aspects are expressed with nominalized complements of copulas (a very counterintuitive concept).

The first of these criteria is the most easily demonstrated: when asked to translate active nonpast sentences from Spanish, Panare speakers all use Set II verbs; when asked to back-translate main clause sentences constructed with Set II verbs, native speakers who control Spanish always use main clause Spanish verb forms rather than nominalized

complements of copulas. The following elicitation sequence is illustrative of the dual nature of the Panare Set II suffix *-ñe* ‘Nonspecific Aspect / Subject nominalizer’ (cf. the Proto-Cariban A nominalizer *\*-ne*, reconstructed in Chapter 7, §7.1):

#### (113) Direct elicitation

- a. How do you say ‘He hits the monkey’ (El pega al mono)?
- b. 

<u>arakon</u>	<u>pétvu'mañe</u>	<u>kěj</u>	<u>kěn</u>
arakon	Ø- <sup>^</sup> petyú'ma-ñe	kěj	kěn
monkey	Ø-PO-hit-T/A	3.ÁNIM.AUX	3.AN.PRO
			‘He hits / is gonna hit the monkey’
- c. How do you say ‘He is a hitter of monkeys’ (El es pegador de monos)?<sup>1</sup>
- d. 

<u>arakon</u>	<u>pétvu'mañe</u>	<u>kěj</u>	<u>kěn</u>
arakon	Ø- <sup>^</sup> petyú'ma-ñe	kěj	kěn
monkey	Ø-PG-hit-Subj.NMLZR	3.ÁNIM.COP	3.AN.PRO
			‘He is a hitter of monkeys’

#### (114) Back-translation at a different time

- a. What does this mean: “arakon pétvumañe kěj kěn”
- b. “He hits / is gonna hit the monkey.”

The point is that although both verbal and nominal translations are possible for the same sentence, in back-translation, native speakers offer the verbal translation (and the nonverbal one can only be extracted under duress).

A second argument for assuming that Set II morphology inflects independent clause verbs is the distribution of such verbs in discourse. In a series of narrative texts — both oral and written — entered into a computer database by Payne, Payne, and Gildea, 95% of verbs bear Set II morphology. Not a single verb bears Set I morphology in 500 clauses of oral historical or mythological narrative, only 6 Set I verbs occur in 660 clauses of oral descriptions of daily Panare life, and only 2 occur in 604 clauses of written descriptions of Panare daily life. Given these distributions — and the others shown in Table 8.1 — it is impossible to maintain synchronically that Set II suffixes all derive nouns and Set I suffixes remain the exclusive means to inflect independent clause verbs.

Table 8.1: Distribution of Set I and Set II Verbs in a Panare Text Corpus

		Clauses		Set I		Set II	
		#	%	#	%	#	%
Oral:	Personal Experience <sup>2</sup>	37	100	13	35	20	65
	Historical/Mythological	500	100	∅	∅	500	100
	Descriptions of Life	666	100	6	.9	660	99.1
	Pear Stories	332	100	53	16	279	84
	Prayer	32	100	3	9	29	91
Written:	Personal Experience	80	100	38	48	42	52
	Historical/Mythological	118	100	3	2.5	115	97.5
	Descriptions of Life	604	100	2	.3	602	99.7
Totals:		2369	100	118	5	2247	95

The last semantic/pragmatic point to consider is that languages must have a means to express various times of action and viewpoints on the state of completion for a given action (i.e. tenses and aspects), and Cariban languages are no exception. In Panare, with only four Set I tenses remaining, and with these four all indicating past tense with a perfective aspect (they distinguish different degrees of remoteness in the past, and can express evidential distinctions as well, cf. note 2), the bulk of the tense/aspect system is carried by verbs bearing Set II suffixes. It seems counterintuitive to suggest that the only way to express future and present times is with nominalized forms, and that any aspectual distinctions other than perfective must also be expressed with nominalizations.

In sum, the intuitions of native speakers and the linguists who have worked on Panare converge on the conclusion that verbs bearing Set II morphology are best analyzed as independent clause verbs, and the fact that 95% of clauses in the discourse data presented in Table 8.1 contain no Set I verb form drives home the point. Set II forms have expanded their function from exclusive nominalization in Nominative languages to both nominalization and main clause verbal tense/aspect in Mixed Language Panare.

## 8.1.2 Morphosyntactic Evidence for Reanalysis

Although it is clear that verbs bearing Set II morphology do function as independent verbs in Panare, an internal reconstruction shows their origin as nominalizations, and they still do double service as derived nominals (cf. Gildea 1989a-b, T. Payne 1990, Payne, Payne, and Gildea in process). In addition, the morphology associated with Set II verbs even in main clauses is still identical to nominal morphology. Based on the fact that some Set II verbal suffixes in Panare also function to derive nouns, and by analogy to the exclusively nominalizing function cognate forms have in Nominative Language Hixkaryana, Derbyshire 1991 suggests that Panare Set II forms should also be analyzed exclusively as nominalizations. As Derbyshire notes, in arguing that Set II forms have been reanalyzed in Panare it is not enough to rely on the semantic and functional arguments — syntactically nominalized forms in Hixkaryana sometimes bear the functional load of verbs, and yet all of the morphosyntactic evidence still points to their membership in the syntactic class of nouns.<sup>3</sup> He argues that it would be more economical to analyze all Panare Set II forms as syntactically nominal in that this analysis would not require multiple glosses for the “same” individual forms. Derbyshire thus would analyze Panare (and other Mixed languages) as Nominative languages, and do away with the Mixed category altogether.

A part of Derbyshire’s argument is correct: if the reanalysis has occurred, and if Set II forms are no longer derived nominals, then there should be some syntactic evidence of their new syntactic status. However, we cannot look for evidence in the morphology associated with Set II verbs, since this very morphology is what I am arguing has been reanalyzed (i.e. it cannot be argued that reanalysis has not taken place just because the verbs still take what formally looks like nominal morphology — the point of reanalysis is that even though forms appear the same on the surface, the syntactic status of the forms

has changed). The first indications of change are functional, and can be seen in the discourse distribution of forms (i.e., either in how they are used in specific contexts, cf. tests 1 and 3 from §8.1.1, or in overall amount of use, as in test 2 from §8.1.1). These functional indications are sufficient to convince some analysts that change has taken place (cf. especially Givón 1979, 1983, 1991). However, those more oriented toward the study of syntactic configurations are in need of further evidence before concluding that reanalysis has actually happened (i.e. the functional change must surely drive the syntactic change, and if only the functional change is visible, then perhaps the stage is merely set for the syntactic reanalysis, without it having happened yet). Thus, to many linguists (e.g., Timberlake 1977, Langacker 1977, and Alice Harris in personal communication) the only evidence which can conclusively prove that reanalysis has (or has not) taken place is syntactic: the form in question must lose syntactic characteristics of the source construction and gain syntactic characteristics of the resultant construction.

In the case of Panare Set II verbs, this entails examining the synchronic Set II tenses for evidence that they are no longer biclausal. What we need to look for in the case of verbs bearing Set II morphology is evidence of a change in syntactic status, from more noun-like to more verb-like. This entails that we first define the syntactic characteristics of lexical nouns in exactly those constructions where we suspect nominalizations to have been reanalyzed. Then we must compare these syntactic characteristics with those of the Set II verbs in the same syntactic environments. If there is no difference between the syntactic behaviors of lexical nouns and Set II verbs, then a hard-core syntactician must conclude that the Set II forms still derive syntactic nouns despite their verbal function. Given differences, we have syntactic evidence for reanalysis. The modified syntactic behaviors of the reanalyzed forms must then be compared to that of other syntactic classes to see which they most resemble. Similarly,

the independent verb *cum* auxiliary must be examined for changes which indicate its new status, and the predicate itself must be examined for evidence of unity.

This is the approach I take in Gildea 1989a-b. In the next sections, I reiterate and expand on the syntactic evidence for reanalysis given in those two papers. The historical biclausal construction which was the source for modern Set II independent verbal constructions was a predicate nominal clause with a Set II nominalization for a predicate noun. The evidence for reanalysis thus comes from comparing the syntactic properties of predicate nominal clauses with a lexical noun predicate against those of a predicate nominal clause with a Set II verb predicate.

#### 8.1.2.1 Loss of the Obligatory Copula

Unlike other Cariban languages, all predicate nominal clauses in Panare require a copula. In other Cariban languages, a simple juxtaposition of nouns yields an equative clause with the first noun being the predicate and the second noun the subject. Such a sequence of nouns is not considered a grammatical utterance in Panare:

(115) Ungrammaticality of a predicate nominal clause without a copula

a. With animate nouns

\**i'yan*  $\emptyset$  *e'ñapa*  
 shaman Panare  
 (the [Panare] man is a shaman)

b. With inanimate nouns

\**e'chipen*  $\emptyset$  *manko*  
 fruit mango  
 (mango is a fruit)

c. With a pronoun S

\**e'ñapa*  $\emptyset$  *kën*  
 Panare he  
 (he is a Panare)

Panare has three copular paradigms which may occur between the two nouns of a predicate nominal clause. The paradigm which occurs with equative clauses is a suppletive nonverbal set of three forms, two of which also express spatial deixis (a holdover from their probable history as deictic pronouns, cf. Gildea 1989d).<sup>4</sup> The inanimate nonverbal copula is mĕn/-n, the proximate animate nonverbal copula is kĕj, and the distal animate nonverbal copula is mĕnĕj/-mnĕj/nĕj. When a member of this paradigm occurs between two nouns, the result is an equative predicate nominal clause:

## (116) The nonverbal copulas

a. kĕj 'Animate Proximal'

i'yan kĕj e'ñapa  
shaman is.Anim. Prox Panare  
'The [Panare] man is a shaman.'

b. nĕj 'Animate Distal'

i'yan nĕj e'ñapa  
shaman is.Anim.Dist Panare  
'The [Panare] man is a shaman.'

c. mĕn 'Inanimate'

e'chipen mĕn manko  
fruit is.Inan mango  
'Mango is a fruit.'

Although there is a great deal more complication involved in the nonverbal copular paradigm (cf. Gildea 1989a, d), for the purposes of this paper the preceding five examples are sufficient to establish the point: two nouns in sequence do not form a sentence, but with a copula between them, they do. Assuming that verbs bearing Set II morphology are nouns, they should presumably be subject to this same syntactic requirement. A parallel to nominal behavior does exist, as the Set II verb forms do in fact occur sentence-initially like predicate nouns, followed by a nonverbal copula which agrees with the subject of the clause for animacy.

## (117) Set II verbs as predicate nouns with a copula

a. -n/-nĕ 'Nonspecific Intransitive' plus kĕj<sup>5</sup>

y-u-ñā-n kĕj e'ñapa  
3-Intr-fall-T/A is.Anim.Prox Panare  
'The (Panare) man falls/is going to fall.'

b. -npĕj 'Imperfective Transitive' plus nĕj

yi - pa-npĕj nĕj michi  
3-feed-T/A is.Anim.Dist cat  
'The cat is feeding them (her kittens) (somewhere out of sight).'

c. -sa 'Perfect/Passive Visible' plus mĕn

y-iki-ti-sa' mĕn manko Toman uya  
3-cut-T/A is.Inan mango Thomas Dat  
'The mango has been cut by Thomas / Thomas has cut the mango.'

These examples are glossed and translated with the Set II verbal meanings, but as Derbyshire 1991 points out, such sentences could conceivably be analyzed as biclausal, with the Set II verbs being nominalized subordinate complements of the nonverbal copula of the matrix predicate nominal clause. However, where predicate nominal clauses are completely ungrammatical without the copula, these clauses with Set II verbs freely omit the copula in the speech of all our consultants:

## (118) Set II verbs with the copula omitted

a. -n 'Nonspecific Intransitive' with no copula

y-u-ñā-n Ø e'ñapa  
3-Intr-fall-T/A Panare  
'The (Panare) man fell / falls / is going to fall.'

b. -npĕj 'Imperfective Transitive' with no copula

yi - pa-npĕj Ø michi  
3-feed-T/A cat  
'The cat is / was feeding them (her kittens).'

- c. -sa 'Perfect.Visible' with no copula

y-iki-ti-sa Ø manko Toman uya  
 3-cut-T/A mango Thomas DAT  
 'The mango has been cut by Thomas / Thomas has cut the mango.'

These examples illustrate a paradigmatic distinction. That is, Set II verbs in Panare share the privilege of occurring with no copula/auxiliary, whereas all lexical nouns in a predicate nominal construction require the copula. Thus, the syntactic test of copula retention separates lexical nouns from Set II verbs. This new syntactic behavior indicates that the copula has changed in status to an auxiliary; similarly, since they now have the possibility of occurring without an auxiliary, Set II verbs have become more like the Set I verbs, which never take auxiliaries.

#### 8.1.2.2 New Word Order Freedom: Postverbal Nouns and Prefix Agreement

A second syntactic test which separates Set II verbs from lexical nouns is word order variation and the status of the person marker (i.e. clitic versus agreement/clitic). Since the source of the absolutive word order alignment in Set II verbal clauses is the genitive construction, and the source of the absolutive prefix on Set II verbs is a possessive clitic, in examining the syntax of the genitive construction and comparing it to that of the Set II verb phrase, any differences that we find will serve to indicate that reanalysis has taken place.

Two linked differences stand out: (1) The genitive noun must precede the possessed lexical noun or else be replaced with a possessive pro-clitic. (2) The possessive pro-clitic, if one occurs, must be the sole reference to the possessor, with no noun phrase reference allowed to occur elsewhere in the clause, "agreeing" with the pro-clitic. In the Nominative Languages Hixkaryana and Carib, these restrictions hold for the absolutive possessors of verbs bearing Set II morphology; in Panare, these restrictions do not hold for the absolutive of verbs bearing Set II morphology.

The syntactic restrictions on the Panare genitive construction are illustrated in 119a-d. In these clauses, three nouns have a relationship predicated among them: toman 'Thomas' is the genitive which possesses the noun qi 'meat.Classifier'. These two form a complex noun phrase which is the predicate noun of the predicate nominal clause. The subject of the predicate nominal clause is naro 'parrot' and the copula is këj. In 119a, the genitive nominal precedes the possessed noun. In 119b, a possessive pro-clitic replaces the genitive noun. In 119c, the possessive clitic replaces the genitive noun in front of the possessed noun, but the genitive noun also occurs following the predicate. This sentence is disallowed. In order to have the genitive noun co-occur with the possessive clitic in the same sentence, the entire predicate needs to be repeated, separated from the first clause by an intonational break (119d).

- (119) Complementary Distribution between genitive nominal and possessive pro-clitic in a predicate nominal clause

- a. With a genitive nominal

toman y-oi këj naro  
 thomas Ø-meat.Cl is.Anim.Prox parrot  
 'The parrot is Thomas' meat.'

- b. With a possessive prefix

tyoi këj naro  
 3-meat.Cl is.Anim.Prox parrot  
 'The parrot is his/her meat.'

- c. Ungrammatical when the genitive nominal occurs later in the clause...

\*ty-oi këj naro toman  
 3-meat.Cl is.Anim.Prox parrot Thomas  
 (the parrot is Thomas' meat)

- d. ...unless the full predicate is repeated

ty-oi këj naro, toman y-oi këj  
 3-meat.Cl is.Anim.Prox parrot Thomas Ø-meat.Cl is.Anim.Prox  
 'The parrot is his meat, is Thomas' meat.'

This predicate nominal construction is the source for the transitive Set II verbal reanalysis. Given that the source meaning of Panare -ñe is ‘A nominalizer’, the clause in 120a must have been exactly parallel to 119a historically. The gloss represents this historical analysis, whereby the main clause is a predicate nominal construction with the subject měj ‘3.Animate.Proximal’ occurring at the end, the copula kěj ‘is.Animate.Proximal’ second from the end, and the predicate complement the derived noun yikítěñe ‘cutter’ possessed by the notional O of the action ‘cut’, aire ‘meat’. By the same analysis, 120b is exactly parallel to 119b. If we wanted to claim that the suffix ñe could only be analyzed as a nominalizer synchronically — that verbal reanalysis of ñe as a Set II verbal suffix has never happened — then we would predict that the genitive noun which possesses the derived nominal would not be able to occur later in the clause (cf. 119c). However, this restriction on the possessors of lexical nouns does not apply to the absolutive of the reanalyzed Set II transitive verbs — the absolutive (pro)noun is free to occur postverbally, and the absolutive prefix then functions as agreement rather than as a possessive clitic (cf. 120c, 121a-f, 122a-e).

(120) Establishing the parallel to a transitive Set II verb inflected with ñe

- a. With a preverbal absolutive-genitive noun

aire y-ikítě-ñe \_\_\_\_\_ kěj \_\_\_\_\_ měj  
 meat Ø-cut-A.Nominalizer is.Anim.Prox 3.Anim.Prox  
 ‘S/he is the meat’s cutter / is going to cut the meat.’

- b. With an absolutive/possessive pro-clitic replacing the absolutive/genitive noun

yikítě-ñe \_\_\_\_\_ kěj \_\_\_\_\_ měj  
 3-cut-A.Nominalizer is.Anim.Prox 3.Anim.Prox  
 ‘S/he is it’s cutter / is going to cut it.’

- c. With a postverbal absolutive noun — which cannot be analyzed as a genitive

yikítě-ñe kěj \_\_\_\_\_ měj \_\_\_\_\_ aire  
 3-cut-T/A is.Anim.Prox 3.Anim.Prox meat  
 ‘S/he is going to cut the meat.’

(121) Postverbal O nouns agreeing with Set II absolutive prefixes

- a. with -sa ‘Perfect/Passive Visible’

y-ani-sa yu-uya mankowa  
 3-get-T/A 1Sg-Dat poison  
 ‘I got the poison / the poison was gotten by me.’

- b. with -se ‘Perfect/Passive’

yi-kaj-se \_\_\_\_\_ mananke (toose uya)  
 3-weave-T/A basket Toose Dat  
 ‘The basket has just been woven (by Toose).’

- c. with -jpě ‘Perfect/Passive Inferential’

yikítě-jpě měn manko (toose uya)  
 3-cut-T/A is.Inan mango Toose Dat  
 ‘The mango has been cut (by Toose).’

- d. with -npěj ‘Imperfective Transitive’

y-ani-mpěj \_\_\_\_\_ kěj \_\_\_\_\_ kěn \_\_\_\_\_ aire  
 3-eat.meat-T/A is.Anim.Prox 3.ANIM.DIST meat  
 ‘S/he is eating meat.’

- e. with -séjpa ‘Future’

y-amenkě-séjpa pi yu kapere  
 3-write-T/A Neg 1Sg paper  
 ‘I’m not going to write anything’  
 (lit. ‘I won’t write the paper.’)

- f. with -jtépa ‘Desiderative’

y-inkě-jtépe w-aj yu Ø-po  
 3-put.on-T/A 1-Aux 1Sg 1-clothes.Cl  
 ‘I wanted to put on my clothes.’

For intransitive verbs, the absolutive prefix agrees with the postverbal S:

(122) Postverbal subjects of intransitive verbs agreeing with absolutive prefixes

- a. with -sa ‘Perfect Visible’

wuchiremasa \_\_\_\_\_ yu  
 Ø-w-ch-ireema-sa’ yu  
 1-Intr-Detr-feed-T/A 1Sg  
 ‘I have (already) eaten.’

- b. with -jpě 'Perfect Inferential'

yutějpě                    kěň  
y-u-tě-jpě                kěň  
 3-Intr-go-T/A 3.Anim.Dist  
 'He left / has (already) gone.'

- c. with -n/-ně 'Nonspecific Intransitive'

otachiiman                    aměň  
a-w-t-achiima-n                aměň  
 2-Intr-Detr-make.dance-T/A 2Sg  
 'You danced / dance / are going to dance.'

- d. with -séjpa 'Future'

wataramaséjpankě                yu tyakópe arakon pěj kuure  
Ø-w-at-arama-séjpa-nkě                yu tyakó-pe arakon pěj kuure  
 1-Intr-Detr-hunt-T/A-again 1Sg other-Ad monkey on many  
 'I will hunt again for more monkeys.'

- e. with -jtépa 'Desiderative'

okupijtépa                    aměň  
a-w-kupi-jtépa                aměň  
 2-Intr-bathe-T/A 2Sg  
 'You want to take a bath.'

In sum, although the possessive clitics and the absolutive prefixes share both form and the ability to be replaced by a full NP referent, they differ in a crucial syntactic behavior: the possessive clitics can never co-occur with a genitive (pro)noun elsewhere in the clause, but the absolutive prefixes can co-index an absolutive (pro)noun elsewhere in the clause. Again, the new behavior adopted by Set II verbs is more like that of Set I verbs, whose prefixes (both A-oriented and O-oriented) can co-index postverbal (pro)noun arguments.

### 8.1.2.3 Independent Innovation of the Third Person Possessive Prefix to t(y)-

The third distinction I illustrate between Set II verbs and lexical nouns is completely morphological. This test separates lexical nouns from Set II verbs regardless

of whether the Set II verb functions as a derived nominal or as a verb synchronically.

The Proto-Cariban possessive prefix set contains one form for third person, \*y- '3', and another for third person reflexive, \*t- '3.Refl'. In Panare, the morphological distinction between 3 and 3REFL has been lost. However, a modern reflex of the third person reflexive form has been retained in the possessive prefix set as an allomorph of the nonreflexive third person prefix, occurring on vowel initial possessed nouns. This is illustrated in 104a-b:

#### (123) Third person possessive prefixes

- a. yi- '3' with consonant initial nouns (from Proto-Cariban \*y- '3')

yi-mata-n  
 3-shoulder-Poss  
 'his/her shoulder'

- b. t(y)- '3' with vowel initial nouns (from Proto-Cariban \*t- '3.REFL')

ty-awa  
 3-heart  
 'his/her heart'

In contrast, for Set II verbs the third person prefix is always y(i)- '3', regardless of whether the Set II verb functions as a nominalization or as an independent verb. That is, whether the Set II verb functions as a verb or a noun in the given clause does not affect the choice of third person prefix. This is illustrated in 105a-c:

#### (124) Third person prefixes with Set II verbs

- a. yi- '3' with a consonant initial verb

yi-petyú'ma-mpěj kěj                    kěň  
 3-hit-IMPERF.T is.Anim.Prox 3.Anim.Dist  
 'S/he is hitting it.'

- b. y- '3' with a vowel initial verb (\*ty- '3')

y-iki tě-npěj                    aměň  
 3-cut-IMPERF.T 2Sg  
 'You are cutting it.'

- c. \*ty-ikite-npej amen  
(you are cutting it)

This particular distinction between the third person possessive clitic for lexical nouns and the third person absolutive prefix for Set II verbs provides an interesting insight to the evolutionary process in Panare. At some point in the past, if a verb bore Set II morphology, it was a derived noun, and presumably shared in all the morphological and syntactic characteristics of nouns (as they do synchronically in Nominative Languages). Then some Set II verbs (those in predicate nominal clauses) were reanalyzed as verbal participles, and presumably at that point the syntactic behavior of this subset of Set II verbs changed slightly to reflect their new syntactic status. Then, when the form of the 3Refl clitic ɛ was reanalyzed as an allomorph of the third person form in the possessive paradigm, it was not automatically incorporated into the Set II absolutive prefix set as well. Although this particular morphosyntactic evidence does not make Set II verbs look any more like finite verbs, it does distinguish Set II verbs as a class from non-derived nouns.

In sum, the Set II verbs which appear in Panare independent clauses are no longer derived nominals — they are translated with verbal meaning, they are the only type of verbs which occur in entire genres of discourse, and the morphosyntactic behavior of the new verbal complex (Set II verb plus auxiliary) differs in three significant ways from that expected prior to reanalysis.

### 8.1.3 A Subject Focus Construction from the Idiosyncratic O Nominalizer \*n-

In addition to the Set II verbal system with absolutive prefixes, one reanalyzed verb type in Panare bears a Set II A prefix. This verb is derived etymologically from the idiosyncratic Proto-Cariban O Nominalizing prefix \*n-. Recall (from Chapter 7, §7.4) that in the source construction, the notional A possesses the derived nominal, which refers

to the notional O of the verbal action. When this particular nominalization is reanalyzed as a main clause verb, the possessive prefixes (which became absolutive markers in other Set II tenses and aspects) become markers of A. Since the possessor always precedes the possessed, and since the reanalyzed verb always precedes the auxiliary and S, placing this particular nominalization in a predicate nominal clause has the effect of placing the notional A of the transitive verb in sentence-initial position. As a result, the synchronic verbal use of this construction is as an A focus construction (cf. Gildea 1991e for further illustration and argumentation).

I illustrate the use of the Set II Subject focus construction with a question and answer sequence from a written text. In 125a, the transitive verb in the quoted speech, utu ‘give’ bears the n- ‘A Focus’ prefix, and then the preceding free pronoun is the question word nej ‘who’, referring to the A of ‘give’. In the answer, 125b, the mother uses the same construction, replacing the question pronoun with the word e’napa ‘Panare’.

- (125) a. “nej netujpe \_\_\_\_\_ men ane” kañe  
nej Ø-n-utu-jpe      men ane      Ø-ka-ñe  
 who Ø-A.Focus-give-T/A 3.Inan mother Ø-say-T/A  
 “‘Who gave (you) (that), Mother?’ (they) say.’ (MKW.61.12)
- b. “e’napa netujpe \_\_\_\_\_ men Pekoro pe tiche”  
e’napa Ø-n-utu-jpe      men Pekoro pe tiche  
 Panare Ø-A.Focus-give-T/A 3.Inan Pedro Ad 3-name  
 “‘A Panare named Pedro gave (it),’” (MKW.61.13)

Although this nominalization does not evolve into a particular tense or aspect (which would be a redundant development, since it co-occurs with Set II suffixes which do evolve into particular tenses and aspects), it is a variation of the Set II system which is more widespread in the Southern Ergative Languages (cf. Chapter 9, §9.2), and as such bears noting here in the only other Cariban language which shows evidence of reanalyzing this particular type of nominalization.

## 8.2 The Other Apparent Mixed Languages

The data from other putative Mixed Languages is more limited, and hence their inclusion in the category is more tentative. Based on both paradigmatic splits between Set I and Set II tenses in independent clauses, and based on the occurrence of Set II verbs as independent clause predicates, I consider Apalaŋ, Carib, and Yukpa to be Mixed Languages.<sup>6</sup>

### 8.2.1 Apalaŋ

Koehn and Koehn (1986:100-1) show the Apalaŋ tense/aspect paradigm as consisting of six “finite” (i.e. Set I) past tenses and three “nonfinite” (i.e. Set II) tenses, one of which is nonpast and the other two past-completive. The past-completive Set II inflections are derived from a historical derivational adverbializing prefix, and as such I do not treat them here (but see Gildea 1991a for discussion of the cognate construction in Carib of Surinam). Koehn and Koehn assert that all nonpast verbs must occur “as complements of the copular verb. The construction is verb stem plus continuative aspect suffix followed by copular verb. It is the copular verb that has the person marking prefixes and nonpast tense suffix.” In further paradigms (p. 101-2), Koehn and Koehn show that the copular verb is unique in Apalaŋ in taking “finite nonpast tense” (i.e. nonpast Set I) suffixes. In sum, all references to nonpast times in Apalaŋ must be carried out by a combination of a nonpast Set I copula (the only verb that takes nonpast Set I tense markers) and the Nonpast Continuative Set II suffix *-Ńko* (where *Ń* indicates that the final vowel of the preceding verb is nasalized).

This distribution of the functional load of tense suggests that reanalysis has already taken place in Apalaŋ. If the only means to express nonpast time in Apalaŋ is a combination of a copular verb and a Set II verb, then by definition this copular verb is

servicing the grammatical function of a tense auxiliary. The marker which the verb stem bears is etymologically a nominalizer, and the construction is etymologically a predicate nominal clause. However, until now nobody has identified this construction as cognate to the Set II inflections in other Cariban languages because: (1) the A does not take an ergative case marker, and (2) the verb does not bear absolutive agreement prefixes. This first problem is also common to a number of Panare Set II inflections, and in fact is true of Set II imperfective clauses in all attested Mixed and Set II Languages. The second problem is only half true: the verb does not bear Set II S prefixes, but it does bear Set II O prefixes (perhaps due to an idiosyncrasy of the particular nominalizer which has been reanalyzed).<sup>7</sup> In 126a, the intransitive verb *urakana* ‘hunt’ bears the Set II nonpast continuous suffix *-Ńko*, but no Set II absolutive prefix. In 126b, the transitive verb *uru* ‘tell’ bears the nonpast continuous suffix and also the second person object prefix *o-* ‘2’. In 126c, the verb *ekei* ‘bake’ is preceded by the O nominal, and as such does not take an O prefix.

- (126) a. *urakana-Ńko mana*  
 hunt-T/A 3.be.Present  
 ‘He is hunting now’ or ‘He will be hunting soon’ or ‘He hunts’  
 (p. 103:355)
- b. *onoky a-Ńko puhko o-uru-Ńko, kaikuxi-jana asa Ø-Ń-ne*  
 who say-T/A Eyewitness 2-tell-T/A Jaguar-people 2+mother Ø-eat-T/A  
 ‘Who is it that is telling you the jaguars ate your mother?’ (p. 80:241)
- c. *wyi Ø-ekei-Ńko toh n-exi-ase pitiko rokẽ pyra*  
 manioc Ø-bake-T/A 3Pl 3-be-T/A little just Negative  
 ‘They were making a lot of manioc bread.’ (P. 105:366)

Note that the etymological function of the verb plus *-Ńko* occurs also in 106b: the initial clause is a predicate nominal construction ‘who is it that is telling you’. The subject of the predicate nominal clause is the question word *onoky* ‘who’, followed immediately by the predicate noun phrase *a-Ńko puhko o-uru-Ńko* ‘the one who is telling you’. This is not a verbal clause, but rather a sequence of two nouns (cf. the description

of equative clauses — and especially their use with nominalized verb phrases — Koehn and Koehn 1986:36). Note also in 107c that the Set II verb can also be used with a past tense copula to refer to past actions. The further evolution of this Set II verb can perhaps be seen in examples like 127, where the Set II verb occurs in an independent clause with no auxiliary.

- (127) j-ene j-ene a-ŵko eremia-ŵko ywy  
 1-see 1-see say-T/A sing-T/A I  
 “someone sees me,” I would say singing.’ (p. 55:103)

Additional cases where so-called nonfinite verb forms (i.e. Set II verbs) occur without Set I auxiliaries are contrary to fact conditionals (which can only be expressed by nonfinite forms, cf. 128a) and uses of the nominalizer -ry on independent verbs (128b-c).

- (128) a. opotu nymyry a-htaο  
 fast water genuine be-if  
a-ry-pyra kahpyry exi-ry toh asakororo  
 be-Nominalizer-Negative ugly ne-Nominalizer 3PI both  
 ‘If the water had been fast there would have been nothing left of them.’  
 (p. 77:226)
- b. j-yto-ry moro  
 1-go-Nominalizer that  
 ‘That was my going.’ (‘I was going.’) (p. 109:377)
- c. a-yto-ry moro  
 3-go-Nominalizer that  
 ‘He was going.’

### 8.2.2 Innovative Dialects of Carib

The primary evidence for Carib as a mixed language comes from dialectal variation in the tense system: Mosonyi (1982) shows that Cariña (the dialect of Carib spoken in Venezuela) has lost the Set I future tense, replacing it with a Set II form and a copular auxiliary. Secondary evidence comes from Mosonyi (1982), who describes a combination of nominalized verb plus the auxiliary verb ‘to go’ as indicating immediate

future; this evidence is corroborated in discourse data from Hoff (1986), discussed in Gildea (1991a). Finally, in discourse data, H. Courtz (personal communication) has pointed out that nominalized verbs frequently occur as the sole verbs in independent clauses, often without auxiliaries. I illustrate each of these points in turn.

The future tense in Carib of Surinam is a standard Set I tense, taking the standard Set I personal prefix set and the Set I nominative word order. In 129a the intransitive verb ‘go mad’ bears the first person Set I S<sub>O</sub> prefix y- ‘1’. In 129b-c the transitive verb ene ‘see’ bears the Set I A-oriented prefixes s- ‘1A’ and kin- ‘3A’. In 129d the transitive verb oono ‘eat’ bears the ambiguous prefix k- ‘1/2’ meaning either ‘1A2O’ or ‘2A1O’.

#### (129) The Set I Future (Hoff 1968:170-1)

- |  |  |
|--|--|
| a. <u>y-cemerex-ta-ke</u><br>1-go mad-T/A-1/2A<br>‘I’ll go mad.’ | b. <u>s-enee-ta-ke</u><br>1A-see-T/A-1/2A<br>‘I’ll see him’  |
| c. <u>kin-ene-ta-ŵ</u><br>3A-see-T/A-Evid<br>‘He’ll see him.’    | d. <u>k-oono-ta-ke</u><br>1/2-eat-T/A-1/2A<br>‘You will eat me.’ (p. 292) or<br>‘I will eat you.’ (rules in Hoff 1968:160-1) |

In contrast, the future tense in Cariña is a Set II tense, with absolutive prefixes and ergative case-marking on the A. In 130a-e the intransitive verb yoona ‘cultivate’ bears the possessive prefixes referring to S (although note that the 1+2 prefix alternant kit- is probably extended from the Set I 1+2 S<sub>A</sub> prefix set). In 131a-e the transitive verb aaro ‘take’ bears the same prefix set, this time referring to O. In 132a-c, the future clause takes an ergative A (ii-wa ‘1-Dat’), occurring first postverbally (132a), then preverbally (132b), and finally between the infinitive and the invariant third person copula (132c). When A is first person and O is second person, note the distinction between the Set II verb in 132, which marks only the O regardless of the person of A, and the Set I verb in 129d, which marks both participants.

## (130) The Set II Future with an Intransitive Verb (p. 45)

- a. woonariimmia  
i-voona-rü-ma  
1-cultivate-Infinitive-3.be  
'I will cultivate'
- b. avoonariimmia  
a-voona-rü-ma  
2-cultivate-Infinitive-3.be  
'You will cultivate'
- c. yoonariimmia  
i-voona-rü-ma  
3-cultivate-Infinitive-3.be  
'He will cultivate'
- d. tuwoonariimmia  
tü-voona-rü-ma  
3Refl-cultivate-Infinitive-3.be  
'He himself will cultivate'
- e. kuwoonariimmia / kotoonariimmia  
kü-voona-rü-ma / küt-voona-rü-ma  
1+2-cultivate-Infinitive-3.be 1+2-  
'You and I will cultivate'

## (131) The Set II Future with a transitive verb (p. 29)

- a. düaarorümmia  
ü-aaro-rü-ma  
1-take-Infinitive-3.be  
'(Somebody) will take me'
- b. adaarorümmia  
a-aaro-rü-ma  
2-take-Infinitive-3.be  
'(Somebody) will take you.'
- c. aroorümmia  
i-aaro-rü-ma  
3-take-Infinitive-3.be  
'(Somebody) will take him.'
- d. taroorümmia  
t-aaro-rü-ma  
3Refl-take-Infinitive-3.be  
'(Somebody) will take he himself.'

- e. karoorümmia  
k-aaro-rü-ma  
1+2-take-Infinitive-3.be  
'(Somebody) will take you and me.'

## (132) Ergative A and Word Order Variation with the Set II Future (Mosonyi 1982:20)

- a. adeenariimmia i'wa  
a-eena-rü-ma ü-'wa  
2-tener-Infinitive-3.be 1-Dative  
'I will have you.'
- b. i'wa adeenariimmia  
ü-'wa a-eena-rü-ma  
1-Dative 2-tener-Infinitive-3.be  
'I will have you.'
- c. adeenari i'wama  
a-eena-rü ü-'wa-ma  
2-tener-Infinitive 1-Dative-3.be  
'I will have you.'

These data provide somewhat mixed evidence for reanalysis. The strongest evidence for reanalysis comes from the paradigmatic nature of the construction and from the semantic bleaching of the copula cum auxiliary. The paradigmatic argument is essentially that if you want to express future time in Cariña, this is the way to do it — the Set I future tense (seen in the Carib of Surinam dialect, 129a-d) has been lost. The semantic bleaching of the auxiliary is seen in the loss of person reference: ma is the third person present tense conjugation of the copula, yet it occurs even when there is no third person referent involved in the clause (cf 132a-c). Further, the auxiliary is actually treated as a suffix on the verb in terms of vowel harmony and prosodic gemination effects: in 132b the onset of the auxiliary is geminated by prosodic rule, and the harmonic vowel ü is inserted as well, changing the surface form of the auxiliary to -rmmia from the underlying form -ma, which occurs as the surface form in 112c. Despite this phonological evidence of the bond between verb and auxiliary, the two can be broken up by the ergative A, which somewhat weakens the claim that the two form a single

syntactic predicate. Nonetheless, the preponderance of evidence supports the preliminary claim that the Set II future tense in Cariña has gone through reanalysis.

The second reanalyzed Set II inflection is found in both Cariña and in Carib of Surinam. This inflection is derived from the Carib  $\text{-}\emptyset$  action nominalizer, which resembles the Apalaí  $\text{-n}\check{\text{o}}\text{k}\text{o}/\text{-}\check{\text{V}}\text{k}\text{o}$  in that the personal prefixes index O but not S. The nominalized verb then occurs with the Set I auxiliary ‘to go’, which agrees with the nominative of the clause — A for transitive verbs and S for intransitive. Mosonyi (1982) calls this Set II inflection the ‘Supine’ (after the Latin verbal noun in the accusative case  $\text{-um}$ ), and illustrates with the examples in 133: in 133a-c the transitive verb eena ‘have’ does not bear a suffix, which marks it as the supine, but it does bear Set II personal prefixes, which indicate only the person of O; in 133d the intransitive verb vataaro bears neither prefixes nor suffixes. In 133a-b, the auxiliary üto ‘to go’ bears a Set I tense suffix and indexes A. Mosonyi does not exemplify the auxiliary with an intransitive verb.

(133) The Cariña Set II ‘Supine’ from Mosonyi (1982)

- |  |  |   |
|--|--|---|
| <p>a. <u>eena</u>                      <u>wüjisa</u> b.      <u>adeena</u>                      <u>künüjisa</u><br/> <math>\emptyset</math>-eena-<math>\emptyset</math>                      ü-üto-sa                      a-eena-<math>\emptyset</math>                      kün-üto-sa<br/> 3-have-Supine 1-go-T/A                      2-have-Supine 3-go-T/A<br/> ‘I’m going to have it.’ (p. 21)                      ‘He’s going to have you.’ (p. 22)</p> | <p>c. <u>toona</u><br/> t-eena-<math>\emptyset</math><br/> 3Refl-have-Supine<br/> ‘...to have himself’ (p. 21)</p> | <p>d. <u>vataaro</u><br/> <math>\emptyset</math>-vataaro-<math>\emptyset</math><br/> <math>\emptyset</math>-hunt-Supine<br/> ‘...to hunt’ (p. 50)</p> |
|--|--|---|

Although Hoff (1968) does not discuss the syntax of this construction, it occurs fairly frequently in the narrative texts appended to his grammar. The following examples are all taken from the story “Kuruupi as Teacher” as told by J. Mande. In 134a the intransitive verb weeka ‘defecate’ occurs with no affixation at all, followed by the 1+3 S of the auxiliary verb wüto ‘go’, which is inflected with a Set I personal prefix and T/A and evidential suffixes. In 134b, the transitive verb aiye ‘fetch’ occurs with the third person  $\emptyset$ - prefix and the  $\text{-}\emptyset$  nominalizing suffix, followed immediately by the auxiliary

inflected for the third person A. Since a skeptic might ask what evidence there is for a third person  $\emptyset$ - prefix in 134b, I include also an example with the second person prefix ay- ‘2’ in 135a, an example which is not quite as good because the two verbs are separated by pause, and in the translation are treated as conjoined clauses rather than as a single predicate (I take this reading to reflect the etymological construction prior to reanalysis).

(134) The same construction in Carib of Surinam from texts in Hoff (1968)

- a. weeka                      a’na nüsañ  
 $\emptyset$ -weeka- $\emptyset$                       a’na n-wüto-sa-ñ  
 $\emptyset$ -defecate-Nominalizer 1+3 3-go-T/A-Evidential  
‘The two of us are going to defecate.’ (Hoff 1968:290)
- b. moxko kuruupi aiye                      künüjisañ  
moxko kuruupi  $\emptyset$ -aiye- $\emptyset$                       kün-wüto-sa-ñ  
that Kuruupi 3-fetch-Nominalizer 3-go-T/A-Evidential  
‘Kuruupi went to fetch it himself.’ (Hoff 1968:292)

- (135) a. ayaaró,                      wixtake,                      mo’ninengoroopo  
ay-aaro- $\emptyset$ ,                       $\emptyset$ -wüto-ta-ke,                      mooni’-ne-koroopo  
2-take-Nominalizer 1-go-T/A-1/2A farther-Intensifier-tomorrow  
‘I shall go and take you with me two days after tomorrow;’
- b. koroopo wotaaró                      no(ñ)                      küisa  
koroopo  $\emptyset$ -wotaaro- $\emptyset$                       noñ                      k-wüto-sa  
tomorrow  $\emptyset$ -hunt-Nominalizer for.a.moment 1+2-go-T/A  
‘tomorrow we shall go hunting for a while.’ (Hoff 1968:298)

In this case, the evidence for reanalysis is somewhat weaker than in the case of the Set II future tense. In favor of reanalysis, we see a new semantic value of immediate future cited by Mosonyi (1982), but counterbalancing that semantic evidence is Mosonyi’s (1982:11) statement that the construction “implies in general a spatial displacement of the actor in order to realize the indicated action.” This indicates that the original semantic value of the auxiliary ‘go’ is retained even as the emphasis shifts from displacement in space to displacement in time. There is no syntactic evidence of reanalysis in Carib of Surinam, with the two predicates separable by either the S of the auxiliary (cf. 134a) or by an adverbial of time (cf. 135b), but since Carib of Surinam

appears to be a more grammatically conservative dialect than Cariña, this is not evidence against such a reanalysis for Cariña.<sup>8</sup> Further research is needed to evaluate the synchronic syntactic status of the Cariña “Supine”.

The third piece of evidence for a dialect of Carib as a Mixed Language comes from Henk Courtz (in personal correspondence), who studies dialects of Carib of Surinam not described by Hoff. Courtz has transcribed a short text in which there are 60 independent sentences. Of these 60, only 35 have a Set I inflected main verb; the remaining 25 all take Set II main verbs which bear the suffix  $\text{-}\dot{\text{p}}\text{o}$  (cf. the Proto-Cariban Past Time O/Action nominalizer  $\text{*}\text{-}\text{tupu}$ ).<sup>9</sup> In this text, five of the first seven sentences do not contain a Set I inflection, and in another part of the story, seven consecutive sentences go by without a Set I inflection. An especially significant point in these Set II sentences is that they occur alone, with no Set I auxiliary — as such, they greatly resemble the Set II ergative system in Makushi (including even the cognate past tense inflection: Makushi  $\text{-}\dot{\text{p}}\text{i}$  ‘Past’ and Carib  $\text{-}\dot{\text{p}}\text{o}$  ‘Past Nominalizer’). Examples of such sentences appear in 136a-b: 136a is the first line of the story — the only verb is  $\text{yto}$  ‘go’, which bears the Set II suffix  $\text{-}\dot{\text{p}}\text{o}$  ‘Past Nominalizer’ and the first person prefix  $\text{w-}$ ; 136b comes in the middle of the text, with the transitive verb  $\text{aro}$  ‘bring’ bearing  $\text{-}\dot{\text{p}}\text{o}$ , preceded by a free noun O in place of a prefix, and followed by the oblique/ergative A  $\text{nàna wa}$  ‘1+3 Dative’. In light of data like these, it appears that the gloss ‘Past Nominalizer’ represents etymology rather than synchronic reality.

- (136) a.  $\text{am kurita wytòpo ...}$   
 am kurita w-yto-`po  
 one day 1-go-Past Nominalizer  
 ‘One day I went ...’
- b.  $\text{gro aròpo \quad \quad \quad nàna wa \quad \quad \quad tymaro}$   
 ero Ø-aro-`po \quad \quad \quad nàna wa \quad \quad \quad ty-marò  
 this Ø-bring-Past Nominalizer 1+3 Dative 3Refl-with  
 ‘We brought this with us.’

Courtz also points out similar data for the action nominalizer  $\text{-ry}$ : the first five sentences of a different text contain no Set I inflections, and all of the verbs instead bear the action nominalizer  $\text{-ry}$ . Courtz reports that whereas these sentences are given a present tense reading in elicitation, in discourse they are most often used to refer to historical actions — a use he calls ‘*praesens historicum*’. Courtz has fully glossed only two examples, both intransitive. In 137a the intransitive verb  $\text{ura}$  ‘weep’ bears  $\text{-ry}$  and is preceded by a free nominal S  $\text{mòko woryi}$  ‘the woman’; in 137b there are two verbs which bear  $\text{-ry}$  — the dependent verb  $\text{sapiry}$  ‘my playing’ is truly nominalized synchronically, serving as the object of the postposition  $\text{poko}$  ‘about’, and the main verb of the sentence  $\text{onumenka}$  ‘think’ bears the first person Set II prefix  $\text{w-}$ .

- (137) a.  $\text{mòko woryi \quad urary}$   
 $\text{mòko woryi \quad \quad \quad \emptyset\text{-ura-ry}}$   
 that woman Ø-weep-Nominalizer  
 ‘The woman weeps’ or (as *praesens historicum*) ‘The woman wept’
- b.  $\text{sapiry poko wonumenkary}$   
 $\text{\emptyset\text{-sapi-ry poko w-onumenka-ry}}$   
 1-play-Nominalizer about 1-think-Nominalizer  
 ‘I (usually) thought about my play(ing)’ (as *praesens historicum*), or  
 ‘I (usually) think about my play(ing)’

In sum, although the most extensively documented dialect of Carib of Surinam seems to be a quite conservative Nominative Language, dialects documented in Venezuela and elsewhere in Surinam appear to be well into the process of syntactic reanalysis, with nascent Set II ergative systems occurring frequently in independent clauses.

### 8.2.3 Yukpa

The evidence for a Mixed main clause verbal system in Yukpa is very tentative, due to the preliminary nature of the data.<sup>10</sup> As in other Cariban languages, the Set II inflections I discovered in Yukpa appear to take copular auxiliaries. As such, I first

illustrate the portion of the copula paradigm which I was able to collect. In 138a, the simple present tense equative clauses seem to be a combination of an invariant stem formative syllable or plus the copula, yás for first person and mak for second and third. For completeness, in 138b I present the copula in attributive clauses, and in 138c in past tense equative clauses. In each of the latter, a bilabial stop occurs: in the attributive suffixed to the predicate (probably from the Proto-Cariban postposition \*pe 'Denominalizer') and in the past tense prefixed to the copula.

## (138) a. The Present Tense Copula

<u>kácha oryas</u>	'I am a child'
amo <u>kácha ormak</u>	'you are a child'
o <u>kácha ormak</u>	'he is a child'

## b. The Present Tense copula with denominalized complement

am <u>káchap mak</u>	'you act young/like a child'
amoro <u>káchap meto</u>	'you (Pl) act young/like children'
oka <u>káchap neto</u>	'they act young/like children'

## c. The Past Tense Copula

au <u>kácha pfe</u>	'I was young/a child'
am <u>kácha (p)me</u>	'you were young/a child'
o <u>kácha pinen</u>	'he was young/a child'
ijpi <u>kácha pinen</u>	'you and I were young/children'
nán <u>kácha pinen</u>	'he and I were young/children'
amoro <u>kácha pinen</u>	'You (Pl) were young/children'
oka <u>kácha pinen</u>	'They were young/children'

From the forms in 138, I isolate the present tense form yás as first person and mak as second and third person. These same forms occur in the present continuous construction, as documented in 139 and 140a-c, always co-indexing the nominative (S in 139, A in 140a-c). Set II personal prefixes on the verbs mark absolutive, and are identical to possessive prefixes (cf. Chapter 6)

## (5) The Present Continuous with an Intransitive verb

<u>au top yás</u>	'I'm going.'
<u>tóp mak</u>	'You're going.'
<u>otóp mak</u>	'He's going.'

## (139) The Present Continuous with a Transitive Verb

a.	pero <u>yeskápmak</u>	'The dog is biting me.'
b.	am au <u>yéskapmak</u>	'You are biting me.'
	am <u>kípa Ø-esekapmak</u>	'You are biting the man.'
c.	au <u>oyeskápyas</u>	'I am biting you.'
	au <u>oyeskápmak</u>	'I am biting you.'

I was unable to explore the conditions under which the last example would be spoken, but it appears to be a case where the auxiliary has become invariant (rather than agreeing with the first person A), a clear additional argument for reanalysis if it can be verified in further research.

A second Set II tense/aspect, a past tense, is formed by adding the suffix ni to the verb stem, followed by the form of the copula seen above in 138b. I only collected examples of this with intransitive verbs, as in 141. In the first four cases, the S free pronoun precedes the verb, so Set II prefixes would not be expected; the fact that no prefix occurs with the third person plural could be idiosyncratic to this verb or it could be indicative of a general pattern (cf. the Apalaí continuous inflection in §8.2.1 or the Cariña/Carib immediate future with the 'go' auxiliary in §8.2.2).

## (140) A Set II Past Tense

au <u>shin yí</u>	'I cried.'
am <u>shin me</u>	'You cried.'
o <u>shin nen</u>	'He cried.'
amora <u>shin meto</u>	'You (Pl) cried.'
<u>shini neto</u>	'They cried.'

The future suffix is parallel to the continuous in that, for transitive verbs, the prefixes indicate O and the auxiliary agrees with A. What I take to be the underlying form of the suffix occurs in 143b, where the bound copular auxiliary is replaced by a free

form of uncertain composition, leaving the suffix to occur in the word final environment, where it does not reduce (as in 142a-b, 143a) or assimilate (as in 142c).

- (141) a. yápiešmak 'He's going to grab me.'  
ayápiešmak 'He's going to grab you.'  
šapóišmak 'He's going to grab him.'
- b. amo yápiešmak 'You're going to grab me.'  
amo šapóišmak 'You're going to grab him.'
- c. au šapoišyas 'He's going to grab you.'  
ayapfešyas 'He's going to grab you.'
- (142) a. pero oyeskášmak 'The dog will bite you (the dog is close).'
- b. pero oyeskáše pirakan 'The dog will bite you (the dog is distant).'

The final Set II inflection which I recorded, something akin to a sporadic habitual, is formed by adding the suffix ni(n) to the verb stem. I collected this only with transitive verbs. The prefixes indicate O, but the suffix does not transparently include an auxiliary to agree with A (although note the lack of the final nasal with first person A, as well as the additional form -pšek — according to Armato, meaning 'at times' — which occurs only with the two verbs involving first person).

- (143) a. pero yéskanišpek 'The dog bites me at times.'  
pero oyeskániš 'The dog bites you (at times).'
- pero seyeskániš 'The dog bites him (at times).'
- b. oyeskanišpek 'I bite you at times.'

In summary, the Yukpa evidence is extremely preliminary, yet still fits exactly with the predicted patterns of reanalysis — the Set II verb bears absolutive prefixes (etymologically possessive) and takes an auxiliary. As with the Apalaí Set II Continuous aspect, none of the Yukpa Set II aspects would be readily identified as Set II, simply because they do not take ergative case-marking on the A. Since this pattern is actually found in fully Ergative Languages as well (creating a pattern of split ergativity), I put off discussion until Chapter 11, when all cases can be discussed at once.

### Notes to Chapter 8

1 This particular sentence is so pragmatically odd that I feel a need to provide the context in which it was elicited. After much elicitation of nominalizations as terms in isolation (i.e. 'bus driver', 'thief', 'butcher'), it became clear that different tense-aspect suffixes did dual service as nominalizers. From this context, I began to elicit these nominalizations as the predicates of predicate nominal clauses ('I am a bus-driver', 'he is a thief', etc.). At this point, the parallel to independent verbal clauses was unmistakable, so I tried to elicit some predicate nominal clauses parallel to transitive verbal clauses already in my corpus. My informants were good enough to humor me with sentences like 113c, but they didn't disguise their amazement that this tato ('non-Indian') would ask them to say such absurd and barbaric things.

2 The relatively high number of Set I inflections used in personal narratives and Pear Stories reflects an evidential distinction: the Set I recent past-perfective suffix -yaj includes the evidential value of visual first hand knowledge. Personal history is obviously experienced first hand, and the speakers told the Pear Story narratives just after watching the Pear Story film.

3 In fact, this functional ambiguity (where a nominal form functions as a verb) is a necessary precondition to reanalysis of the form as a verb — were it not for the verbal function of the Set II form historically, there would be no motivation for young speakers to form a grammar where the forms are taken to be verbs rather than nouns.

4 Gildea 1989a-b calls this paradigm the "pronominal particles" due to their etymology; Payne, Payne, and Gildea 1990 call them "specifiers" due to their synchronic function of specifying animacy of the subject and deixis of the predicate. To avoid introducing nonstandard terminology, here I simply refer to them as nonverbal copulas.

5 One of the interesting semantic features of the Set II verbal systems is that each seems to have one inflection which is extremely flexible temporally: it is used for nonpast — i.e. habitual, present progressive, and future — as well as past time expressions. In Panare, Payne, Payne, and Gildea (1992) label this indeterminate marker the "Nonspecific Aspect". In Makushi, Abbott (1991) labels the corresponding form "Universal Tense". With its verb in the Nonspecific Aspect, 98a could potentially be translated with English past tense as well, except that the proximal marking of the copula requires a reading of immediacy, which usually translates as present or immediate future.

6 Actually, Pemóng and Kapóng are also Mixed Languages, since although they have developed full ergativity in most tenses, they have retained two Set I tenses each. The evolution from Nominative to Mixed to Ergative Languages is a continuum, and Kapóng and Pemóng are so close to the Ergative end of the continuum that it makes more sense to include them with the Ergative Languages because: (1) the Set II system is fully finite in these languages (cf. Chapter 10), (2) they have been held up as examples of ergative Cariban languages, and (3) they are very closely related to fully Ergative Language Makushi, which has lost all Set I tenses.

7 Although Koehn and Koehn take the basic synchronic form of the continuous aspect marker to be -Vko (where the symbol V indicates that the last vowel of the verb

stem is nominalized), the etymological form can be seen in a synchronic allomorph *-nōko* (Koehn and Koehn 1986:105, example 365, confirmed in personal correspondence). Apparent cognates are: Hixkaryana *-no* 'General Nominalizer' (Derbyshire 1985:233); Carib of Surinam *-no* 'Nonpersonal Nominalizer', (Hoff 1968:201), and the Apalaí adjective/adverb and postposition nominalizer *-no*, (Koehn and Koehn 1986:93). However, these cognate forms allow neither S nor O to possess the derived nominal, whereas the etymological source for the continuative aspect suffix in Apalaí must have allowed possession by only the O (cf. a similar pattern for the Panare Imperfective Aspect for intransitive verbs, *-nēpēj*, and the displacement suffix *-ñe*, (Payne, Payne, and Gildea in process).

8 It should also be noted that the 1+3 pronoun *a'na* is not typical of other free pronouns or nominals in that it obligatorily precedes the verb whenever it is an argument — with a 1+3S or 1+3A the verb bears the *n-* '3A/3S' prefix and with a 1+3O the verb bears no prefix (i.e. the 1+3 pronoun functions as a preverbal free noun in complementary distribution with the 3A prefix). This same behavior has been noted for the 1+3 pronoun in most Cariban languages.

9 Courtz has developed a very different orthographic system from either Mosonyi or Hoff; the primary difference is that Courtz represents the diverse dialectal pronunciations of historically reduced syllables (according to Hoff (pc) these range from a velar fricative to glottal stop or fricative to length and/or breathiness on the preceding vowel) by simply marking the preceding vowel with a grave accent. Thus, the reduced syllable at the beginning of the Proto Cariban suffix *\*-tupu* is represented by Hoff as either a fricative (*-xpo*) or vowel length (*-:po*), but by Courtz simply with the grave accent (*-̀po*). I find this a most elegant abstract device to capture the predictable regularity associated with the reduction of syllables. The two secondary differences are that Courtz represents the high central vowel [i] as *y* and the palatal glide [y] as *j* (cf. also the orthography developed for Apalaí by Koehn and Koehn 1986).

10 I collected these data in March, 1990, from Javier Armato, a linguistically sophisticated Yukpa man, co-author of a Yukpa-Spanish Lexicon (Obregón and Armato 1986), and compiler of a book of Yukpa tales (Armato 1988). It is primarily due to Mr. Armato's sophistication that I was able to verify as many linguistic points as I did during our five hours of elicitation, but obviously we were barely able to scratch the surface of Yukpa morphosyntax in so short a time.

## CHAPTER 9

### THE LOSS OF SET I IN ERGATIVE LANGUAGES

The evolutionary step from a Mixed Language to a Ergative Language is not so much a function of Set II inflections evolving still further away from their nominalized origins, but rather the step where the Set I system, if it is retained at all, becomes so marginal that the language is best characterized in terms of its Set II verbal system. The paradigm cases have been Makushi, Pemóng, and Kapóng, three closely related languages spoken in Venezuela, Guyana, and Brazil, where verbs bearing the "same" Set II morphology can operate in independent clauses as the sole verb or in dependent clauses as derived nouns, taking postpositions or serving as subject and object of independent verbs even without further subordinating morphology. In each of these languages, auxiliaries also bear Set II morphology, marking a further shift away from even the Mixed Languages, where auxiliaries rarely bear Set II morphology (and even then, can optionally take a further auxiliary inflected with Set I morphology). I treat these three northern Ergative Languages in §9.1.

More recently, southern Brazilian languages Kuikúro and Kalapalo have also been described; although the descriptions are less comprehensive than those of the northern languages, Kuikúro and Kalapalo, too, are clearly Ergative Languages. I discuss these two southern Ergative Languages in §9.2.

### 9.1 The Northern Ergative Languages

Although the northern Ergative Languages have been described in the typological literature as ergative languages, I have shown in Chapter 5 that two of the three (Kapóng and Pemóng) are, in fact, Mixed Languages in the strict sense of the term, since they retain one or two past tense inflections from the Set I system. However, unlike the Mixed Languages described in Chapter 8, Kapóng and Pemóng do not seem to accord the Set I system any special status with regard to auxiliaries. That is, in the previously described Mixed Languages, the auxiliaries usually are inflected with Set I morphology, or if they do bear Set II morphology, these auxiliaries themselves could take yet another Set I auxiliary. This is arguably due to the relatively recent reanalysis of the Set II morphology as main clause verbal rather than derived nominal. In the Ergative Languages, the reanalysis seems to have established itself more firmly, to the point that all analysts consider it the basic system (Tuggy 1989 considers the Set I system an idiosyncratic aberration in Pemóng; Edwards 1972 apparently thought it so marginal that he did not include it in his grammatical description for either Kapóng or Pemóng, even though it occurs several times in the Kapóng text he appends to the description). The third Northern Ergative Language, Makushi, is the only one which shows no trace at all of the Set I system.

The three languages seem to fit along a continuum in terms of the loss of the Set I system: Kapóng still uses at least one Set I past tense fairly frequently (6 out of 31 sentences in the one text I have access to); Pemóng possesses two Set I inflections according to the descriptions, but I found no examples of its use in a brief survey of five texts (one from Edwards 1972, the first three from the 82 in Armellada 1973, and a fragment from Simpson 1940); Makushi has completely lost the Set I system. A necessary prerequisite to losing the Set I system must be to stop using the system as the

unmarked way of expressing any TAM distinction. This “markedness reversal” (Givón 1991a-b) seems to be a common part of the reanalysis process, where the “new” construction becomes the unmarked way of expressing a tense, and the older form becomes pragmatically marked on its way to obsolescence. In this sense, Pemóng seems to be well on the way to losing the Set I system altogether.

At this point, a comment on methodology is in order. The apparent disuse of the Set I system in Pemóng (and for that matter, of the apparent continued use of the Set I system in Kapóng) might be a function of the sample of discourse data available to me. Consider the discourse distribution of Set I and Set II verbs in Panare (Table 8.1, §8.1.1): were my Panare database restricted to historical narrative, Panare would appear very like Pemóng, with no attested use of Set I in discourse; were my Panare database restricted to personal history and Pear Stories, Panare would look very like Kapóng, with regular use of the Set I tenses (although still far less than the Set II tenses). The discourse distribution of Set I and Set II verbs in Pemóng and Kapóng must be taken as somewhat tentative until further discourse research has been carried out.

I illustrate the Kapóng Set II system in §9.1.1, Pemóng in §9.1.2, and Makushi in §9.1.3.

#### 9.1.1 Kapóng

According to Migliazza (1985), Kapóng is the self-denomination for three geographically contiguous, but linguistically and socially distinct, groups: Akawayo, Ingarikó and Patamona (which are treated in most classificational literature as the names of independent languages). Descriptions of Kapóng are limited to the Akawayo dialect, so we cannot evaluate the claims for status of other communities as either dialects or independent languages. The only sources for Akawayo are Adam (1893, 1905, compiled

from translations made in the latter part of the 19th Century by English missionary W.H. Brett and Edwards (1972, 1978b).

Edwards (1972) includes a brief grammatical sketch of Akawayo, extensive wordlists, and a short text. The grammatical description is not intended to be exhaustive and only lists the Set II tenses. The conjugation tables show only the intransitive verb endakna 'eat', always preceded by the free pronoun S (so, no prefixes occur on the verbs in 144). As such, I reproduce only the first person forms of the various conjugations:

(144) <u>uurö Ø-endakna-Ø</u>	'I eat' (Present)
<u>uurö Ø-endakna-ng bök mang</u>	'I am eating.' (Present Progressive)
<u>uurö Ø-endakna-pĩ</u>	'I ate.' (Past)
<u>uurö Ø-endakna-dokodong</u>	'I will eat.' (Future)
<u>uurö Ø-endakna-pĩ mang</u>	'I had eaten.' (Past Anterior [pluperfect])

These inflections should look familiar: we have seen the Ø first as a Proto-Cariban nominalizer (Chapter 6, §6.1), and then in Cariña as what Mosonyi called the "Supine" inflection (which occurred with the auxiliary 'go' to express immediate future actions with spatial displacement — Chapter 8, §8.2.2). We have seen -pĩ 'Past' as the Proto-Cariban nominalizer \*-tupu (Chapter 7, §7.1), as a reanalyzed passive in Panare -jpě (Chapter 8, §8.1.2), and as a new past tense in Carib -pö (Chapter 8, §8.2.2). The pluperfect is simply the past tense plus the frozen third person copular auxiliary mang. The complex of -ng bök mang 'Present Progressive' is cognate to Panare -npěj 'Imperfective.Transitive', etymologically derived from a nominalizer \*-ni, the locative postposition bök, and the third person present tense copula. Only the future form dokodong is etymologically opaque, and is probably derived from an adverbial of time rather than a nominalizer.

In the section on nouns, Edwards notes that the "doer" of the action is marked by the suffix -ya" (p. 44), then in note on word order he offers the example in 145, with the A nominal peero 'dog' marked by the ergative suffix -ya. The O nominal nong 'earth'

precedes the verb, and the verb does not bear personal prefixes of any kind, but only the past tense suffix.

- (145) peero-ya nong Ø-aka-pö  
 dog-Erg earth Ø-dig-Past  
 'The dog dug the earth.' (p. 45)

None of the examples in Edwards' grammatical description illustrate the Set II ergative system, with absolutive prefixes and ergative suffixes, nor is there any discussion of the Set I system described by Adam (1893, 1905). However, a survey of the short text provides examples of both. The text contains 70 clauses, which fall into 31 independent sentences (taking Edwards' transcription of periods to mean pause, and taking pause to mean "end of sentence"). Of these 70 clauses, six contain verbs inflected with Set I morphology, one with uncertain morphology, and the rest have verbs bearing Set II morphology. Of the 31 independent sentences, 6 are headed by Set I verbs, one by a verb bearing unknown morphology, and 24 by Set II verbs. Of the 24 Set II verbs which head independent clauses, only four take auxiliaries, and all four of these auxiliaries bear Set II morphology. I illustrate these categories in the following examples.

The examples in 146a-b are conjoined independent clauses. In 146a, the Set I past tense suffix -ji occurs on the intransitive verb eebĩ, and even though the verb is preceded by its S, the Set I prefix nĩy- occurs (unlike a Set II intransitive prefix, which is in complementary distribution with an S nominal). In 146b the transitive verb ewatöbödi 'hold/catch' bears the Set I Past tense suffix, but is preceded by the O nominal, and hence does not bear the Set I 3A prefix. As this is a Set I tense, there is no ergative suffix.

(146) The Set I system

- a. nĩyaikma nĩy-eebĩ-ji  
 giant 3-come-Set I Past  
 'the giant came'
- b. tok Ø-ewatöbödi-ji  
 they Ø-hold-Set I Past  
 'and held (caught) them' (line 4, p. 48)

The examples in 147a-b illustrate the Set II past tense suffix -pĩ on the intransitive verb enapo 'return' (147a) and on the transitive verb achii 'hold/catch' (147b). Neither verb bears a Set II prefix since the absolutive nominal precedes each verb, but the verb in 147b does bear the Set II ergative suffix ii-ya '3-Ergative'.

(147) The ergative Set II system with no auxiliaries

- a. moratai warawokamök enapopĩ  
 moratai warawokamök Ø-enapo-pĩ  
 then boys Ø-return-Past  
 'Then the boys went home.' (p. 48, lines 23-4)
- b. azaro warawokamök achii-pĩ-ii-ya  
 azaro warawokamök Ø-achii-pĩ-ii-ya  
 two boys Ø-hold-Past-3-Erg  
 'He held (caught) two boys.' (p. 47, lines 12-3)

In 148a-b, the verbs bear the suffix -zak, as a past-perfect in 129a and as a nominalizer in 148b. In both cases, the verb is intransitive, and is preceded by an S nominal and hence bears no personal prefixes.

(148) Another Set II past tense, -zak (< Proto-Cariban \*-sapo)

- a. As an independent verb
- ono braro tok dözak  
 ono braro tok Ø-dö-zak  
 far not 3PI Ø-go-Perfect?  
 'They had not gone far'
- b. As a dependent verb
- piiyaikma yeezak atai ganang ...  
 piiyaikma y-ebi-zak atai ganang  
 giant Ø-come-Nominalizer at again  
 'When the giant comes again...' (p. 47, line 25)<sup>1</sup>  
 (lit. 'at the giant's coming again...')

The future tense dokodong described in the grammar does not occur in the text, but another apparent future tense (with a clearer etymology) occurs several times. In this tense, the verb does not bear the ergative suffix, and (although it cannot be verified due to zero anaphora) this probably means that a free A nominal does not bear the ergative

suffix either.<sup>2</sup> The three examples in 149a-c represent a connected string of text. The future verbs are in 149a and 149c. In 149a the transitive verb arö 'take' bears the tense marker -dok, the plural suffix -gong (referring to the A), and is followed by the second part of the future, which is the postposition (auxiliary?) bee. The O nominal eejii suuruuruui 'casava flour' precedes the verb, so there is no absolutive prefix. In 149c the verb makörö 'throw' is inflected identically.

(149) The Set II Future tense with -dok bee  
 (< Proto-Cariban \*-topo pe 'Purpose nominalizer, Denominalizer (adverbializer)')

- a. eejii suuruuruui adokgong bee  
eejii suuruuruui Ø-arö-dok-gong bee  
 casava flour Ø-carry-Future-Pl Future  
 'We (Incl) will carry casava flour.'
- b. morataijii yaröiya nogong atai  
 morataijii y-arö-Ø-i-ya nogong atai  
 and then I-carry-Nominalizer-3-Erg Pl at  
 'And then when he carries us (Incl) ...'  
 (lit. 'And then at our (Incl) being carried by him...')
- c. eejii suuruuruui makörödok kong bee ema dak  
eejii suuruuruui Ø-makörö-dok kong bee ema dak  
 casava flour Ø-throw-Future Pl Future trail into  
 'we (Incl) will throw cassava flour onto the trail.'

The verb in 149b is also worthy of note, in that it shows the simple present tense inflection with its etymological nominalizing function. The verb arö 'take' bears the -Ø suffix, which I have glossed here as nominalizer, and the third person ergative suffix i-ya '3-Erg'. Marking of the O is divided between the personal prefix y- '1' and the postverbal plural marker nogong. The entire verbal complex functions as the nominal object of the postposition atai 'at'.

The final Kapóng Set II inflection to illustrate, the present progressive, requires an auxiliary. In 150 the independent verb is gomami 'live', which bears the progressive suffix -nöpök, is followed by the auxiliary eejii 'be' inflected with the Set II past tense suffix -pĩ.<sup>3</sup> We cannot determine from these examples whether the intransitive

progressive verb bears absolutive prefixes, or whether (like the Apalaí continuous and the Panare imperfective) it takes no personal prefixes. (As I found no examples with a transitive verb, the question of whether an A bears an ergative marker cannot be answered, but based on both the apparent structure of the intransitive clause, and also on comparative data, I predict in Chapter 11, §11.2.1, that it does not).

(150) Set II progressive aspect with an auxiliary

Kamrang boo nörö gomang nöböök eejiipi  
 Kamrang boo nörö Ø-gomami-nöböök Ø-eejii-pi  
 Kamarang on also 3-live-Continuous 3-be-Past

agawaio warawok tinopi keenang...  
 agawaio warawok ti-nopi keenang  
 Akawayo man 3Ref1-wife with  
 'At Kamarang lived an Akawayo with his wife...'

To summarize, the Akawayo dialect of Kapóng shows two Set I past tenses in Adam (1893), and one of these is illustrated in Edwards (1972). All the rest of the tenses and aspects are expressed via Set II inflections and, for at least some of these, either the A is marked with an ergative suffix or the verb bears an ergative personal suffix.

### 9.1.2 Pemóng

Like Kapóng, Pemóng is a self-designation for three separate communities of speakers — Arekuna, Kamarakoto, and Taurepang — and also for a now-extinct community, the Purukoto (Migliazza 1985:79). Migliazza suggests that these dialects are minimally different from each other, a notion seconded by Armellada (1943a:14), who asserts that although the phonology varies among the three, grammar and lexicon are virtually identical. Armellada (1943a) is a grammatical treatment of all three extant dialects, and first suggests that they should be known by the single term "Pemong". The Arekuna dialect is further documented in a grammar sketch (Edwards 1972) and ongoing fieldwork (Tuggy 1989). On the basis of "some weeks" of living with the Kamarakotos,

Simpson (1940) produced a brief morphological description and a fairly long word list, but no full sentence examples and only one brief extract (the first nine and one-half sentences) from a text.<sup>4</sup>

Pemóng is similar to Kapóng in grammatical structure, with two Set I tenses and all the rest being Set II. Set I tenses are independently attested by Armellada (1943a), Tuggy (1989), and Simpson (1940), but not by Edwards (1972), nor are there examples in the text appended to Edwards (1978). This might represent oversight, or it might represent the loss of the Set I system entirely in the Arekuna dialect spoken in Guyana (making it more like Makushi, cf. §9.1.3). The lack of text examples in Edwards (1972), Simpson (1940), and Armellada (1973) seem to indicate that the Set I system is used less in Pemóng than in Kapóng, although further research is needed to verify this hypothesis.

The Set II system is taken as basic by all four authors and is described in much the same terms by all four (although Armellada 1943a gives by far the most extensive treatment). Several tenses are described in all four sources, but due to their more complete glossing, I illustrate primarily with sentences from Tuggy (1989) and Edwards (1972).

The Past Tense morpheme is etymologically descended from Proto-Cariban \*-tupu, but has many synchronic variations. Tuggy (1989) records -pá, with a phonologically conservative glottal stop retained from reduction of the final syllable. Edwards (1972:41) gives the form as -pö in his conjugation tables, but the conservative form can be seen as -kpö in 133, taken from the appended text. Armellada (1943a:186) describes the form -pui with a diphthong, which seems innovative in both losing the preceding glottal stop altogether and in changing the vowel to a diphthong. Simpson (1940:332-3) describes no glottal stop and great variation in the vowel: -pe, -püi, -po, and -pa.

In 151a, the intransitive verb *tō* 'go' bears the third person S prefix *i-*, and in 151b the transitive verb bears the same third person prefix referring to the O of the transitive verb *kā'pā* 'smear (with paint)'. The same person marker occurs yet once again as a part of the ergative suffix *-i-ya* '3-Erg' in 151b. In 152 the overt A nominal bears the ergative suffix *-ya*, the vowel-initial verb takes a *Ø-* '3' O prefix, and the ergative suffix does not occur.

(151) The Set II Past tense *-pā* (Tuggy 1989)

- |    |                |    |                        |
|----|----------------|----|------------------------|
| a. | <i>i-tō-pā</i> | b. | <i>i-kā'pā-pā-i-ya</i> |
|    | 3-go-Past      |    | 3-smear-Past-3-Erg     |
|    | 'He went.'     |    | 'He smeared him.'      |

(152) The Set II Past tense *-pō* (Edwards 1972)

*... torong-ya Ø-arō-kpō t-īm-poo*  
bird-Erg 3-take-Past 3Refl-back-on  
'...bird; took him; on his; back.' (p. 50, line 30)

My only examples of present tense are with transitive verbs. In 153, the verb *koka* 'wash' bears only the ergative suffix *a-uya* '2-Erg'. The present tense marker is a *Ø* suffix and the O prefix does not occur due to the presence of the free nominal O *tōpon* 'his own clothes' preceding the verb.<sup>5</sup>

(153) The Present tense *-Ø* (Tuggy 1989)

*tōpon*            *kokaaya*  
*tō-po-n*            *Ø-koka-Ø-a-uya*  
3Refl-clothes-Poss Ø-wash-Present-2-Erg  
'You wash your clothes.'

The Set II future is listed as *-see* (for first person subjects = A and S) and *-mō* (for second and third person subjects) by Edwards (1972:41); Tuggy (1989) includes examples of each form without explanation, but his examples are consistent with Edwards' analysis; Simpson (1940:333) lists only *-se*; Armellada (1943a) does not include a future tense in his primarily morphological description, presumably because he does not consider *see* an inflection, but rather an auxiliary or particle (cf. discussion

below). Examples of the future are sparse, and I found no full sentence examples of the intransitive. Hence, in 154 I present the future tense paradigm directly from Edwards (1972):

(154) Future *-see* with the intransitive verb *entakna* 'eat' (Edwards 1972:41)

<i>yuurō entakna see</i>	'I will eat.'
<i>amörō entakna mā</i>	'You will eat.'
<i>mīkrörō entakna mā</i>	'He will eat.'
<i>iinna amörō entakna see</i>	'We (Excl) will eat.'
<i>amörōknōkōng entakna mā</i>	'You (Pl) will eat.'
<i>tok entakna mā</i>	'They will eat.'

This paradigm does not address the question of whether, in the absence of a free pronoun S, the future tense verb bears personal prefixes. Also, the morphosyntactic differences between these future suffixes and the past suffix is not clear from the paradigm. In the transitive examples (136a-c), both of these questions are answered. In 155a, the transitive verb *arō* 'take' bears the Set II O prefix *a-* '2', and then the ergative suffix *-Ø-ya* '1-Erg' precedes the first person A future suffix *-see*. In 155b, from Tuggy (1989), this pattern is confirmed, except with a preverbal O nominal. Another example from Tuggy (1989) illustrates the second and third person future auxiliary *mā*, and also illustrates that when a preverbal A bears the ergative suffix, there is no ergative suffix on the verb (155c — note that in this case, the verbal plural suffix *kon* refers to the O rather than A).

(155) Future *-see/mā* with transitive verbs

- |    |  |  |
|----|--|--|
| a. | <i>ayarōyasee</i>  |  |
|    | <i>a-arō-Ø-ya-see</i>  |  |
|    | 2-take-1-Erg-1A/S.Future.Auxiliary   |  |
|    | 'I will take you' (Edwards 1972:50, line 19)   |  |
| b. | <i>upon</i> <u>          </u> <i>kokayase</i> <u>          </u> <i>penanne</i>         |  |
|    | <i>u-po-n</i> <u>          </u> <i>Ø-koka-Ø-ya-se</i> <u>          </u> <i>penanne</i> |  |
|    | 1-clothes-Poss Ø-wash-1-Erg-Future tomorrow  |  |
|    | 'I will wash my clothes tomorrow.' (Tuggy 1989)  |  |

- c. mārānō'ya ayennawakonmä  
 mārānō'-ya a-ennawa-Ø-kon-mä  
 Mārānā-Erg 2-teach-Present-Plural-2/3A/S.Future Auxiliary  
 'Mārānā will teach you.' (Tuggy 1989)

Tuggy (1989) documents a second Set II future tense, in which the suffix -pe (etymologically the Proto-Cariban denominalizing postposition \*pe) follows the verb with its ergative suffix, and then the third person present tense copular auxiliary occurs as the final element of the verb word. Cognates to this invariant copula are considered finite in Nominative Languages, but the copula itself does not bear Set I inflectional morphology (in fact, cognates are either members of a suppletive copula set, or suppletive members of a separate copular paradigm, in every Cariban language I have seen to date). This particular future is neither described nor illustrated in the other works on Pemóng, but it is very similar to the future found in Makushi (cf. next section).

(156) Future -pe plus third person copular auxiliary (Tuggy 1989)

<u>upon</u>	<u>kokavapeman</u>	<u>penanne</u>
<u>u-po-n</u>	<u>Ø-koka-Ø-ya-pe-man</u>	<u>penanne</u>
1-clothes-Poss	Ø-wash-1-Erg-Future-3.be	tomorrow
'I will wash my clothes tomorrow.'		

The final Pemóng Set II aspect that I will illustrate here is the present progressive. Edwards 1972:39 describes the present progressive as "most frequently preposing mang and postposing pök to the main verb. Edwards (p. 40) illustrates with preverbal mang and postverbal -ng pök, which are clearly cognate to the Panare and Kapóng Imperfectives (Chapter 8, §8.1.2, this chapter, §9.1.1, respectively). Example 157a (from the text in Edwards 1972), takes the long form of the suffix, -nöpök, the S follows, and the past tense copular auxiliary (bearing the Set II past tense marker) occurs at the end of the clause. The intransitive verb manuumi 'dance' does not bear a personal prefix. In 157b (from Tuggy 1989), the transitive verb koka 'wash' takes the -pä suffix without a preceding nasal, has a preverbal O nominal (and hence no personal prefix), and has no ergative suffix. The first person A does not seem to be indicated anywhere in this

example, unless perhaps in the context or in the lack of a prefix on the auxiliary. Either way, it seems that the progressive verb in Pemóng, like the Set II imperfectives in other Cariban languages, does not take an ergative A.

(157) Progressive with a Set II past tense auxiliary

- a. manuunnöpök pörötuukuu eechiipö  
 manuumi-nöpök pörötuukuu Ø-eechi-pö  
 dance-progressive frog Ø-be-Past  
 'Frog was dancing.' (Edwards 1972:51, lines 4-5)
- b. upon kokapä' esi'pa  
 u-po-n Ø-koka-pä' Ø-esi-'pä  
 1-clothes-Poss Ø-wash-Continuous 1?-be-Past  
 'I was washing / washed my clothes.'

### 9.1.3 Makushi

Makushi is quite well documented, with grammars by Williams (1932), Carson (1982), and Abbott (1991). Although Williams and Carson each provide a wealth of examples, Williams did not record glottal stops (which greatly diminishes the use of his grammar for etymological purposes), and although Carson does indicate many glottal stops, she missed two key glottals, one in the past tense suffix and the other in the progressive suffix (the difference between two: 'pí' 'Past' -pí' 'Progressive'). Although I refer to these two works for verification or for further exemplification of certain points, Abbott (1991) stands out as the clearest and most complete grammar to date for any Ergative Language, and as such it is my primary reference for Makushi — in fact, the detail Abbott provides makes it possible for me to state certain reanalyses more clearly for Makushi than for any other language. None of the descriptions of Makushi includes anything that might be called a Set I inflection — the entire Set I system has been lost in Makushi, leaving only the Set II system to operate in independent clauses.

Based on semantic distinctions, Abbott (1991) describes three finite verbal tenses (113-7), nine finite aspects (117-22), and two moods (122-3). Based on both

etymological affix class and on synchronic morphosyntactic patterns, I analyze the Makushi verb complex as follows:<sup>6</sup>

(158) Abs-Verb-(Aspect I)-(Aspect II)-Finite-(A-Erg) (TAM) (Auxiliaries)

Going from left to right, the Absolutive may be represented either by a proclitic, a noun phrase, or an idiosyncratic change in the verb root.<sup>7</sup> Verb is the lexical verb root. Aspect I is a set of two aspect suffixes which are etymologically derivational meaning-changing suffixes. They are -pîî 'Iterative' and -ka 'Reversative'. These were not nominalizers historically, nor are they finite verbal inflections now; they simply occur on any verb stem to add their aspectual meaning prior to either finite inflectional or class-changing derivational operations. They do not seem to have been affected by the reanalysis. Aspect II is a set of four suffixes recently developed from transitive complement-taking verbs. These are -tu'ka 'finally', -yonpa 'Conative' (meaning 'try to'), pi'a'î 'Ingressive', and areî'ka 'Terminative'. Both types of aspect suffixes are optional. In contrast, Finite consists of three suffixes which are etymologically nominalizers, but synchronically one member of the set is required to occur on all finite verbs. These are -pî 'Past', -sa 'Completive', and -Ø 'Universal'. The Finite suffixes are followed by an optional complex of the A (either as a noun or a clitic) plus the ergative suffix -ya 'ERG'.

At this point, the verb could be either a finite main clause verb or a nominalized subordinate clause verb, depending on the context in which it occurs. As such, this verb complex may be followed by morphology which is etymologically derivational — deriving an oblique from a noun — but which synchronically I call TAM, since it has been reanalyzed with a verbal function. Abbott 1991:123-5 specifically states that the verb is nominalized preceding the oblique postposition pî 'at' (which I analyze as

indicating imperfective), but when the verb precedes -pe 'Denominalizer' (which I analyze as future, as in Pemóng example 156), she does not make a similar statement.

The final member of the verbal complex is auxiliary, which consists of three verbs. Two of these three are recently derived from synchronic intransitive verbs, one the verbal copula wanî/e'/si 'be' and the other the verb ko'mamî 'remain'. The third auxiliary, the Proximate Tense copula wai/nai/man/nantî, is a remnant of a Proto-Cariban copula which does not belong to either the Set I or Set II systems, the idiosyncratic copula verb \*a. As noted at the conclusion of the last section, cognates to this verb are finite in Nominative Languages as well, but they do not bear verbal morphology from either system.

The parts of this system I will focus on are the Finite suffixes, the Aspect II suffixes, and the Oblique plus auxiliary combination. In §9.1.3.1 I illustrate the complex syntactic status of the Finite suffixes by showing that they may be interpreted as either finite, participial, or nominalizing suffixes, depending on the syntactic context in which they occur. Since the Finite suffixes are all derived from nominalizers used in O-oriented predications, the oblique A is reanalyzed as an ergative subject with all three. In §9.1.3.2 I show how the Aspect II suffixes are secondary developments, where etymologically the bare verb stem (one of the three finite inflections described in §9.1.3.1) occurs as a nominal complement of a set of transitive verbs, and the biclausal sentence is then reanalyzed into a monoclausal predicate. In §9.1.3.3 I argue that the present progressive is a fully verbal non-ergative predication, a position which is at odds with Abbott's analysis. As in Pemóng, this creates an aspect-based split in the otherwise purely ergative Set II system of Makushi.

### 9.1.3.1 The Dual Function of Makushi Set II Finite Verbal Morphology

In this section I will focus on the Makushi Set II suffixes which I have labeled *Finite*. Etymologically they are simple nominalizers, and they have a dual function in synchronic Makushi as both finite verbal inflections and as nominalizers. These suffixes are:  $\emptyset$  'Universal Tense',  $-\underline{p\acute{i}}$  'Past Tense', and  $-\underline{s\acute{a}}$  'Completive Aspect'. One of these three affixes occurs obligatorily on all independent clause verbs in Makushi. Although Abbott's semantic analysis places  $\emptyset$  'Univ' and  $-\underline{p\acute{i}}$  'Past' in the class of tense markers and  $-\underline{s\acute{a}}$  'Compl' in the separate class of aspect markers, morphosyntactic evidence places the three in their own unique class: they are mutually exclusive (i.e. in a position class analysis they would all occur in the same position — following the verb root or the verb root plus a derivational suffix); they may occur alone as the sole suffix, or in combination with either or both of the classes of aspect suffixes; they all may be followed by an auxiliary; and all may derive nouns which occur either as complements of other main clause verbs or as objects of postpositions. I now illustrate these properties for each, comparing the behavior of the three for each of these properties.

The Past tense suffix  $-\underline{p\acute{i}}$  and the completive suffix  $-\underline{s\acute{a}}$  cannot co-occur on the same verb stem (Abbott 1991:123). This is consistent with the fact that they are etymologically members of the same class of morphology, derivational nominalizers. Since the universal tense is a zero form, we cannot prove that it does not co-occur with every verb stem in the language (including past and completive verbs); however, it forms an etymological class with stems bearing  $\underline{s\acute{a}}$  and stems bearing  $-\underline{p\acute{i}}$ , so unless further investigation uncovers evidence to the contrary, I will maintain that the three are members of a morphosyntactic class in synchronic Makushi. The morphosyntactic unity of these three suffixes is illustrated by 159-163: verbs bearing any of these three suffixes can stand alone as main clause verbs (159a-c); they may co-occur with either (or both)

Aspect I or Aspect II suffixes (160a-c), they may take a further auxiliary (161a-c, 162a-c), or they may derive a noun which functions directly as the complement of a transitive matrix verb or which serves as the object of a postposition in an adverbial phrase (163a-e).

In 159a, the transitive verb *eporí* 'find' occurs with no overt tense/aspect suffix, which Abbott (1991:123) takes to mean it is inflected with  $\emptyset$  'Universal tense'. The subject is referenced with the third person ergative suffix  $-\underline{i-ya}$  '3-ERG' and the third person absolutive object is presumably referenced by the particular form of the verb rather than by a separate absolutive pro-clitic. In 159b the transitive verb *yanumí* 'pick.up' bears the past tense suffix  $-\underline{p\acute{i}}$  'PAST', the ergative suffix  $-\underline{i-ya}$  '3-ERG', and since the absolutive NP precedes the verb, I show a  $\emptyset$  in place of the absolutive prefix on the verb. In 139c the third person form of the intransitive verb *atí* '3.go' bears the completive aspect suffix  $-\underline{s\acute{a}}$  'Cmpl'. The deictic pronoun *mírí* expresses Addressee Involvement (AI), either physical, temporal, or psychological (cf. Abbott 1991:106-7 for discussion).

(159) The three affixes on main clause finite verbs

- a.  $-\emptyset$  'Universal Tense'  
penane eporí  $\emptyset$  i-ya  
 tomorrow find-Univ-3-Erg  
 'He will find it tomorrow.' (Abbott's 464, p. 123)
- b.  $-\underline{p\acute{i}}$  'Past'  
pemonkon  $\emptyset$  yanumí  $-\underline{p\acute{i}}$  i-ya  
 person  $\emptyset$ -pick.up-Past-3-Erg  
 'He picked up the man.' (Abbott's 476, p. 123)
- c.  $-\underline{s\acute{a}}$  'Completive'  
atí  $-\underline{s\acute{a}}$  mírí aminke  
 3.go-Cmpl AI far  
 'He went/has gone far.' (Abbott's 483, p. 123)

That these three finite inflections are of a different morphological class from the Aspect I and Aspect II suffixes can be seen from their co-occurrence with either (or both) classes of aspect. In 160a the transitive verb *ya'ti* 'cut' bears the Aspect I suffix *-piti* 'Iterative' and the lack of a further suffix indicates that the verb is in universal tense.<sup>8</sup> The verb bears neither the absolutive nor the ergative clitics, since the absolutive NP *yei* 'tree' and the ergative NP *paapa-ya* 'father-Erg' both occur in the clause. In 160b the same transitive verb *ya'ti* 'cut' takes first the Aspect II suffix *yonpa* 'Conative' and then the finite suffix *-sa* 'Cmpl'. The absolutive pro-clitic is again replaced by the preverbal absolutive NP *yei* 'tree', and the ergative suffix *-i-ya* '3-Erg' attaches after the finite suffix. In 160c the entire clause is contained in the verb *po* 'whip': the verb bears first the Aspect I suffix *-piti* 'Iterative', next the Aspect II suffix *-tu'ka* 'finally', and then the tense suffix *-pi* 'Past'. In addition, the verb bears the absolutive prefix *i-* '3' and the ergative suffix *-i-ya* '3-Erg'.

(160) Tense co-occurring with Aspect I and Aspect II suffixes

- a.  $\emptyset$  plus Aspect I suffix *-piti* 'Iterative'

*paapa-ya yei  $\emptyset$ -ya'ti-piti- $\emptyset$*   
 father-Erg tree  $\emptyset$ -cut-Iter-Univ  
 'Father cuts the tree (repeatedly).' (Abbott's 488, p. 123)

- b. *-sa* plus the Aspect II suffix *-yonpa* 'Conative'

*yei  $\emptyset$ -ya'ti-yonpa-sa'i-ya*  
 tree  $\emptyset$ -cut-Conat-Cmpl-3-Erg  
 'He tried to cut the tree.' (Abbott's 487, p. 123)

- c. *-pi* plus Aspect I *-piti* 'Iterative' and Aspect II *-tu'ka* 'finally'

*i-po-piti-tu'ka-pi-ya*  
 3-whip-Iter-finally-Past-3-Erg  
 'He finally whipped him.' (Abbott's 497, p. 123)

That these three Set II finite inflections went through a participial stage can still be seen in that all three may occur with auxiliaries, both with finite Set II auxiliaries (as opposed to the Set I auxiliaries of Mixed languages), and with the idiosyncratic

Proximate Tense copula. In 161a Abbott 1991:123 considers the verb *ko'mami* 'remain' to be an auxiliary because it takes the tense marker *-pi* 'Past' for the entire clause, but does not take person markers. The transitive main verb *yeuri-piti* 'bark.at-Iter' also does not bear personal clitics, but the grammatical relations of the preverbal absolutive *no'santon* 'old.woman' and the postverbal ergative NP *arimaraka-ya* 'dog-Erg' are clearly from the transitive main verb rather than the intransitive auxiliary. Abbott does not mark the  $\emptyset$ - on the auxiliary, but I have inserted it to show that etymologically the nominalized complement served as the absolutive subject of the intransitive verb, a source construction that would be translated roughly as 'the old woman's barking at by the dog remained'. In 161b the intransitive main verb *erepami* 'arrive' bears the past tense suffix *-pi* and does not bear an absolutive pro-clitic, since the absolutive free pronoun *to* 'they' precedes it. The auxiliary verb is *wani* 'be', which bears the same past tense suffix *-pi*. The auxiliary again does not bear an absolutive pro-clitic because etymologically the preceding verb was a nominalization which served as the absolutive NP, a source construction that would be translated as 'their past arrival was (before)'. In 161c the main verb *nimi* 'leave' bears the absolutive prefix *i-* '3', the finite suffix *-sa* 'Cmpl', and the ergative suffix *-i-ya* '3-Erg'. The auxiliary is again *wani-pi* 'be-Past', which again bears no absolutive prefix because the preceding verb was etymologically its absolutive NP: 'the leaving of it by him was'.

(161) Tense co-occurring with Set II auxiliaries

- a.  $\emptyset$  with *ko'mami* 'remain (Continuous Aspect)'

*no'santon  $\emptyset$ -yeuri-piti- $\emptyset$  arimaraka-ya  $\emptyset$ -ko'mami-pi*  
 old:woman  $\emptyset$ -bark-Iter-Univ dog-Erg  $\emptyset$ -remain-Past  
 'The dog kept barking at the old woman.' (Abbott's 509, p. 123)

- b. *-pi* with *wani* 'be'

*to'  $\emptyset$ -erepami-pi  $\emptyset$ -wani-pi*  
 3.PRO.PL  $\emptyset$ -arrive-Past  $\emptyset$ -be-Past  
 'They had arrived (before).' (Abbott's 481, p. 123)

- c. -sa' with wanî 'be'

i-nîmî-sa-i'-ya      ∅-wanî-'pî  
 3-leave-Cmpl-3-Erg ∅-be-Past  
 'He had left it.'

The Proximate Tense copula also occurs with finite verbs as an auxiliary, adding a sense of either temporal or metaphorical proximity (i.e. urgency) to the predication. In 162a the verb ko'mamî 'live, remain' bears the first person inclusive S marker, the suffix -nî, and then is followed directly by the third person Proximate Tense copula man (which is also used for 1+2 and 1+3 subjects; Abbott 1991:123). In 162b the main verb in the quoted speech is wîfî 'go', which bears the past tense suffix -'pî and which is followed by the Proximate tense copula man '3.be'. In this case, the Proximate tense serves to make the action "more vivid and emphasize the certainty of the action." In 162c the verb entamo'ka 'eat' bears the completive finite suffix -sa' and is followed by the first person form of the Proximate tense copula, wai. Here, the Proximate tense indicates that the action is "already completed today" (Abbott 1991:123).

(162) The Proximate Tense copula added to finite verbs

- a. ∅ 'Universal Tense'

... manan-nî-to'      kore'ta ko'man-nî-∅      man  
 dance-1.INCL-INST.NMLZR among live-1.INCL-Univ 3.be  
 'We live among dancing ...' (Abbott's 461, p. 123)

- b. -'pî 'Past'

"mîikîrî ∅-wîfî-'pî man."      ta-'pî-i-ya  
 3.PRO ∅-go-Past 3.be say-Past-3-Erg  
 "'He went," he said.' (Abbott's 474, p. 123)

- c. -sa' 'Cmpl'

entamo'ka-sa'wai  
 eat-Cmpl 1.be  
 'I have eaten (today).' (Abbott's 471, p. 123)

In all of these cases the auxiliaries clearly do not form separate predicates which subordinate the finite verbs. Rather, the finite verb remains the main verb of the clause and the auxiliary simply adds extra grammatical information to the main verb, like tense or aspect. It is interesting at this point to note that both Williams (1932:68) and Carson (1982:145) analyze Abbott's Proximate Tense Copula as an inflectional suffix. Typological patterns of grammaticalization (motivated by functional principles of iconicity) would lead us to expect exactly such a reduction of the auxiliary to a suffix, since the auxiliary is both semantically and syntactically a part of the single predicate headed by the finite verb.

As discussed in Chapter 8 (§8.1.2), the ability of a finite verb to bear nominal morphology is evidence for its earlier etymological status as a derived nominal, but given that reanalysis has taken place, the synchronic status of any nominal morphology occurring on Set II verbs is in question. Syntactic tests which can separate synchronic Set II finite verbs from synchronic derived nouns are: (1) ability to serve as complement subject or object of an independent matrix verb, and (2) ability to bear an oblique postposition and thereby serve as an adverbial adjunct to an independent matrix clause.<sup>9</sup>

In 163a and 163d the finite verb forms t-eerepamî-∅ '3.REFL-arrive-Univ' and uufî-sa' '1.go-Cmpl' bear postpositions and function as adverbial adjuncts to their respective matrix clauses. In 163b and 163e the finite verb forms aw-enna-po-'pî-kon 'you-arrive-Past-COLL' and ∅-apa-sa' '∅-dry-Cmpl' serve as absolutive complements of the verb epu'tî 'know'. In 163b epu'tî is the matrix verb of the independent clause, which takes the ergative suffix -i-ya '3-Erg' and lacks the absolutive pro-clitic because the finite verb form serves as the absolutive noun. In 163e epu'tî is in an adverbialized form itself, but the lack of an absolutive/genitive pro-clitic indicates that again, the finite verb form is serving as the absolutive/genitive noun. In 163d the finite verb form e-es-enupa-'pî '2-Detransitive-teach-Past' bears the ergative suffix -ya, and thus serves as the subject of the

transitive matrix clause. In each of these cases, forms that are morphologically finite verbs serve the syntactic functions of nouns, indicating that the reanalyzed Set II finite verb inflections continue to serve their etymological function as well.

(163) The etymological nominalizing function of the Tense suffix forms

- a.  $\emptyset$  before the postposition *pe* 'Denominalizer'

t-eerepami- $\emptyset$  pe e-ewomi-'pi t-ewi ta  
3.Refl-arrive-Univ Denom 3-enter-Past 3Refl-house in  
'Arriving, he entered his house.' (Abbott's 218a, p. 68)

- b. *-pi* 'Past' marking the nominalized complement of *epu'ti* 'know'

aw-enna'po-'pi-kon  $\emptyset$ -epu'ti-'pi-i-ya  
2-return-Past-Coll  $\emptyset$ -know-Past-3-Erg  
'He knew you all returned.' (Abbott's 219, p. 68)

- c. *-pi* 'Past' bearing the ergative suffix *-ya* as the A of the matrix clause

kure'ne e-es-enupa-'pi-ya ayawi pe a-ku-'sa' mirifi  
much 2-Detr-teach-Past-Erg crazy Denom 2-make-Cmpl AI  
'Your much learning made you crazy.' (Abbott's 230, p. 70)

- d. *-sa* 'COMPL' as an adverbial before the postposition *yai* 'at'

amen uutif-sa' yai ekaremeki-'pi to'-ya  
recently 1.go-Cmpl at tell-Past 3.Pro.Pl-Erg  
'They told me recently, at the time I went.' (Abbott's 248, p. 74)  
(lit. 'Recently at my having gone, they told me.')

- e. *-sa* 'Cmpl' as the nominalized complement of *epu'ti* 'know'

loron  $\emptyset$ -yarima-'pi-i-ya tuna  $\emptyset$ -apa-sa'  $\emptyset$ -epu'ti-pa kai'ma  
bird  $\emptyset$ -send-Past-3-Erg water  $\emptyset$ -dry-Cmpl  $\emptyset$ -know-Purpose Intent  
'He sent the bird in order to know if the water was dried up.'  
(Abbott's 265, p. 77)  
(lit. 'He sent the bird in order to know the water had dried up.')

In this section I have explored the various behaviors of the three "finite" inflections in Makushi: they do not co-occur with each other, they inflect finite verbs, they co-occur with either or both Aspect I and Aspect II suffixes, they may take an additional auxiliary, and they may also derive syntactic nominals which either serve as

direct arguments of, or oblique adjuncts to, matrix clauses. This final behavior is retained from their etymological source as nominalizers. The fourth behavior is a reflection of the first stage of reanalysis where they develop the behavior of participials. The second and third behaviors show that they have arrived in synchronic Makushi as finite verb inflections.

The zero universal tense form makes the Makushi verb particularly difficult to parse — if at any point in a sequence of suffixes a meaning-bearing zero might occur, then the empirical basis for a position-class analysis is undercut. However, armed with the knowledge of the zero form's source as a nominalizer, it becomes possible to sort out patterns of grammaticalization. The next section examines how the zero form of the universal tense is instrumental in the reanalysis of a set of complement taking verbs into the Aspect II suffixes.

### 9.1.3.2 From Complement-taking Verbs to Auxiliaries to Aspect II Suffixes

The Aspect II suffixes are relatively recently derived from transitive complement-taking verbs, with the verb root which precedes them etymologically being their absolutive complements. Synchronically, all but one of these aspect suffixes continue to be attested as transitive lexical verbs (Abbott 1991:123).<sup>10</sup> I will argue that the source construction was originally biclausal, but the transitive matrix verb was then reanalyzed as an aspect marker and the transitive or intransitive nominalized complement verb was reanalyzed as the main verb which bears the new aspect marker. The synchronic aspect marker may occur on either transitive or intransitive verbs, but with intransitive verbs the ergative A of the etymological complement-taking transitive verb has been lost, showing that it is now simply a grammatical marker on the intransitive main verb (see 164). The matrix verb was easily reanalyzed as a suffix because one of the nominalizers which forms complement verbs in Makushi is the zero form, i.e. the universal tense suffix.

Since the reanalysis is slightly different for transitive and intransitive subordinate verbs, I present each separately, beginning with the transitive. A schematic diagram of the source and reanalyzed constructions is given in 164:

(164) The underlying structures of pre- and post-reanalysis transitive Aspect II forms

a. Before reanalysis: the biclausal construction

[	[	POSS-V <sub>1</sub> (-Aspect I)-∅	-∅	]∅	-V <sub>2</sub> -Finite-Erg
			-Nmlzr-Erg		
]		ABS NP		]	Abs-V <sub>2</sub> -Finite-Erg

b. After reanalysis: a single verb word, no zeros, and V<sub>2</sub> as Aspect II

ABS-V<sub>1</sub>(-Aspect I)-Aspect II-Finite-Erg

The source construction was biclausal: the subordinate verb V<sub>1</sub> occurred as a bare stem, which etymologically was a nominalized form. This nominalized subordinate verb took as its possessor the absolutive (either a preceding NP or a prefix), but the oblique/ergative A did not occur overtly because of an equi-relation with the A of the matrix clause verb, V<sub>2</sub>. The matrix V<sub>2</sub> does not bear an absolutive prefix because it is preceded by its O, the nominalized V<sub>1</sub>; but it does take a normal finite inflection and the ergative suffix. Since the subordinate V<sub>1</sub> can never bear the ergative suffix, and since the matrix V<sub>2</sub> can never bear the absolutive prefix, and since the nominalizer on V<sub>1</sub> is a zero form, the two verb stems will always be in immediate surface proximity to each other. This creates a situation of surface ambiguity, where the language learner could easily re-interpret the same surface string as representing the different underlying structure shown in the second half of 144. The three zeros — the zero form nominalizer, the zero ergative, and the zero absolutive — are all lost, the absolutive of the subordinate verb becomes the absolutive of the complex verb, and the tense suffix and ergative of the matrix verb become the tense and ergative of the complex verb.

The Aspect II suffixes *-yonpa* 'try' and *-tu'ka* 'finally' are illustrated above (160b-c, respectively). In 165, the Aspect II suffix *-areti'ka* 'Finish' occurs immediately

following the verb *ya'li* 'cut' and is followed in turn by the Past tense suffix *-pi* and the ergative suffix *-i-ya* '3-Erg'. In 166, Abbott's only examples of the lexical sources for these suffixes, the free verb *yonpa* 'try, taste' is preceded by its O, *t-ekkar* '3Refl-food', and in turn serves as the O for the verb *areti'ka* 'finish', which bears the completive suffix *-sa* and is followed by its ergative A.<sup>11</sup>

(165) *yei ∅-ya'ti-areti'ka-pi-i-ya*  
wood ∅-cut-Terminative-Past-3-Erg  
'He finished cutting the wood.' (Abbott's 504, p. 123)

(166) *areti'ka* 'finish' and *yonpa* 'try, test, taste' as transitive verbs

*waikin erepami-pi*  
deer arrive-Past

*t-ekkari ∅-yonpa-∅ ∅-areti'ka-sa' kaikusi-ya tanne*  
3.REFL-food ∅-taste-Univ ∅-finish-Cmpl jaguar-Erg while

'The deer arrived at the time the jaguar had finished eating his food.'  
(Abbott's 294, p. 84)

A similar, but slightly different scenario derives the synchronic intransitive verbs which bear Aspect II suffixes:

(167) The underlying structures of the pre- and post-reanalysis intransitive forms

a. Before reanalysis: the biclausal construction

[	[	POSS-V <sub>1</sub> (-Aspect I)-∅	]∅-	V <sub>2</sub> -Finite-Erg
		-NMLZR]		
]		ABS NP		] ABS-V <sub>2</sub> -Finite-Erg

b. After reanalysis: a single verb, no zeros, V<sub>2</sub> as Aspect II, no Erg

ABS-V<sub>1</sub>(-Aspect I)Aspect II-finite

The nominalized intransitive V<sub>1</sub> has only its absolutive (S) possessor, which is obligatorily expressed — but there is no optional oblique A. The transitive matrix verb V<sub>2</sub> has both an absolutive (the preceding nominalized complement) and an ergative A as well; the latter is coreferential with the absolutive S of the subordinate clause. In the process of reanalysis, the zero tense marker on V<sub>1</sub> and the zero absolutive on V<sub>2</sub> are both

lost, but unlike for the transitive  $V_1$ , this alone does not result in a fully reanalyzed clause. The final step in reanalysis is for the transitive matrix verb  $V_2$  to lose its transitive verbal properties, which entails losing its ergative argument. Since the ergative of  $V_2$  and the absolutive of  $V_1$  are coreferential, the loss of the ergative does not result in any loss of information — it only indicates the completion of the reanalysis from transitive matrix verb to aspect II suffix on the new intransitive main verb. The loss of the of the superordinate clause ergative is illustrated in 168, where the intransitive verb sa'manta 'die' bears the Aspect II suffix -yonpa 'Conative', and the S occurs preverbally (in place of an absolutive prefix) — there is no ergative A for the etymological complement-taking verb 'try, taste, test).

- (168) mĩkĩrĩ  $\emptyset$ -sa'manta-yonpa-pĩ  
 3.Pro  $\emptyset$ -die-Conative-Past  
 'He tried to die' or 'He almost died' (Abbott's 501, p. 123)  
 (etymologically: 'He tasted death/dying')

This particular evolutionary scenario helps in understanding the sequence of affixes on synchronic verbs. The Aspect I suffixes are etymologically from a class of derivational affixes which preceded the category-changing derivational affixes. Since the  $V_1$  complement was nominalized, the Aspect I suffixes occurred directly after the root of  $V_1$ ; since the  $V_2$  followed the entire  $V_1$ -Aspect I-Nominalizer sequence, the modern Aspect II suffixes follow the entire sequence as well. In fact, the historical presence of the zero nominalizer can be seen also in modern morphophonemic alternations in the Aspect I suffix -pĩtĩ 'Iter'. In Makushi (as in other Cariban languages), the final syllable of -pĩtĩ reduces to a glottal stop when immediately followed by another suffix which begins with the sequence -CV (cf. Gildea 1991b). So when -pĩtĩ is followed by the completive suffix -sa' (which begins with -CV) the result is the sequence -pĩ'-sa' (149a). When -pĩtĩ is followed by the zero tense suffix, it retains its full form (149b). When -pĩtĩ is followed by the Aspect II suffix -tu'ka (which begins with a CV) the phonological rule

would predict that -pĩtĩ be reduced to -pĩ'. However, as seen in 149c, the full form -pĩtĩ occurs instead. I suggest that the full form occurs here because -pĩtĩ is not immediately followed by the -CV initial suffix -tu'ka — the historical  $\emptyset$  nominalizer intervenes between the two.

(169) Syllabic reduction of -pĩtĩ

- a. -pĩtĩ  $\rightarrow$  -pĩ' preceding -CV initial suffix -sa'  
aa-ko'man-pĩ'-sa'  
 3-remain-Iter-Cmpl  
 'He has remained (repeatedly).' (Abbott's 486, p. 123)
- b. -pĩtĩ  $\rightarrow$  -pĩtĩ preceding  $\emptyset$  universal tense  
paapa-ya yei  $\emptyset$ -ya'tĩ-pĩtĩ- $\emptyset$   
 father-Erg tree  $\emptyset$ -cut-Iter-Univ  
 'Father cuts the tree (repeatedly).' (Abbott's 488, p. 123)
- c. -pĩtĩ  $\rightarrow$  -pĩtĩ preceding CV initial suffix -tu'ka  
i'-po-pĩtĩ-tu'ka-pĩ-i-ya (i'-po-pĩtĩ( $\emptyset$ )-tu'ka-pĩ-i-ya  
 3-whip-Iter-finally-Past-3-Erg  
 'He finally whipped him.' (Abbott's 497, p. 123)

Up to this point the reanalysis scenario has been relatively straightforward — the etymological class of the nominalizers, their synchronic reanalysis as finite inflections on verbs, the mechanism by which they became verbal inflections, and the means by which a group of transitive verbs became the Aspect II suffixes are all clear. All of these forms have fed into the synchronic ergative system of Makushi. In the next section, I address the reanalysis of a nominalizer-plus-postposition sequence into a non-ergative Set II independent clause aspect marker.

### 9.1.3.3 Makushi as a Split Ergative Language: The Imperfective

In a number of the Set II systems we have seen, the imperfective (i.e. progressive/continuous) aspect marker does not take an ergative A (cf. Apalaf, Panare, Pemóng, Kapóng). According to Williams 1932:69 and Carson 1982:145-7, the Makushi

imperfective is no exception.<sup>12</sup> However, Abbott 1991 does not analyze the imperfective as an independent clause aspect, but rather as a biclausal construction in which the semantically “main” verb is nominalized, then made the object of a postposition, thus serving as an oblique adjunct to a matrix clause headed by one of the copulas or the verb *ko'mamĩ* ‘remain’. In this section I argue that the Makushi imperfective construction has, in fact, been reanalyzed as a monoclausal predicate. As a consequence of this reanalysis, the main clause verbal system of Makushi is not exclusively ergative as claimed by Abbott (1991) and Derbyshire (1991a), but rather is split ergative with the split conditioned by aspect.

The synchronic imperfective aspect involves three historically independent morphemes which have been combined in a single construction: the first person inclusive personal suffix *-nĩ* (or *-Ø*),<sup>13</sup> the locative postposition *pĩ* ‘at’, and the auxiliary (either the Set I Proximal tense copula or the auxiliary *ko'mamĩ* ‘remain’). The three occur as follows in Abbott’s illustrative examples:

(170) Abbott’s historically conservative analysis of the imperfective aspect

- a. *wĩfĩ-n pĩ wai*  
go-1.Incl at 1.be  
‘I’m going (just now).’ (Abbott’s 468, p. 123)
- b. *mĩkĩrĩ vaso'ka-Ø pĩ wai*  
3.PRO stab-1.Incl at 1.be  
‘I gave him an injection (several hours ago).’ (Abbott’s 470, p. 123)
- c. *t-ewĩ Ø-koneka-Ø pĩ it-akon Ø-ko'mamĩ-pĩ*  
3REFL-house Ø-make-1Incl at 3-brother Ø-remain-Past  
‘His<sub>i</sub> brother<sub>j</sub> continued making his<sub>j</sub> house.’ (Abbott’s 508, p. 123)<sup>14</sup>

Abbott’s analysis shows each of these three as independent morphemes with no necessary connection to each other. I suggest that Abbott’s analysis represents the source for construction reanalysis, but that the historical biclausal construction with a main clause copula/aspectual verb plus an oblique adverbial adjunct has been reanalyzed into a single main clause predicate. After reanalysis, the old first person inclusive marker

occurs regardless of person and the locative semantics of the postposition are completely lost, leading to the conclusion that the two are combined into a single imperfective meaning. The copula, which earlier was the matrix verb, now serves only as an auxiliary to mark tense and aspect for the new main verb. Transitive and intransitive main verbs have a slightly different pattern synchronically, so I show the reanalysis of each independently:

(171) The reanalysis of the intransitive imperfective construction

- a. The source construction

$$\begin{array}{ccc} -nĩ-Ø & pĩ & \\ V_1-1+2-Univ & \underline{\text{Locative}} & \text{Abs-V}_2 \end{array}$$

- b. The reanalyzed construction

$$\begin{array}{ccc} -nĩpĩ & & \\ V_1-\underline{\text{Imperfective}} & \text{Abs-Aux} & \end{array}$$

The source construction in 171a is bi-clausal, with the nominalized  $V_1$  embedded in a locative phrase which is an adverbial adjunct to the matrix copular verb,  $V_2$ . The subjects of  $V_1$  and  $V_2$  are in an equi relationship, and as expected, the subordinate S does not occur overtly. However,  $V_1$  bears the 1+2 personal suffix *nĩ* in all cases, regardless of the identity of its S.<sup>15</sup>  $V_1$  bears the  $\emptyset$  ‘Universal’ tense/nominalizer as well, and the entire derived nominal then becomes the object of the postposition *pĩ* ‘at’. In the reanalyzed construction (171b), the invariant 1+2 suffix and the locative postposition combine to form a single aspect inflection, and the previous main verb  $V_2$  now serves as a tense/aspect auxiliary to the reanalyzed main  $V_1$ . The S of  $V_1$  occurs in the absolutive case, which it inherits from its historical status as the S of  $V_2$ .

A similar reanalysis takes place for transitive  $V_1$ :

(172) The reanalysis of the transitive imperfective construction

a. The source construction

Abs-V<sub>1</sub>- $\emptyset$ -1+2 Locative Abs-V<sub>2</sub>

b. The reanalyzed construction

Abs-V<sub>1</sub>-Imperfective Abs-Aux

In the source construction, the A of the subordinate V<sub>1</sub> is in an equi-relation with the S of the matrix V<sub>2</sub>, and as such is not expressed overtly. In this case, the verb does not bear the additional overt 1+2 suffix. Abbott 1991 analyzes the  $\emptyset$  as indicating the 1+2 ergative A (i.e. parallel to the 1+2S suffix -nĩ in the intransitive imperfective, 171a), however the  $\emptyset$  could equally well be taken to mean that the A is suppressed due to the equi-condition with the S of the matrix clause. Either way, the locative pi' 'at' again serves as the postposition of choice to make the nominalized V<sub>1</sub> an oblique adjunct to the matrix V<sub>2</sub>. After reanalysis, the sole overt marker of imperfective on main V<sub>1</sub> is pi'.

The primary arguments in favor of reanalysis are: (1) The meanings of the individual morphemes no longer coincide with their historical meanings: -nĩ '1+2' has no synchronic referential meaning and pi' 'at' no longer shows even a metaphorical connection to its historical locative meaning. (2) The translations show no hint of either a subordinate reading for V<sub>1</sub> nor of any adverbial adjunction — V<sub>2</sub> simply adds tense and aspect to the main verb, V<sub>1</sub>. By analogy to the cases where these same auxiliaries serve the same function when occurring with finite verbs (161 and 162 above), it appears that the 1+2 verb in combination with the locative postposition has been reanalyzed as a finite verb with a non-ergative A.

In sum, the synchronic Set II system of Makushi shows all the signs of its nonverbal origins: finite verbs may also function as participials and nominals, each piece of verbal morphology has a separate meaning as well, either nonverbal or lexical, and the

syntactic patterns of person marking in the verb and case-marking of the A can be traced back to the respective source constructions which gave rise to each modern tense and aspect.

## 9.2 The Southern Ergative Languages

The two southern Ergative Languages, Kuikúro and Kalapalo, are both spoken in the Xingu river basin in South-Central Brazil. They are closely related, spoken by ethnically distinct communities (Franchetto 1986:65-67), and they at least represent distinct dialects (as will be seen in the phonology of the following sections), although their status as separate languages has yet to be determined. Like Makushi, the southern Ergative Languages show no evidence at all of the Proto-Cariban Set I verbal system. In each language, the ergative Set II system is dominant, with possessive prefixes doubling as verbal absolutive prefixes. The A nominal is case-marked with the ergative suffix -heke / -feke (certainly from the form \*-peke, cf. also the Kuikúro 1+2 ergative pronoun ku-peke and the Kalapalo kupehe — however, with no attested cognates in other Cariban languages, there is no reconstructable Proto-Cariban meaning). Both languages also exhibit a limited "nominative" system, where the A of a transitive verb which bears the prefix n- 'De-ergativizer' is expressed via the etymological possessive prefix (the same form which marks the absolutive of non-de-ergativized verbs). I defer discussion of this Set II nominative system to §9.2.3. In the next two sections I illustrate the ergative Set II system in Kuikúro (§9.2.1) and Kalapalo (§9.2.2).

### 9.2.1 Kuikúro

All my linguistic information on Kuikúro comes from Franchetto (1986, 1990a-b, 1991). For the purposes of illustration, I take the examples directly from Franchetto's (1990a) introductory exposition. The absolutive in Kuikúro is marked on the verb by the

same prefixes that mark possession on nouns. The absolutive prefix alternates with a preverbal free (pro)noun absolutive (cf. 173a, 174a-b). The preverbal absolutive noun is further marked by a shift in primary accent to the final syllable (cf. karáihá ‘non-indian’ → karaihá in 173a, and kukakisá ‘our words’ → kukakisá in 174a-b). The A bears the ergative suffix -héke, both as a full noun (174a-b) and as a pronoun (174c-d), and may occur either preceding or following the OV constituent (174b and 174a, respectively).

(173) Intransitive Clauses (from Franchetto 1990a:408, example 1)

- a. karaihá Ø-kacun-tárâ  
non.indian Ø-work-T/A  
‘The non-indian is working.’
- b. cué i-kacun-tárâ  
hard 3-work-T/A  
‘He is working hard.’
- c. cué i-kacun-tárâ-ko  
hard 3-work-T/A-PI  
‘They are working hard.’
- d. cué u-kacun-tárâ  
hard 1-work-T/A  
‘I am working hard.’

(174) Transitive Clauses (Franchetto 1990a:408, example 2)

- a. kuk-aki-sá Ø-ta-lâigo léha karaihá-héke  
1Incl-word-Relative Ø-hear-Future Aspect non.indian-Erg  
‘The non-indian will hear our words.’
- b. karaihá-héke kekuk-aki-sá Ø-ta-lâigo léha  
non.indian-Erg 1Incl-word-Relative Ø-hear-Future Aspect  
‘The non-indian will hear our words.’
- c. i-ta-lâigo léha karaihá-héke  
3(P)-hear-Future Aspect non.indian-Erg  
‘The non-indian will hear it.’
- d. i-ta-lâigo léha i-héke  
3(p)-hear-Future Aspect 3-Erg  
‘The non-indian will hear our words.’

Franchetto (1990a:409) illustrates the etymology of the ergative suffix -héke as a source locative:

- (175) eté iháki ipá-héke  
village far lagoon-Loc  
‘The village is far from the lagoon.’ (Franchetto 1990a:409, example 3)

The future suffix -lâigo must be derived etymologically from a combination of the Proto-Cariban action nominalizer \*-ri plus some unknown material. In contrast, the Perfective suffix -pârâ is easily recognized as descended from Proto-Cariban \*-tupu-ri ‘Past Tense Action / Object nominalizer-Possession/Action Nominalizer’.

- (176) tehú-héke u-e-pârâ  
stone-Erg 1-hurt-Perfective  
‘The stone hurt me.’ (Franchetto 1990a:410, example 4b)

Similarly, the punctual suffix -lâ is almost certainly derived etymologically from Proto-Cariban -ri (from Franchetto 1990a:410, example 5)

- (177) a. hâré Ø-té-lâ  
arrow Ø-go-Punctual  
‘The arrow goes.’
- b. hâré Ø-té-lâ i-héke  
arrow Ø-go-Punctual 3-Erg  
‘He made the arrow go / He shot the arrow.’

In addition to the Set II ergative system, Franchetto describes a Set II nominative system which she calls “de-ergativization”, derived etymologically from the idiosyncratic Proto-Cariban O nominalizer \*n- (cf. Chapter 7, §7.4). This nominalizer only occurs on transitive verbs etymologically. In synchronic Kuikúro as well, the process of de-ergativization only happens to transitive verbs. When the de-ergativizing prefix g-/ñ- [ŋ-/ñ-] ‘DeErgativizer’ occurs on the verb, the Set II clitic marks A rather than O. Since Set II prefixes always mark the S of intransitive verbs, it is the parallel marking of A or O which makes verb markers “nominative” versus “absolutive”. With the de-ergativized transitive verb, A marking is precisely parallel to all cases of S marking; hence Franchetto calls this de-ergativized sub-system “nominative”.

(178) With the de-ergative prefix, the Set II prefix refers to A

- a. ku-n̄-api-rái ágele  
 1+2-DErg-hit-Intentional he  
 'We shall hit him.' (Franchetto's 13a, p. 413)
- b. akiñá e-g-iha-tái u-iña  
 story 2-DErg-show-Intentional 1-Purpose  
 'You shall tell the story to me.'

As mentioned in Chapter 4 (§4.3.2), Franchetto (1986, 1990a, 1991a) suggests that this de-ergativizing prefix is cognate to the Set I personal prefix \*n̄- '3A/3S'. In §9.2.3 I summarize the arguments that the de-ergativizing prefix is etymologically derived from the Proto-Cariban O nominalizer \*n̄- as opposed to the Set I personal prefix.

### 9.2.2 Kalapalo

The Kalapalo are well-documented anthropologically (Basso 1973, 1985, 1986, 1987). Basso's anthropological works also display a high degree of linguistically sophisticated discourse analysis. However, Basso has not published a morphological analysis of Kalapalo, and the Southern Ergative Languages are just divergent enough from the members of the family with which I am more familiar that I have not been able to parse the Kalapalo text material into morphemes for comparative purposes. However, in a brief unpublished manuscript, Basso (1992) offers both some morphological analysis and a number of illustrative sentences. Based on these materials, Kalapalo does not seem to differ dramatically from Kuikúro, at least in terms of basic morphosyntax. All attested verb inflections belong to the Set II system and, with the exception of the de-ergativizing construction, the same set of personal prefixes mark both possession and absolutive on the verb. The A bears the ergative suffix -feke.

- (179) a. utelifa  
u-te-li-fa  
 I-go-punctual/reportative-Connective  
 'I'm leaving.'

- b. ofunigikofa ufeke  
o-funí-gí-ko-fa u-feke  
 2PI-hear-Perfective-Plural-Connective  
 'I have heard you (Pl).'

The de-ergative verb is parallel in form to that of Kuikúro, but Basso (pc) states that she has yet to study its distribution in both grammar and discourse, and as such has yet to demonstrate that it is truly a main clause verbal inflection in Kalapalo as it is in Kuikúro. It is interesting to note that the use of the de-ergative in 180 is parallel to the cognate construction in Panare (Chapter 8, §8.1.3), where it is used to put the A first in the clause, thus focusing attention on the A. In contrast, Franchetto (1990a) argues that the de-ergative construction is used to focus attention on the O (Chapter 7, §7.4).

- (180) ungelepefale ntsaketanimilefa  
 ungele-pe-fale Ø-n-tsake-ta-imi-lefa  
 that.same.person-salient-however Ø-DErg-cut.up-T/A-Purpose-Motonymic.Taxis  
 'And additionally, however, she was the only one who planned to cut it up.'

### 9.2.3 Arguments for the Nominalizer Etymology of the De-ergative Prefix

In this section, I summarize the arguments that the de-ergativizing prefix is etymologically derived from the O nominalizer \*n̄- as opposed to the Set I personal prefix \*n̄- '3A/3S' (these arguments are presented in more detail in Gildea 1991f):

- (i) The de-ergative prefix, like the Proto-Cariban O nominalizer, only occurs on transitive verbs. In contrast, the Set I A-oriented prefix \*n̄- '3S' also occurs on intransitive verbs.
- (ii) Verbs bearing the de-ergative prefix, like the those bearing the O nominalizer, bear an additional Set II personal prefix which refers to the A. In contrast, the Set I prefix itself refers to 3A and 3S, and it never combines with any Set II personal prefixes.

(iii) The de-ergative verbs have all the characteristics of construction reanalysis: the de-ergativized verb (like other Set II finite verbs) bears a Set II prefix, can take auxiliaries, bears etymological nominalizing morphology, and is attested in synchronic Kuikúro with the dual function of deriving an O nominalization (cf. Chapter 7, §7.4). The Set I prefixes occur in environments where there is no evidence of reanalysis.

The reason this particular Set II verb resembles the Set I system in being non-ergative is that the historical possessor of the nominalization was not the O, but the A (similar to the English object nominalization formed with *ee*, which is possessed by the A: *He is her' employeee* meets the same truth conditions as *She employs him*, thus possessor = A). This one nominalizing prefix is unique in each Cariban language in that the possessor of the derived nominal is the A rather than the O/absolutive. When the nominalization is reanalyzed as a verb, the possessive prefix is reanalyzed as the morphosyntactic representation of A. The system is not classically nominative, however, in that the de-ergative prefix does not occur on intransitive verbs (a noun referring to O cannot be derived from an intransitive verb, which has no O). The *n-* nominalizer in the northern Ergative Languages has apparently not evolved into a marker of independent clause verbal mood as it has in the southern Ergative Languages, but in northern Mixed Language Panare it has begun to do so (cf. Gildea 1991e, Chapter 8, §8.1.3).

In conclusion, rather than representing a conservative ergative system just beginning a family-wide move to nominativity, it seems that Kuikúro and Kalapalo are the most innovative of Cariban languages — not only have they completed the switch from the Proto-Cariban Set I verbal system to the innovative ergative Set II system, but they are now launching a new Set II nominative system based on the Proto-Cariban object nominalizer *\*n-*.

### Notes to Chapter 9

1 The morphological analysis of this verb is based on (1) the comparative knowledge that closely-related Pemóng and Makushi take a *y-* prefix on vowel initial stems with preceding possessors (cf. Chapter 6, §6.1.2), from the fuller form of the verb found in 127a, and from comparative knowledge of the phenomenon of syllable reduction in Makushi, Pemóng, and other Cariban languages (cf. Mattéi-Muller 1981 and Gildea 1991b).

2 However, in Makushi the 1+2 A ergative suffix is a zero form for both the person and the ergative component. Thus, a transitive verb which would normally take either an ergative argument or an ergative suffix will simply occur with no marking for A, and be understood as 1+2A (Abbott 1991:101, illustrated on 103). In the Kapóng data, we have to consider the possibility that the future verb is showing a parallel lack of marking to indicate 1+2A.

3 The only cases I could find of Kapóng 'live' were bore the progressive suffix, and both took the surface form *gomang*. I posit the underlying form *gomamí* by analogy to the Makushi cognate *ko'mamí* 'remain'. In addition, comparative evidence to date indicates that syllable reduction never happens to two consecutive syllables, and if the final syllable of the verb root is reduced, then we have a principled explanation for the first syllable of the progressive suffix occurring in its long form *-nó* rather than in the form which Edwards takes to be basic, the reduced form *-ng*.

4 Armellada produced an incredible number of books and articles in the 43 years from 1939 to 1981 — references to his works occupy 33 pages in the bibliography to Barceló Sifontes (1982). I have briefly surveyed Armellada (1973), a collection of 82 Pemóng folk tales, but I have so far found no examples of the Set I system in actual use. Presumably they are attested in others of Armellada's works.

5 This is the only example I have ever seen in a Cariban language where a descendent of the Proto-Cariban third person reflexive prefix *\*t-* can indicate second person. In the dialect of Arekuna which Tuggy studies, apparently the reflexive meaning has been extended to second person as well. Hopefully, Tuggy will illustrate the full possessive paradigm in future work, including whether the new scope of the reflexive extends to first person possessors as well.

6 This analysis is based primarily on Abbott's 1991:113-123, 127-9 description. I should note that Abbott offers a very different subgrouping of the tense/aspect forms, one based primarily on semantics and only secondarily on morphosyntax. My grouping is based on etymological class and on a synchronic position class analysis (derived from Abbott's statements about co-occurrence restrictions, as well as from her examples of co-occurring forms). At relevant points in my description of individual classes of forms, I give the position class and other morphosyntactic evidence for my sub-grouping of the tense/aspect suffixes. I do not include the "impending action" particle *kupí* in my treatment of the verbal tense/aspect morphology for three reasons: (1) it is neither affixal nor an auxiliary and thus does not form a synchronic class with any of the other tense/aspect morphology, (2) it seems to be derived etymologically from an adverb, unlike the other Tense/Aspect morphology, and (3) it apparently only occurs as a

modifier on universal tense verbs, and as such does not enter into the verbal complex proper.

7 Between Absolutive and the verb root there is an optional set of derivational voice prefixes which derive intransitive verbs from transitive roots. This same prefix class with the same function can occur in all verb forms in all Cariban languages — it is not sensitive to the distinction between Set I and Set II morphology, nor does it seem to be affected by the construction reanalysis which creates the Set II finite verbal system, and as such I do not discuss it in this study.

8 Note that Abbott 1991 does not consider this example to be a case of the sequence  $-\text{p}\ddot{\text{t}}\ddot{\text{t}}-\emptyset$  'Iterative-Universal', but rather to be a case of the iterative suffix standing alone as a finite inflection. However,  $-\text{p}\ddot{\text{t}}\ddot{\text{t}}$  'Iterative' and  $-\text{ka}$  'Reversative' precede the finite inflections  $-\text{p}\ddot{\text{t}}$  and  $-\text{sa}$ , and by analogy I assume that they must precede the universal tense  $-\emptyset$  when they appear to be occurring alone as finite inflections:

$-\text{p}\ddot{\text{t}}\ddot{\text{t}}$  'Iterative Aspect' =  $-\text{p}\ddot{\text{t}}\ddot{\text{t}}-\emptyset$  'Iter-Universal'  
 cf.  $-\text{p}\ddot{\text{t}}\ddot{\text{t}}-\text{p}\ddot{\text{t}}$  'Iter-Past'  
 $-\text{p}\ddot{\text{t}}\ddot{\text{t}}-\text{sa}$  'Iter-Compl'

$-\text{ka}$  'Reversative' =  $-\text{ka}-\emptyset$  'Reversative-Univ'  
 cf.  $-\text{ka}-\text{p}\ddot{\text{t}}$  'Rev-Past'  
 $-\text{ka}-\text{sa}$  'Rev-Compl'

This analogy is supported by the fact that when the verb bears an Aspect I suffix as its sole overt indicator of tense and aspect, the semantics of the aspect are combined with the semantics of universal tense in the translations. We would not expect  $-\text{p}\ddot{\text{t}}\ddot{\text{t}}$  and  $-\text{ka}$  to be reanalyzed into finite inflections like the nominalizers, since  $-\text{p}\ddot{\text{t}}\ddot{\text{t}}$  and  $-\text{ka}$  are etymologically part of a different set of Cariban derivational morphology, one which does not change the syntactic status of the verb stem, but rather one which adds to the meaning of the stem. In all Cariban languages this class of morphology occurs between the verb root and the inflectional or category-changing derivational suffixes, and in none do they get reanalyzed as finite inflections.

9 Note that the ability to bear an oblique postposition is by itself not a test of syntactic class, since these markers also can — in combination with nominalizers — be reanalyzed as parts of the Set II TAM morphology (cf. the Panare, Pemóng, and Kapóng imperfective/continuous/progressive suffix developed from the postposition  $\text{p}\ddot{\text{e}}\text{j}/\text{p}\ddot{\text{a}}/\text{p}\ddot{\text{o}}\text{k}$  'Locative', the Pemóng future tense developed from  $\text{p}\ddot{\text{e}}$  'Denominalizer', etc). It is only in combination with syntactic function as adverbial adjunct that the test of bearing an oblique postposition identifies a synchronic derived noun.

10 Abbott (1991:11) suggests that the suffix which has no lexical verb counterpart,  $-\text{tu}'\text{ka}$  'Finally' is cognate to the Hixkaryana completive aspect suffix  $-\text{t}\ddot{\text{h}}\text{ka}$  (Derbyshire 1979:140-1), which has a lexical verb counterpart  $\text{t}\ddot{\text{h}}\text{ka}$  (cf.  $\text{t}\ddot{\text{h}}\text{ka}-\text{t}\ddot{\text{x}}\text{e}\text{h}\text{ka}-\text{no}$  'Finish-Completive-T/A' 'He completely finished it.' (I wish to thank Des Derbyshire for pointing out the origin of the reference, and supplying the last example in personal communication). Also, Makushi  $\text{a}\text{r}\text{e}\text{t}\ddot{\text{t}}'\text{ka}$  'finish' — and the completive suffix  $-\text{a}\text{r}\text{e}\text{t}\ddot{\text{t}}'\text{ka}$  derived from it — appear to be this same cognate form plus some additional preposed material of unidentified origin. Derbyshire (pc) also notes that Hixkaryana, a Set I

Language with no synchronic  $-\emptyset$  nominalizer, has developed something akin to Aspect II suffixes from complement-taking verbs, and he suggests that the Hixkaryana and Makushi Aspect II affixes might be considered a shared innovation, and hence much older than my hypothesis would indicate. However, due to the relatively unreduced forms of these affixes, the transparent etymologies from still-extant lexical verbs, the naturalness of the process, and the fact that such suffixes are not more widely attested in the family lead me to posit relatively recent independent innovation. Further research is in order to reconstruct the path of reanalysis for the Hixkaryana Aspect II suffixes.

11 Although Abbott presents these as independent verbs, I do not see what distinguishes this use of  $\text{a}\text{r}\text{e}\text{t}\ddot{\text{t}}'\text{ka}$  from the suffix  $-\text{a}\text{r}\text{e}\text{t}\ddot{\text{t}}'\text{ka}$ . I had assumed that the only lexical use of the verb would be with a lexical noun as a complement (cf.  $\text{t}-\text{e}\text{k}\text{k}\text{a}\text{r}\text{i}\text{ }\text{v}\text{o}\text{n}\text{p}\text{a}$  'taste his food' in 166).

12 Although both Williams and Abbott recognize the imperfective as a verbal inflection, due to problems in recording the critical glottal stops, both conflate part of the imperfective suffix  $-\text{p}\ddot{\text{t}}$  with the Past tense suffix  $-\text{p}\ddot{\text{t}}$ , despite the completely different morphophonemic and morphosyntactic behaviors which occur with each. One must read through this conflation in each author's work to see the distinctions pointed out so clearly in Abbott (1991).

13 But see note 15.

14 Abbott does not indicate a suffix on the verb in this example. To be consistent with her earlier description, I have inserted a  $-\emptyset$  'Incl' suffix (as in the preceding example).

15 It seems likely that Abbott's analysis of the suffix  $-\text{n}\ddot{\text{t}}$  as always being '1+2' masks a possible decedent of the Proto Cariban action nominalizer  $*-\text{n}\ddot{\text{t}}$ . Consider the analogous form in Panare, where the cognate 1+2 S suffix  $-\text{n}\ddot{\text{t}}$  has been partially conflated with the  $-\text{n}$  action nominalizer / Set II Aspect suffix. As in Makushi, the Panare 1+2 suffix is restricted to intransitive verbs, and hence marks only S (rather than being an absolutive marker, which would also mark O); also as in Makushi, the Panare 1+2 suffix acts as a clitic in that if the 1+2 free pronoun precedes the verb, the 1+2 suffix does not occur. In the following, note that the 1+2 suffix  $-\text{n}\ddot{\text{t}}$  occurs between the verb stem (including meaning-changing derivational suffixes) and several Set II nominalizers cum aspectual suffixes,  $-\text{sa}$ ,  $-\text{j}\ddot{\text{p}}\ddot{\text{e}}$ ,  $-\text{s}\acute{\text{e}}\text{j}\text{p}\text{a}$ , and  $-\text{j}\ddot{\text{t}}\text{e}\text{p}\text{e}$ .

$\emptyset-\text{w}-\text{t}\ddot{\text{e}}-\text{n}\ddot{\text{t}}-\text{sa}$	'we (Incl) have gone / our (incl) having gone'
$\emptyset-\text{w}-\text{t}\ddot{\text{e}}-\text{n}\ddot{\text{t}}-\text{j}\ddot{\text{p}}\ddot{\text{e}}$	'we (Incl) have gone / our (incl) having gone'
$\emptyset-\text{w}-\text{t}\ddot{\text{e}}-\text{n}\ddot{\text{t}}-\text{s}\acute{\text{e}}\text{j}\text{p}\text{a}$	'we (Incl) will go'
$\emptyset-\text{w}-\text{t}\ddot{\text{e}}-\text{n}\ddot{\text{t}}-\text{j}\ddot{\text{t}}\text{e}\text{p}\text{e}$	'we (Incl) want to go'

In contrast to these examples, the  $-\text{n}\ddot{\text{t}}$  '1+2' suffix replaces the action nominalizer/nonspecific aspect marker  $-\text{n}$  when there is a 1+2 S:

<u>Ø-w-të-n</u>	'I go / my going'
<u>a-w-të-n</u>	'you go / your going'
<u>y-w-të-n</u>	'he goes / his going'
<u>Ø-w-të-në</u>	'we (Incl) go / our (Incl) going'

The fact that this idiosyncratic 1+2 suffix and the Proto Cariban nominalizer \*-nî have been conflated in Panare make it conceivable that the same process has happened in Makushi, especially given that the semantics of '1+2S' play no part in either the source construction or the reanalyzed construction. A \*-nî 'Action Nominalizer' etymology for the Makushi -nî in the imperfective would remove the -Ø 'Universal' morpheme from the source construction in 171a and would replace the '1+2' gloss of -nî with the gloss 'Nominalizer'. The construction would then presumably be exactly parallel to that in Panare, Kapóng, and Pemóng.

#### PART IV: THEORETICAL IMPLICATIONS OF THIS STUDY

At this point, the various arguments in favor of the hypothesis have been presented, and the exposition and synthesis of the comparative data is also finished. In this part of the study, I briefly discuss what these data can show us about broader questions, both typological and in further study of the Cariban family. In Chapter 10, I explore morphological and syntactic verbal finiteness as a synchronic theoretical notion. In Chapter 11, I conclude the study with brief comments on the semantic connection between source nominalizers and resultant tense-aspects, the Cariban violation of two claimed typological universals, syntactic change and language classification, and the difficulty of describing any synchronic Cariban language without a diachronic perspective.

## CHAPTER 10

## ON THE EVOLUTION OF FINITENESS

The notion “finite verb” has long been used as a cover term for two properties, as is displayed nicely in *Webster’s Third New International Dictionary* (1981:854): “of, relating to, or being a verb form which can function as a predicate or as the main element of one and that is limited (as in tense, person, and number)”.<sup>1</sup> Webster’s definition conflates two tests for verbal finiteness each of which have long traditions in the linguistics literature. The first is the “predicate-forming function”, otherwise known as the “simple sentence test”. Basically, if a verb can occur as the sole predicating element in a simple sentence, or as the sole verb in the matrix clause of a complex sentence, then this verb is defined as “finite” (cf. works such as Jespersen 1923, Timberlake 1976, Comrie 1976, Huddleston 1985, and Thompson and Longacre 1985). The second test is for morphological “limitation”. In this test, one compares various verbal conjugations to see which varies morphologically for the most “limiting” features, such as tense, aspect, person or number of participants (cf. works such as Bloomfield 1933, George and Kornfilt 1981, and especially Joseph 1983). These two definitions often converge — i.e. the verbs which can serve in or as the predicates of independent sentences in a given language often do bear morphology which “limits” them to certain tense interpretations and/or person or number of either A, S, or O. Because of this convergence, the term “finite” has been used without controversy in describing many languages of the world.

However, these two tests do not always converge; the Cariban languages discussed in this study provide a clear example where they do not. Given that verbs

bearing Set II suffixes were completely nominalized in Proto-Cariban, all analysts would certainly agree that they were nonfinite forms in Proto-Cariban. In fully independent clauses in Ergative Languages, all verbs and nearly all auxiliaries bear Set II suffixes; by the predicate-forming test, they must be considered finite verbs in these languages.<sup>2</sup> However, the morphological limitation test (as refined in Joseph 1983, discussed below in §10.1) requires that a morphological class of “finite verb” be isolated from a morphological class of “nonfinite verb”. Since verbs in dependent clauses (i.e. nominalizations) also bear Set II morphology, the morphological class defined by Set II morphology cannot be called “finite”; hence, despite their occurrence in independent clauses, verbs bearing Set II morphology would not be considered morphologically finite.

As a descriptive linguist facing such a contradiction between the two parts of the traditional definition, one needs a principled reason to choose one result over the other.

Joseph (1983) argues for taking the morphological test — augmented with other morpho-syntactic evidence — as primary. In seeking a discovery procedure for finiteness which allows one to state the maximal structural generalizations, Joseph ends up completely eliminating the predicate-forming test from consideration (in fact, he appears to consider it as derivative from morphological finiteness, albeit not perfectly correlated). Joseph’s discovery procedure seeks out necessary and sufficient criteria by which to identify members of the discrete category “finite verb”. I discuss Joseph’s approach to finiteness in §10.1.

In contrast, Givón (1990) argues that finiteness is the structural correlate of a functional domain; he characterizes the associated functional domain as “degree of predictability”, and therefore “degree of independence” from the surrounding discourse context. To Givón, finiteness is a structural property of clauses, rather than of verbs, and can be expressed by a range of clause-level morphology, both verbal and nominal. This range of markers for finiteness allows languages to mark many points on the scale from

“most finite” to “least finite”, meaning that different clause types can be relatively “more finite” and “less finite” than others. Given a language in which only two degrees of finiteness can be distinguished, then the terms “finite” and “nonfinite” can be used; but positing a priori a discrete category of either “finite verb” or “finite clause” is extremely reductionist according to Givón, and forces one away from examining the true variation to be found. I discuss Givón’s approach to finiteness in §10.2.

I believe that Joseph (1983) and Givón (1990) each fall into the same trap: they each identify a structural category which they label with the term “finite”, but neither of their discovery procedures refer to the functions which are coded by finiteness. Joseph (1983) takes the notion of finiteness to be virtually a theoretical prime, and then identifies the category “finite verb” by a theoretically unmotivated discovery procedure. While Joseph’s procedure does identify a real category of verbal morphology which is relevant in a grammatical description, I will argue that his restriction of the term “finite” to this category is an inappropriate reduction of the theoretical concept “finiteness”, yielding counter-intuitive results when applied to the Cariban Mixed and Ergative Languages. Givón (1990) discusses how the structural features of finiteness are coding devices for the functional notion of “degree of event integration”, or degree of functional “independence”, but then his discovery procedure for “most finite” clause does not make use of this theoretical claim. Much like Joseph (1983), Givón utilizes a discovery procedure which is theoretically unmotivated, and which thus produces undesirable results for several Cariban languages.

In §10.3 I try to reclaim the structural term “finite” as the label for a structural category which is defined according to what I take to be the primary function coded by finiteness: the “grounding” of a verbal concept so that a specific instance of the verbal action can be communicated in a single clause. The two steps to the discovery procedure are: (1) a “finite clause” is any simple (i.e. monoclausal) sentence which can be elicited in

isolation, and (2) in discourse, at least one “finite clause” occurs in every sentence (defined by pause phenomena and intonation contours). Based on these discovery procedures, the Cariban data support a binary division between the structural categories “finite clause” and “nonfinite clause”. It is within the discrete category “nonfinite clause” that we find the variations in degree of finiteness noted by Givón. I argue further that the morphological test of verbal finiteness is derivative — the morphological correlates of prototypical finiteness will often map into a unified morphological category, but since diachronic change leads to cases where dependent clause verbal morphology is reanalyzed as independent clause tense-aspect morphology, there must be room in a category of “finite clause” for morphologically less-finite verb forms as well. It is especially important to remember that morphology can be reanalyzed or extended to express more than one function, and hence membership in a morphological category (e.g. Joseph’s “finite” versus “nonfinite” verb) is not always a reliable test for membership in a syntactic category (e.g. verb in a “finite clause”).

#### 10.1 On the Morphological Distinction Between “Finite Verb” and “Nonfinite Verb”

##### 10.1.1 The Morphological Definition of “Finite Verb”

In the first chapter of his volume on Balkan infinitives, Joseph (1983) seeks to make the notion of finiteness “available by linguistic theory for use in language-particular descriptions”. He notes that current formal theories of grammar refer to the notion of finiteness in various rules, but none defines the term rigorously. He explores the question of whether finiteness is definable in theory, or whether it is a ‘pre-theoretical primitive’. He begins from the premise that it is not a primitive because “there are many languages in which this ‘primitive’ notion [finiteness — SG] plays no role at all in the grammar. In particular, there are languages which do not seem to admit of a grouping of verbs into two

classes (+finite and -finite, i.e. finite and nonfinite), which might be expected if this distinction were on a par with primitives such as noun or subject" (p. 9). To the extent that morphological finiteness (the second part of the Webster's definition) is not found in a language, Joseph decides that the entire notion of finiteness is not relevant for that language.

In further discussion (pp. 10-11), Joseph reduces the predicate-forming test of finiteness to a derivative property of the morphological criterion:

The motivation behind such a [morphological — SG] definition is presumably the same as that behind Timberlake's (1976:130) use of the term "nonfinite" to refer to "the extent to which a clause behaves as a simple sentence"; Timberlake notes that "nonfinite clauses are by definition reduced forms of sentences" (p. 138), so that if simple sentences (usually) contain verbs that show some marking for categories like person or tense, one way in which the "reduction" could show up would presumably be in the absence of such markings.

Thus, Joseph takes the predicate-forming and morphological tests to be terminological variants, with the morphological test "couched in more traditional terms" and the predicate-forming test "translated into somewhat different terms". He then argues that this unified definition breaks down, because it can lead to internal contradictions, such as when diachronic change leads to a situation where a morphologically nonfinite verb occurs "in or as the predicate of a matrix clause." Joseph takes such contradictions to mean that a new definition is needed.

Joseph's new definition both reduces and enhances the traditional definition. He reduces the traditional definition by eliminating the predicate-forming test altogether, and he enhances it by seeking "other grammatical criteria" to correlate with the morphological definition.

...it would seem that independent motivation for a division into a class of finite and nonfinite verbs (or clauses) is first needed, followed by an investigation of the features of one class as opposed to the other. Thus, one must find language-particular grammatical generalizations, e.g. of a phonological or syntactic nature, that

correlate with some morphological distinction such as marking for tense, and use these as tests for finiteness/nonfiniteness. (p. 16)

Joseph presents the examples of Ancient Greek, where morphological finiteness correlates with recessive accent; English, where morphological finiteness correlates with occurrence of the complementizer that; and Modern Greek, where morphological finiteness correlates with the use of certain verbal particles and the placement of clitic object pronouns.

Having divided the verbal system into two classes, he next faces the problem of how to decide which class is "finite" and which "nonfinite", so that the two can be compared cross-linguistically:

...since no one type of marking is relevant in all languages, one has to appeal to a more general notion; one could say, then, that the finite class will always be the set which is marked morphologically and the nonfinite the unmarked set, or perhaps even designate the finite class as the set with marking which is variable with respect to some feature, as opposed to invariant marking in the case of the nonfinite class. (pp. 28-9)

In sum, the definition of finiteness is taken completely from morphosyntactic facts, with no appeal made to the way these morphological categories of verbs function in the language in question — two morphological categories of verbs must be definable, these morphological categories must be corroborated by structural criteria, and then the label "finite" is accorded to the category whose morphology varies for the most features.

#### 10.1.2 Morphologically "Finite" versus "Nonfinite" Verb Categories in Cariban Languages

In Proto-Cariban and other Nominative Languages, Joseph's morphological definition works beautifully: verbs bearing Set I morphology are clearly distinct from verbs bearing Set II morphology, and the morphological distinction is corroborated by several syntactic distinctions as well (e.g. Set I verbs never occur in dependent clauses,

Set II verbs bear possessive clitics, Set II verbs can serve as objects of postpositions, etc.). Having established the utility of these two morphological categories in the grammar, the question of which category to call finite is resolved by comparing the morphological features which are marked in either category. Both Set I and Set II verbs are marked for tense and number, but where Set I verbs clearly vary for person of S and A, Set II verbs do not. (Set II verbs do require either a preverbal S (pro)noun or an S pro-clitic, and both Set I and Set II verbs require either a preverbal O (pro)noun or an O pro-clitic; however, (1) these cliticized person markers are not strictly verb-internal morphology, and thus are not relevant to the discovery procedure, and (2) even if we were to count them, Set II verbs still do not vary for person of A.)

Since Set I verbal morphology varies for person of A and S and Set II verbal morphology does not, Joseph's discovery procedure declares the Set I system "finite" and the Set II system "nonfinite". This conclusion is reinforced by the predicate-forming test, since only Set I verbs can serve by themselves "as or in the predicate" of a simple independent clause.<sup>3</sup> These morphological categories are distinct across all modern Cariban languages — verbs bearing Set I morphology always mark more features than verbs bearing Set II morphology, and the syntactic patterns associated with the two categories of morphology remain distinct despite various other changes in the languages. However, one of the key points made in this study is that verbs bearing Set II morphology have been reanalyzed in some Cariban languages such that they can now occur as the primary — or the only — predicating element in an independent clause. The morphological systems allowed in main clauses are illustrated in Figure 2, Chapter 4 (reproduced here as Figure 3):

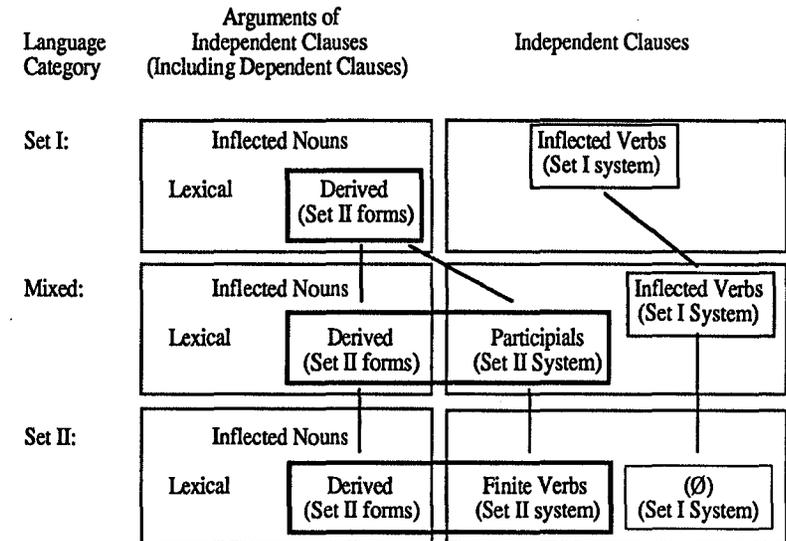


Figure 3. The Evolution of Nominalizations into Finite Verbs

In the evolution from Nominative Languages to Mixed Languages, the morphological category of verbs bearing Set II morphology becomes divided into two syntactic categories, one of which occurs in independent clauses (with Set I auxiliaries; hence, the label "participial" for the verbs bearing Set II morphology), and the other of which occurs in dependent clauses. In the evolution from Mixed Languages to Ergative Languages, I suggested earlier that the syntactic behavior of verbs bearing Set II morphology in independent clauses does not change, but that the loss of the Set I system changes the status of these verbs to the only candidates for the term "finite verb". I will modify this claim below (in §10.3), but since verbal morphology is the only point of interest in this section, this characterization is sufficient.

So in Mixed Languages, a subset of the Set II system has begun to occur in independent clauses. The Set II tense-aspects may play a very limited part in the verbal paradigm (cf. the one imperfective Set II aspect in Apalaf, the one future in Cariña, or the *Præsens Historicum* and ergative past described for another dialect of Carib), or they may be quite widespread (cf. the future, past, progressive, and habitual in Yukpa, or the 13 of 17 main clause inflections identified for Panare). The morphological distinctions between the Set I and Set II systems do not change when verbs bearing “nonfinite” Set II inflections are reanalyzed from nominalizations to main clause verbs — only the functions encoded by these morphological distinctions have been reanalyzed. And although Set II verbs do develop some new syntactic properties as a part of the reanalysis to main clause verbs (cf. Chapter 8, §8.1.2), they also retain many syntactic properties of their nonverbal origin, and hence a search for syntactic properties to reinforce membership in the morphological category would succeed. Thus, in Mixed Languages the reanalyzed Set II verbs would still be considered nonfinite, and the Set I verbs (which occur only in past tense in the Mixed Languages) would be considered the only finite verbs. The fact that “nonfinite” verbs mark most main clause verbal tenses and aspects in, e.g., Panare, is not a problem, since the predicate-forming test is not considered relevant to the determination of verbal finiteness.

When we review the status of the Ergative Languages, we find that Kapóng and Pemóng still retain a vestige of the Set I system, but that Makushi, Kuikúro, and Kalapalo do not. As such, the latter must be treated somewhat differently.

Kapóng and Pemóng are like the Mixed Languages in that they show both Set I and Set II verbs in main clauses. However, they pattern with Ergative Languages (in opposition to the Mixed Languages) in that (1) only the tenses which take a nominative A retain the auxiliary (which agrees with A) — for other tenses, the addition of an auxiliary marks a change to a more complex tense — and (2), in tenses which take an ergative A,

reference to this A is now obligatory, either as a free noun bearing the ergative suffix or as a postverbal ergative clitic. Verbs bearing Set I morphology clearly belong to a different category than verbs bearing Set II morphology; the Set I category must still be regarded as “finite” since it varies for more features than the Set II verb.

By the time we consider the case of Pemóng, only two Set I tenses occur, and these are apparently barely used by modern speakers. Clearly, we are only a step removed from the total loss of the Set I system, as seen in the closely related (even mutually intelligible, according to Abbott 1991) language Makushi. In Makushi, with the loss of the Set I system, only one morphological class of verbs exists. As such, by definition the distinction between finite and nonfinite verbs is not relevant, and hence finite clauses cannot be distinguished from nonfinite clauses — i.e. the distinction between finite and nonfinite is not relevant to the distinction between independent/main clauses and dependent/subordinate clauses. This same conclusion must also hold in the Southern Ergative Languages Kuikúro and Kalapalo. In sum, by Joseph’s definition the loss of the Set I system entails the loss of the distinctive feature [finite] from the grammar of Cariban Ergative Languages.

However, at this point it is instructive to note that the “nonfinite” Set II verb word in Mixed Languages such as Panare does not stand alone as an independent clause; rather it occurs with an obligatory reference to the absolutive (i.e. either the absolutive nominal or its reduced form, the clitic prefix, must occur) and also with an auxiliary which both marks tense and agrees with the nominative (S or A). While the auxiliary is frequently omitted in discourse, in elicitation — where discourse context cannot supply information about the time frame of the clause nor about the identity of the A — most informants insist that the auxiliary is obligatory. Thus, the features of finiteness which distinguish the “finite” Set I verb word from the “nonfinite” Set II verb word are found elsewhere in the independent Set II clause, such that the Set II verb phrase might be considered “finite”

if the structural definition were to account for obligatory morphology beyond the verb word proper.

Since clauses containing the “nonfinite” Set II tenses do not reference any fewer morphological features of finiteness than do clauses containing Set I verbs, one might ask why finiteness is defined purely at the level of the verb word rather than at the level of verb phrase or even clause. Along this line of questioning, one might note that the traditional definition of finite does not refer to the verb word, per se, but to the predicate (Webster’s) or clause (Timberlake 1976) in which the verb occurs.

Also, one might ask what there is in the theoretical notion of finiteness which should make it a candidate for a “universal” category — why do so many languages show a distinction between morphological categories of verbs such that one category both (1) is restricted for (i.e. marks) more features like tense and person, and (2) occurs more easily in independent clauses?

Perhaps in anticipation of these questions, Joseph suggests (note 29 to chapter 2, p. 260-1):

If it should be judged that this “definition” does not give a precise characterization of “finiteness”, but instead only outlines a “discovery procedure” for identifying the realization of this feature in any given language, then the fact that finiteness is not easily defined and must be looked at in this way might well indicate that it should be treated as an undefined primitive notion, realized differently in different languages. This case would thus be entirely analogous to the problems noted above with the definition of “subject”.

Joseph’s definition of finiteness does not (and cannot) answer such questions as those posed in the preceding paragraphs; this is a limitation of the model of linguistics which he has adopted. When one attempts to define the study of linguistics purely in terms of interacting structures, some structural concepts which are derivative from function simply cannot be characterized, but must be taken as primitives. Then these theoretical primitives are identified in actual language data by discovery procedures which are

internally consistent, but which may yield intuitively unsatisfying results (i.e. which do not align with the function which motivates the structural category in the first place).

In order to characterize the theoretical notion of finiteness, one must address the reason for the traditional connection between independent clauses and the morphological category of finite verb. Since this connection cannot be motivated solely with reference to linguistic structure, in the next section I turn to Givón (1990), who discusses the functional motivation behind the structural notion of finiteness.

## 10.2 On Finiteness as a Functionally Motivated Scalar Notion

### 10.2.1 The Structural Scale of Finiteness

From his perspective of language as a discourse-based phenomenon, Givón (1990:826) first rejects even the concept of a simple sentence in isolation, and then the structural dichotomy between “dependent” and “independent” clauses:

First, no clause is totally independent of its immediate clausal context — in connected coherent discourse. Consequently, the strands of discourse coherence always entail some grammatical concomitants, which one could rightly interpret then as syntactic dependency.

I interpret Givón’s claims as follows: first, in natural speech, all utterances are dependent on some sort of context, whether from previous discourse (or in anticipation of discourse to follow), from physical context, or from shared cultural presuppositions. As an example of a grammatical concomitant which appears to entail syntactic dependency of one “finite” clause upon another, the sentences in 181 (from Givón, pc) show how the first in a sequence of finite clauses in English establishes the tense which the other must also bear:

- (181) a. He came in and sat down.  
 b. He comes in and sits down.  
 c. \*He came in and sits down.  
 d. \*He comes in and sat down.

In these conjoined sentences, Givón argues that the first is more finite than the second because the tense of the second does not vary independently from the first. These sorts of dependencies are not relevant for monoclausal sentences elicited in isolation, which Givón takes to be evidence that finiteness is a gradient which can only be fully explored when sentences occur embedded in a context (i.e. “simple sentences” do not show the range of variation necessary to characterize finiteness of clauses).

In further discussion (pp. 852-860), Givón (1990) turns more specifically to the topic of finiteness. He distinguishes his discourse-based functional approach to finiteness from the traditional approach as follows:

- (a) Clausal domain: Finiteness is a property of the clause (rather than of the verb).
- (b) Complexity and scalarity: Finiteness is a complex, multi-featured, scalar grammatical meta-phenomenon (rather than a single, discrete, binary feature).
- (c) Coding Function: Finiteness is the systematic grammatical means used to express the degree of integration of a clause into its immediate clausal environment. The syntactic dependence of the clause — i.e. its finiteness — is thus used to code thematic dependence of an event/state on its discourse context.

In essence, Givón’s (1990) treatment of finiteness subsumes Joseph’s (1983) discovery procedure in that a verb which varies morphologically for more features of finiteness will still occur in the “most finite” clause type of a language. However, Givón’s treatment goes beyond Joseph’s in that Givón considers each minute variation from the morphological marking of the “most finite” clause to indicate not a binary oppositional distinction of “nonfinite”, but another step along a scale towards lesser finiteness.

In order to discuss variations from the “most finite” clause, one must have a means to identify the “most finite” clause type without circularity (i.e. without reference to the structural features of finiteness one uses to mark variation from the prototype). Givón considers finiteness to be the morphosyntactic material which codes “degree of independence” from surrounding discourse, with the “most independent” clauses coded

by the “most finite” morphosyntax, and with the “less independent” clauses typically to be coded by “less finite” morphosyntax. However, as his heuristic, or discovery procedure, Givón (1990:853) offers:

The finiteness of a clause is expressed as the degree of its similarity to the prototype transitive main clause.

I translate this claim into an explicit discovery procedure as follows: first, determine the most transitive clause type in a language (according to Hopper and Thompson’s 1980 criteria). Second, note all the verbal and nominal morphosyntax which occur in this clause. These morphosyntactic characteristics by definition constitute structural marking of the “most finite” clause. Third, take any other clause from the language and compare its morphosyntax with the morphosyntax of this “most finite” clause — any variations are taken to be markers of structurally “less finite” clauses.

According to Hopper and Thompson (1980:252), the most transitive clause types involve a volitional, highly potent agent doing a visible action in telic aspect, realis mode, with the result that some highly individuated patient is totally affected. Hopper and Thompson explain in detail how each these parameters contributes to the prototypical transitive clause, and in their summary of transitivity they suggest that the most important parameter of transitivity is not valence of the verb, but rather the degree to which an action is “carried through” to its conclusion. Givón claims that, cross-linguistically, the “most transitive” clause type correlates with the “most finite” clause type. That is, cross-linguistically, if there is a distinction in the morphosyntax of, e.g. active versus passive clauses, it is active clauses which show the “more finite” morphosyntax; similarly, if there is a distinction in the morphosyntax of affirmative versus negative clauses, or of declarative versus manipulative clauses, or of realis versus irrealis clauses, or of telic versus atelic clauses, it is always the affirmative, the declarative, the realis, or the telic clause which shows the “more finite” morphosyntax. Givón (1990) does not explain why

this correlation (between prototype transitive clause and prototype finite clause) should hold, but only claims that it does.

These correlations do make sense given that Givón considers functional independence to be another way of talking about predictability. That is, the more predictable the features of a given clause are (i.e. tense or person might be predictable from the preceding discourse or from the speech act context), the more that clause can “depend” on the context to provide the hearer with the information, and therefore the less need there is to mark these features explicitly in the morphosyntax. Thus, one might suggest (c.f. Givón 1984:323ff) that a negative speech act takes as its speech-act context the presupposition that the hearer already believes the affirmative to be true. In this sense, the negative clause is more dependent, since it exists only in the context of a presupposed affirmative clause. Thus, following Givón’s discovery procedure, it appears not be mere coincidence that typologically, negative clauses often occur with less finite morphosyntax and affirmative clauses with more finite morphosyntax. Similarly, manipulative speech acts like imperatives prototypically presuppose both the agent of the act, the second person hearer, and the fact that the action in question has not been done, meaning the clause refers to an irrealis event. Hence, the morphosyntax of the imperative clause need not express either person of the agent nor TAM directly, and as such the imperative clause is often morphosyntactically “less finite” than the declarative.

#### 10.2.2 Scales of Finiteness in Synchronic Cariban Languages

By expanding the scope of finiteness to include other elements of the clause, Givón’s treatment of finiteness takes us farther than Joseph’s in accounting for synchronic Cariban languages. Recall that Joseph’s morphological discovery procedure correctly defined Set I verbs as “finite” and Set II verbs as “nonfinite” in the Cariban Nominative Languages, but that in Mixed and Ergative Languages, this procedure led to

the counter-intuitive statement that the emerging Set II system was “nonfinite” not only at the beginning of the change (i.e. in Mixed Languages), but even approaching the conclusion of the change (i.e. in Ergative Languages Kapóng and Pemóng). At the end of the change, the feature [finite] was said to play no role in the Ergative Language Makushi, since verbs in both independent and dependent clauses varied for the same morphological features of finiteness.

But as I pointed out in §10.1.2, all the features of finiteness which are marked in the morphology of the Set I verb remain marked in the Set II independent clause — they are just marked in verb-external morphology. That is, for all Set II independent clauses, the absolutive obligatorily precedes the Set II verb, either as a free (pro)noun or as a clitic. For a subset of Set II conjugations, tense and A-agreement are marked with an auxiliary; for a different subset, tense is marked in the verbal suffix and the A obligatorily occurs as either a free (pro)noun or a reduced form cliticized to the end of the verb word. In dependent Set II clauses the preverbal absolutive is obligatory, but tense and reference to the A are not. In this sense, the morphologically unified category of verbs bearing Set II morphology occurs in syntactically distinct contexts: independent clauses which contain reference to all relevant features of finiteness and dependent clauses which do not. Givón’s treatment of finiteness as a clause-level property allows us to distinguish verbs bearing reanalyzed Set II morphology in independent clauses from unreanalyzed verbs bearing Set II morphology in dependent clauses.

In addition, Givón’s criteria lead us to posit a finiteness distinction in Mixed and Ergative Languages between clauses containing Set I verbs and clauses containing Set II verbs. Since the prototype transitive clause is an affirmative, active, telic assertion, the prototype transitive clause in a Mixed Language like Panare must be a clause containing a verb inflected for a Set I past-perfective tense. Since the morphosyntax associated with the “prototype transitive clause” type is taken as the standard for “most finite” as well, the

“most finite” clause in a Mixed Language like Panare must be defined in terms of the morphosyntax of the Set I system. Then the verbs bearing Set II morphology in independent clauses differ from the “most finite” (and are thus “less finite”) in at least three ways: tense and A agreement are marked in the auxiliary, the main verb no longer agrees with A, and the verb bears absolutive prefixes. Verbs bearing Set II morphology in dependent clauses differ still more from the “most finite” in that tense and identity of A need not be marked at all in the clause, an overt A (pro)noun bears the Dative postposition, and an overt absolutive (pro)noun precedes the verb. This final conclusion accords with my intuition that dependent clauses ought to be “less finite” than independent clauses, even though both take verbs bearing the same morphology.

However, this methodology does lead us to the somewhat counter-intuitive conclusion that in the Mixed Language Panare, independent clauses containing Set II tenses and aspects must then be termed “less finite” than independent clauses containing Set I tenses and aspects. That is, since the discovery procedure for “most finite” morphology is defined in terms of the “most transitive” independent clause, then “less transitive” independent clauses will end up being defined as “less finite” as well. A similar result would arise from consideration of English, where the prototype finite clause must be defined in terms of the past tense (more transitive than the atelic present tense), in which the verb is marked only for tense (and for person if we accept the rather less-transitive copular paradigm into evidence). However, the entire array of independent clauses which utilizes modal verbs would be considered “less-finite” in comparison (since no verb in such a clause varies for either person or for tense). Thus, the English independent clause he hit the man yesterday must be labelled “more finite” than the equally independent clause he will hit the man tomorrow. If finiteness is truly the structural correlate of functional independence, then this position is untenable.

It is presumably in order to avoid defending such a position as this that Givón includes in his definition the caveat “other things being equal.” Givón (1992) states explicitly that a major caveat “concerns the consequences of diachronic change.” Often, diachronic change involves a reversal in the markedness relationship between a pair of structures which share a similar truth value, but which differ in age of form-function pairing. An older form-function pairing is likely to be morphosyntactically less marked (be marked with fewer or phonologically smaller morphemes, both reductions due to erosion in the sense of Heine, Claudi, and Hünemeyer 1991), whereas the newer form-function relationship tends to be structurally more marked (due to the recent reanalysis of such things as lexical items and paratactic constructions). In another sense of the term “marked”, the newer form-function relationship often begins as a pragmatically marked alternant of the older, then becomes “overused” until it becomes the new unmarked way to state the function (for instance, Heine and Reh 1984 show that declarative clauses in Rendile and Somali are derived etymologically from a “focus construction”, which was once presumably a pragmatically marked alternant of a non-focused declarative clause, but which is now the only way to express an independent proposition). As argued in Givón (1991a-c), the pragmatically marked constructions must also be distributionally marked in order to notify the hearer that a piece of information is unusual in some way. Thus, as a new construction occurs more and more frequently in discourse, it loses the ability to mark a deviation from the expected, and becomes the pragmatically neutral way to express the tense-aspect (or other) function with which it is paired. The old construction (due to its decreased frequency of use) becomes the exceptional way to state something, and thus becomes distributionally (and hence probably pragmatically) marked vis a vis the newer construction. It appears that in short order, the older construction stops being used.

The reanalysis of Set II past-perfective tenses in the Ergative languages Kapóng and Pemóng provide a clear example of such a process of markedness reversal. In the Mixed Language Panare, the Set II suffixes *-sa'* and *-jpě* function as perfect participles which form passives. In the Ergative Languages Kapóng and Pemóng, the cognate forms *-zak* and *-pǎ/-pǐ/-pue* have presumably moved through the passive stage to arrive as active ergative inflections (cf. Chapter 9, §9.1.1, §9.1.2, and also Chapter 11, §11.2.2). In the one brief Kapóng text available to me, the Set II past tenses *-pǐ* and *-zak* mark the verbs in 24 of the 31 past-perfective clauses, whereas the Set I past tense *-i* marks the other seven. In Pemóng, I could find no cases of the Set I past tense in texts. Although my text samples for both languages are very limited, and are all of the same genre (historical-legendary narrative), if similar distributions are found in larger and more diverse discourse samples, then this is a paradigm case of markedness reversal: the older (Set I) past tense is less marked structurally, but more marked distributionally; the newer (Set II) past tenses are more marked structurally, but less marked distributionally. Further, the Set II past tenses presumably went through a stage when they marked a passive construction (cf. Chapter 11, §11.2.2 for a schematic representation of the stages of reconstruction), during which time they were pragmatically marked as well. Thus, as a part of arriving at their synchronic stage, where they are distributionally less marked than the corresponding Set I inflection, these Set II tenses lost their pragmatically marked function as well.

It is this sort of markedness reversal which prevents Givón's characterization of finiteness from being an absolute definition. That is, if the process of diachronic change is regularly bringing new, structurally more marked constructions into independent clauses, then the structures which mark the affirmative, realis, telic, etc. prototype transitive sentences (which may be either the new or the old) may differ radically from those which mark other tenses, aspects, or modes (which also may be either the new or

the old). For example, a newer construction might have recently been reanalyzed in the imperfective (an atelic clause), and this new construction would have very different structural characteristics from the (telic) prototype transitive clause — if finiteness is absolutely defined as degree of structural similarity to the prototype transitive clause, then the newly reanalyzed imperfective will be considered “less finite” (this is the case for the Apalaí Set II continuous inflection *-ǎko*). Similarly, if the past-perfective tense (the standard by which to measure finiteness of other clauses) is a product of recent reanalysis, then the standard for finiteness will actually be more marked structurally than the other tenses (for example, the prototype telic transitive clause in French must use the recently reanalyzed *Passé Composé*, which takes independent clause morphosyntax that is unique in the language).

Givón (1992) concludes that the generalizations he makes about markedness only hold “at some mid-range in the life-span of a form-function pairing — after the process of its structural differentiation but before the bulk of its structural decay” (emphases in the original). I suggest that the same type of caveat is needed to allow for the existence of different structures which mark the same degrees of predicate independence: newly reanalyzed verbal systems in finite clauses will be structurally marked relative to the oldest verbal system, and although the newer verb word itself will be less finite than the older verb word (in Joseph's 1983 terms), the entire clause will be no less independent, and hence should not be labeled as less finite.

At a more basic level, Givón's (1990) test of finiteness fails in independent clauses because it does not rely on the functional notion which he contends motivates the marking of finiteness — dependence and predictability. Instead, it takes an observed correlation between (i) degree of transitivity and (ii) morphological marking of features of finiteness and elevates this correlation to the status of discovery procedure for finiteness. In Cariban languages this procedure results in one sub-category of fully

independent clauses being defined as “less finite” than another sub-category of fully independent clauses. In order to give a fully satisfying account of finiteness in Cariban languages, we need to define the structural notion of “finite clause” in such a way as to be derived from the functional notion “independence”. In §10.3 I argue for a return to the “simple sentence test” as a discovery procedure for finiteness in independent clauses.

### 10.3 A Return to the Simple Sentence Test of Finiteness

Joseph (1983) argues that finiteness is a property of verbal morphology. Givón (1990) argues that finiteness cannot be restricted to only the verb, but is better viewed as a property of clause-level morphosyntax. Both define finiteness as either identity with (Joseph) or degree of similarity to (Givón) a unique class of morphology (Joseph) or morphosyntax (Givón), however the unique classes are not identified with reference to the functions coded by finiteness. In this section, I suggest that finiteness in the Cariban languages is best viewed as a property of the clause, but that the category “finite clause” should be identified in a more motivated way, such that different clauses which are all “fully finite” be allowed to contain variation in the morphosyntactic marking of the various obligatory features of finiteness. This test is the “simple sentence test”, verified (where possible) by discourse distribution. Before discussing the test in detail, I motivate it by returning to the discussion of the functional domain coded by the structural markings of finiteness.

Givón (1990:853) suggests that “the syntactic dependence of the clause -- i.e. its finiteness -- is ... used to code thematic dependence of an event/state on its discourse context.” However, as seen in the previous section, the same variations in morphosyntax which Givón takes to mark a decrease in finiteness can also occur in completely independent clauses. This is due to the diachronic process by which new independent clause tenses and aspects are formed: clauses which were historically dependent are

reanalyzed as monoclausal independent clauses (usually along with some sort of etymological superordinate verb). These newer tenses and aspects thus show the morphosyntax of their source, the less finite dependent clause. The question thus arises: How can we determine when “less finite” morphosyntax has been reanalyzed as part of a “fully finite” independent clause?

Another way of characterizing the functional task of finite morphology is hinted at in the second part of the Webster's Dictionary definition: “...and that is limited (as in tense, person, and number)”. To follow the implications of this metaphor, consider the infinite, or unlimited verb: it would presumably represent the essence of the verbal action, not grounded in any time or place, and not referring to any specific participants. In order to use this verb to describe any single concrete occurrence of its action, it must be grounded to a particular time and space, and it must be connected to specific participants. Further, the speaker might also want to specify his/her degree of certainty as to whether the event did (evidentiality) or will (epistemic value) take place. Once the verb is conceptually grounded in this way, the speaker can actually use it to construct an utterance. For a hearer to be able to understand the speaker, the speaker must construct an utterance which provides sufficient information to ground the verbal meaning to the particular set of specific circumstances in question.

In this sense, finiteness is not restricted to the verb word proper, but to whatever parts of speech limit the scope of the action which is referred to by the verb word. Ideally, an utterance must be sufficiently grounded that the interlocutor is able to limit the reference of the utterance to the specific instance intended by the speaker. In practice, the reference of the utterance need not be restricted solely by linguistic material, but might be grounded in other ways, such as by physical context — for an event which is ongoing, the time is “now”, the place is “here”, and the referents are identifiable without the use of linguistic material. In the right physical context, the single word “Score!” could

constitute a fully grounded (and therefore comprehensible) utterance. Similarly, discourse context could provide much of the needed information to ground an utterance. For example, in a stretch of discourse where the same referent is the subject of every clause, the subject need not be explicitly re-identified in each clause (cf. studies from Givón ed. 1983). Similarly, when a stretch of discourse refers to a connected series of events, the time and place can be inferred from the preceding clauses, so that each clause need not restate the time and place of the occurrence in order for the interlocutor to understand that they have not changed.

However, the pragmatic context of a simple independent elicited sentence provides the closest thing a linguist can encounter to a context-free forum, where only the linguistic material of the clause under consideration limits the verbal meaning.<sup>4</sup> Such a clause must independently ground the action denoted by the verb sufficiently for the hearer to at least identify “who did what to whom” — and s/he should further know when, where, and the speaker’s evaluation of either evidentiality or epistemic value associated with knowledge of the action, as these things are relevant. If the simple sentence is the forum where the action denoted by the verb must be most explicitly grounded by linguistic material, then this is the forum where at least such things as participant and tense reference are most likely to be obligatory.

This line of reasoning makes a prediction about simple sentences, which goes beyond verbal morphology: obligatory features of finiteness which are not morphologically marked in the verb will be obliged to occur outside the verb, but still within the clause. In the Cariban data (assuming that examples found in the various sources represent simple elicited sentences), this prediction is correct. In the Set I system, tense and person (of S or of both A and O) are marked in all verbs.<sup>5</sup> The Set II verbal system differs somewhat from language to language, and from clause type to clause type in individual languages. But in nearly all, the absolutive is obliged to precede the Set II

verb, either as free noun or as clitic. In Mixed Languages, tense and A/S agreement are marked in an obligatory auxiliary. In Ergative Languages, most tense-aspect distinctions are marked morphologically on the verb and auxiliaries are no longer required (if they occur, they alter the tense-aspect value for the clause); further, in the tenses which call for an ergative A, reference to this A becomes obligatory, either as a free noun or as a clitic. One simple Set II ergative tense, the future, still requires an auxiliary as a part of the tense-marking morphology, and a number of complex tenses (e.g. the past-perfect, and the imperfective in any tense) require auxiliaries as well. In imperfective clauses, the A is never marked as ergative, but the obligatory auxiliary either agrees with A/S or else requires A/S to occur preceding the auxiliary, either as a free noun or as a clitic. Further, the imperfective verb does not require a preverbal S, but only O.<sup>6</sup> In sum, the features of finiteness found in the Set I verb (which can stand alone as a clause) are tense and person marking. These same features are also required in Set II independent clauses, but rather than being internal to the verb, they occur elsewhere in the clause. So in simple sentences, the notion of “finite clause” in Cariban seems relevant — certain functional categories simply must be marked.

It is worth noting as well that these functional categories must be marked by means of particular structures. Functionally speaking, any clause which includes an adverbial of time could be said to ground the time of the verbal action in a way similar to tense marking, and if the A noun occurs overtly with an adverbial of time, then the auxiliary in Mixed Languages is functionally superfluous. However, speakers continue to prefer that the auxiliary occur, showing that there is something more to the notion of finite clause than simply accounting for all functional features of finiteness.<sup>7</sup>

As Givón notes, clauses are never completely independent in coherent, connected discourse, and given the grounding context of discourse, no single sentence needs to fully ground the verbal action in and of itself. However, the structural categories available to a

language to express finiteness are the same in discourse as they are in elicited data. One might therefore ask if any correlation is seen in connected, coherent discourse with the features of finiteness required in simple sentences in isolation. In the texts which I have surveyed from Carib, Kapóng, Panare, Pemóng, and Makushi, without exception, every major utterance bounded by pause (defined as the text between periods) contains at least one clause which is marked for the same features of finiteness as are required in simple sentences in elicitation.

Overall, the structural components of the “finite clause” — as defined in simple elicited sentences — seem to be required at least once in every sentence in connected, coherent discourse. This confluence of evidence (at least for the languages where I have text data) greatly enhances the reliability of the notion “finite clause”, since such different genres of language as elicitation and connected discourse both point to the relevance of the same category. Given that the notion “finite clause” is relevant in Cariban languages, the opposed notion of “nonfinite clause” is relevant as well, if only as a cover term for the range of syntactic constructions which do not qualify as finite clauses. Thus, Givón’s “degrees of finiteness” might be better seen (at least in Cariban languages) as defining degrees of variation within the discrete categories “finite clause” and “nonfinite clause”.

#### 10.4 A Note on the Evolution of Morphologically Finite Verbs

In §10.1, I pointed out that the notion “finite verb” as defined by the morphological test gave somewhat unsatisfying results, as it isolated only verbs inflected with Set I morphology in any Cariban language. The essence of this diachronic study has been to show that verbs bearing etymologically nonfinite morphology are reanalyzed in certain Cariban languages, after which they occur as the primary predicating element in finite clauses (recall Figure 2 from earlier in this chapter for a schematic representation of

this reanalysis). Given that in so many languages the morphological category of “finite verb” seems to be co-extensive with the category “verb which occurs in a finite clause”, one might ask whether there is any evidence that Cariban languages are moving towards marking the required features of finiteness directly in the verb word.

In looking at the way linguists have transcribed clauses in Ergative Languages — and especially looking at which morphological items they consider to be a part of the verb — it is clear that a process of fusion has already begun; soon all of the elements which are already obligatory in finite clauses will reduce and bind to the verb until they actually become verbal morphology (cf. the scenarios described in Givón 1973). The following examples from the Ergative Languages Kapóng, Makushi, and Pemóng illustrate:

(182) Kapóng (Edwards 1972)

azaro warawokamök achiipiiya  
 azaro warawokamök Ø-achii-pi-ii-ya  
 two boys Ø-hold-Past-3-Erg  
 ‘He held (caught) two boys.’ (p. 47, lines 12-3)

(183) Pemóng (Edwards 1972)

avaröyasee  
 a-arö-Ø-ya-see  
 2-take-1-Erg-1A/S.Future.Auxiliary  
 ‘I will take you’ (Edwards 1972:50, line 19)

(184) Pemóng (Tuggy 1989)

a.	<u>i-tö-pä</u>	b.	<u>i-kä-pä-pä-i-ya</u>
	3-go-Past		3-smear-Past-3-Erg
	‘He went.’		‘He smeared him.’

(185) Makushi (Williams 1932:81)

<u>ainú-nəpə-wái</u>	(cf. Abbott’s	<u>-ní-pí-wai</u> )
fly-Imperfective-1.be		(-1+2 at 1.be)
‘I fly’		

(186) Makushi (Carson 1982:)

<u>y-eká-pi-nán</u>	(cf. Abbott’s	<u>-Ø-pí-nan</u> )
3-bite-Perfective-2Sg.Continuous		(-1+2 at 2.be)
‘You were biting it.’		

(187) Makushi (Abbott 1991)

i'-po-pífi-tu'ka-'pí-i-ya  
 3-Whip-Iter-finally-Past-3-Erg  
 'He finally whipped him.' (Abbott's 497, p. 123)

What each of these examples has in common are that all elements of the clause are phonologically bound to the verb, even those those elements which are syntactically distinct: the absolutive and ergative affixes are syntactically actually clitics (cf. Chapter 7, §7.3 and Chapter 9, §9.1); the -wai suffix in 185 and the -nan suffix in 186 are etymologically suppletive variants of a copula, (and still must be considered syntactically distinct from the verb — i.e. auxiliaries — since the ergative clitic occurs between them and the verb, cf. the examples from Abbott 1991 in §9.1.3.1).

In time, the Set II tense-aspect inflections (which are technically the only verb-internal inflectional morphology in synchronic Set II clauses) will be joined by verb-internal person-marking and also (where required synchronically) by reduced forms of auxiliaries. When this happens, the morphological test and the simple sentence test will once again yield a coherent result.

Notes to Chapter 10

- 1 The idea of checking a dictionary definition for the quintessential “traditional definition” comes from Joseph (1983), who cites a definition from the American Heritage Dictionary (1978) — one which, interestingly enough, only included the second of the two properties cited in the Webster's definition.
- 2 The various Cariban linguists who work with Set II Languages have all described Set II tenses and aspects as “finite” when they occur in main clauses, including even Abbott (1991), who restricts the category the most.
- 3 As in all languages, there are exceptions: for example, imperatives take a reduced tense-aspect and person marking system and predicate nominal clauses can occur with no verb at all (i.e. simple juxtaposition of two nouns constitutes an equative clause). Similarly, negative and desiderative clauses are always expressed by mediation of special “nonfinite” verb forms.
- 4 At this point, I feel obliged to point out that a large body of socio-linguistic research has proven conclusively that the elicitation interview is not context-free, but is a social and linguistic context of its own, with a genre of speech all its own. Thus, Givón's claim is true, that all clauses are connected to discourse context at some level. However, the discourse context of elicitation is clearly different in kind from what Givón calls “connected, coherent discourse” (at least my elicitation sessions show very few contiguous sentences which could be taken as connected thematically, temporally, or in virtually any way other than analytically).
- 5 A hedge: the O-Oriented Set I prefixes (Chapter 5, §5.2.1.2) are actually clitics, and as such might be better taken as obligatory verb-external morphology.
- 6 Split ergativity in the Set II system will be discussed further in Chapter 11 (§11.2.1).
- 7 This is akin to the requirement in English that a simple sentence contain at least one tensed verb — even though the sentence yesterday I go contains all the relevant semantic information, most native speakers will recognize this utterance as somehow ill-formed.

## CHAPTER 11

## CONCLUDING REMARKS

To conclude this study, I present some brief remarks on how the Cariban case of construction reanalysis interacts with a number of current issues in linguistics.

### 11.1 On the Semantic Connection Between Source Nominalizer and Resultant Tense

One of the more interesting questions to be asked in any case study of reanalysis is: Which source forms become which resultant forms? Further, one might ask whether any observed correlations are due to chance or whether there is some underlying semantic or pragmatic motivation for the particular evolutionary scenario which results. In most cases of diachronic change which have been studied to date, the source forms have been lexical items which then evolved, or “grammaticalized”, into functional morphology. It is only relatively late in such a process that forms become fully bound inflections (cf. Heine, Claudi, and Hünemayer 1991, Bybee 1985, Bybee, Pagliuca, and Perkins 1991). In the Cariban case, however, some of the source forms for the reanalysis were already bound morphemes (and had been since at least Proto-Cariban, judging by the uniformly bound cognates in all modern languages). So in addition to the grammaticalization of a lexical item (i.e. the copula → auxiliary), we have reanalysis of an entire class of grammatical morphemes from one set of functions — nominalizers — to another — verbal tense and aspect. In this section, I examine which nominalizers become which tenses and aspects.

Three types of nominalizers go through this reanalysis:

- (1) A nominalizers become immediate future, habitual, and “universal” tense-aspects.
- (2) O nominalizers become past, perfect, and perfective.
- (3) Action nominalizers become “universal”, immediate future, and imperfective tense-aspects.

Before discussing individual cases of the change, a disclaimer is in order on the nature of the synchronic Set II tenses and aspects. Given the somewhat mixed quality of the various descriptions, it is not possible to make fine-grained distinctions between various tense and aspect analyses. It is not even possible to investigate whether some putative “tense” suffixes might not actually be indicating aspectual distinctions which happen to correlate very highly with certain tenses (e.g. “past” tenses might turn out, on further inspection, to be perfective aspects, and future “tenses” might actually be epistemic predictions or future uses of a more general present-habitual marker, etc.). At this point, my sense is that the Set II system is primarily aspectual/epistemic rather than a “tense” system (in the sense of Comrie 1986), but clearly more detailed research will be needed in all of these languages to clarify the status of the Set II inflections. For now, I use the term imperfective as a cover term for what authors have called progressive, continuous, or imperfective (much in the way Hopper and Thompson 1980 use the term “atelic”). I use the term future for virtually any sentence which is glossed with a future time translation (much in the way Bybee, Pagliuca, and Perkins 1991:18-9 define future morphemes as those that “have future as one of their uses”, where future means “an assertion about future time is being made, or in other words,...a prediction.”) — the morpheme which “marks” future might also have other functions (this is the most common pattern according to the database compiled by Bybee, Pagliuca, and Perkins).

By A Nominalizer, I mean a verbal affix which derives a noun referring to the notional A of the action indicated by the verb. This definition is inherently restricted to transitive verbs, since only transitive verbs have an A argument. In languages like English, the A nominalizer is also the S nominalizer (that is, English -er is a nominative, or subject nominalizer). In contrast, the Cariban A nominalizer truly occurs only on transitive verbs.<sup>1</sup> A verbal tense/aspect derived from such a nominalizer could not be marked in intransitive clauses, a distinct disadvantage for a function which is fairly unrelated to transitivity). Despite this disadvantage, the reanalysis is attested in one Cariban language, Panare.

In Panare, the A nominalizer -ñe has become a marker of “nonspecific aspect”, which is essentially comparable to the “universal tense” of Makushi: depending on context, it can be taken as referring to immediate future (the most common interpretation in elicitation), past (the most common interpretation in historical narratives), and habitual (the most common interpretation in precedural text). The semantic interpretation of past is somewhat anomalous in that this interpretation is only found in the discourse genre of historical narrative, and is thus presumably not inherent in the meaning of the verbal marking (a conclusion which is reinforced by the fact that in elicitation, the past reading was often disallowed — presumably due to the lack of past reference in the immediate context). The semantic interpretations of future and habitual both seem available at any time the inflection is used.

The intransitive analogue to -ñe ‘Nonspecific Aspect Transitive’ is -n/-në ‘Nonspecific Aspect Intransitive’, apparently derived etymologically from the action nominalizer of the same form. However, a simple nasal suffix -n [-n] could be derived etymologically from any nasal syllable (cf. Gildea 1991d). Given that there is comparative evidence for a Proto-Cariban \*-ni ‘Action Nominalizer’ and also a Proto-Cariban \*-mi ‘S Nominalizer’, what appears to be a single synchronic Panare suffix -n

could be derived etymologically from either source, or could be a collapsing from several sources (see also note 15 to Chapter 9). Perhaps the Proto-Cariban S nominalizer is the source for the synchronic -n ‘Nonspecific Aspect Intransitive’ and the Proto-Cariban action nominalizer is the source for the synchronic -n ‘Action Nominalizer’ (which occurs freely on both transitive and intransitive verbs).

By O nominalizer, I mean a verbal affix which derives a noun referring to the notional O of the action indicated by the verb. Taken strictly, this definition would refer to a nominalizer which occurs only on transitive verbs — there is one such nominalizer in Cariban languages, the idiosyncratic O Nominalizing prefix n- (cf. §7.4). However, most O nominalizers might be better labeled absolute nominalizers, since they also occur on intransitive verbs to derive a noun which refers to notional S. Since the absolute nominalizers apparently evolve more readily into verbal use, I address them first.

A modern reflex of the Proto-Cariban absolute Nominalizer \*-tupu is found in most Mixed and Ergative Languages as a past tense, a perfective aspect, or a perfect aspect inflection (Panare -jpě, Carib -`po, Kapóng -pi, Pemóng -pǰ/-pǰ-pui, Makushi -`pi/-pi/-pə, and Kuikúro -pârâ). Similarly, modern reflexes of Proto-Cariban \*-sapo are found in several Set II verbal systems with a perfect or completive meaning (Panare and Makushi -sa, and Kapóng and Pemóng -zak). Both of these inflections take an ergative A (still an oblique A in Panare), and never indicate any time reference other than past.

In contrast, the idiosyncratic O nominalizer n- occurs only on transitive verbs and causes a shift in morphological marking: the person-marking clitic refers to the A rather than to the O, leading to a de-ergative analysis in Kuikúro and Kalapalo (cf. Chapter 9, §9.2.3) and an A focus analysis in Panare (Chapter 8, §8.1.3). Since this prefix always co-occurs with a Set II suffix (which independently indicates tense and aspect), after reanalysis it carries no inherent tense or aspect, and as such need not be considered further here.

The Proto-Cariban action nominalizers are \*-Ø(-n̄) and \*-n̄(-n̄). Modern reflexes of \*-Ø become the “Universal Tense” in Kapóng, Pemóng, and Makushi, a modern reflex of \*-n̄ becomes the Panare -n̄ ‘Nonspecific Aspect Intransitive’ (but see discussion above and note 15 to Chapter 9), and a modern reflex of \*-n̄ plus a locative postposition forms the imperfective / continuous / progressive suffix in Panare (-np̄ej/-n̄ep̄ej), Kapóng (-n̄öböök), Pemóng (-n̄öpök/-p̄ä), Makushi (-np̄i’/-p̄i’), and probably Apalaf (-V̄ko/-n̄ōko).

Table 11.1 illustrates the observed correlations between type of antecedent nominalizer and resultant Set II tense/aspect marker.

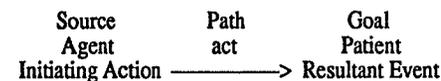
Table 11.1 Correlations Between Antecedent Nominalizer and Resultant Tense/Aspect

Nominalizer	→	Tense Aspect
A	→	Habitual, Future
O	→	Past, Perfect, Perfective
Action	→	Universal, Imperfective

The correlations between source and result are consistent in all cases, so a first hypothesis might be that what we are observing is a shared innovation, where one innovation took place in a single language which was the ancestor to all of the modern languages which show the change. However, many of these reanalyses seem to be independent (cf. §11.3 below): first, at least some of the changes appear to be very recent (Cariña and Apalaf), whereas others appear quite old (e.g. Makushi, Kuikúro); second, the actual forms which have been reanalyzed vary from language to language. As a result, it would be preferable to find a motivation for these correlations that goes beyond the Cariban case. I believe such a motivation can be found in the inherent semantic value and viewpoint which must be associated with each nominalizer.

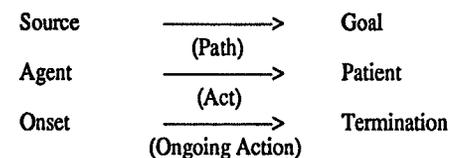
Several studies have shown the utility of analyzing actions as a subset of the “Source-Path-Goal” schema, with the agent of an action as source, the action as path, and

some observable change of state in the patient as goal (cf. Lakoff 1987, DeLancey 1982, 1985). This would most generally be schematized as follows:<sup>2</sup>



Of special relevance here is that the agent is identified with the initiating action and the patient with the resultant event. This means that if one were to focus only on the role of the agent, one could identify the agent without necessarily referring to the event itself — that is, prior to the resultant act taking place. This translates quite naturally into a future orientation, or into an orientation where the identity (or individuation) of the patient is less relevant, such as habitual aspect. Similarly, if one were to focus on the patient, one could only do so at the conclusion of the entire chain of causation, because the prototype affected patient can only be identified in terms of the resultant event that affected it. Thus, patient focus entails orientation to a past, or already completed event (i.e. perfect or perfective).

DeLancey (1982:172) explicitly adds a temporal dimension to the event schema:



Given that an event is structured according to these vectors, it is a pragmatic fact of language that a speaker may take any particular viewpoint when speaking of an event. DeLancey argues that “the perfective/imperfective distinction (at least in some languages) represents a distinction between terminal and non-terminal viewpoint.” As I have already argued, the terminal viewpoint is at least co-extensive with a viewpoint which is focused on patient. However, the analogue to “non-terminal” viewpoint need not be restricted to agent focus, but could also be focus on the ongoing action of the event itself.

To apply this directly to the Cariban case, I submit that the syntactic A will most often be a prototype agent, and the syntactic O will most often be a prototype patient (recall the definitions from Chapter 3). By deriving a nominal which refers to the A, an A nominalizer is inherently oriented towards the agent, and hence will naturally evolve into a future/habitual orientation. Similarly, the O nominalizer is inherently oriented towards the patient at the conclusion of the event, and hence naturally evolves into a past tense or a perfective aspect (the present relevance of the perfect reading in Panare appears to be more due to the auxiliary than the aspectual suffix — cf. Gildea 1989d for discussion of the auxiliaries and Payne, Payne, and Gildea (in process) for discussion of the interaction of inflection and auxiliary). An action nominalizer is oriented toward neither the onset nor the termination of the action, but towards the fact of the action itself. As such, the connection between action nominalizer and imperfective (which is similarly oriented toward an ongoing action) follows naturally from the same event schema.

Of course, this analysis is not exhaustive. In need of further exploration are the Cariña future tense *-rū mā*, which has evolved from the action nominalizer *\*-rī* plus an invariant form of the copula (the copula being presumably the source of the future meaning), and a series of future tenses involving the Proto-Cariban suffix / postposition / auxiliary *\*-se* (meaning uncertain) and/or the postposition/suffix *\*pe* ‘Denominalizer’: Panare future *-sejpe*, Yukpa future *-se mak*, Kapóng future *-dok-bee*, Pemóng futures *-Ø see*, *-Ø-mā*, and *-Ø-pe-man*, and the Makushi future *-Ø pe Aux*. Also, the etymology of most tense-aspect markers in the Southern Ergative Languages Kuikúro and Kalapalo is opaque, and hence in need of further research.

### 11.2 On Violations of Proposed Typological Universals

The Cariban evidence calls into question two proposed typological universals which deal with ergativity: first, the claim that if there is a tense-aspect split in an ergative

language, the ergative tense-aspect will be past-perfective and the nominative will be nonpast-imperfective; second, the claim that all main clause ergative systems are etymologically derived from passives. Neither of these claims is true for the Cariban languages surveyed in this study. Perhaps one reason that the Cariban languages are the first attested which clearly violate these universals is that the Cariban languages are also the first attested case where an entire main clause ergative system comes about by means of reanalysis from an ergatively organized system of nominalization. I discuss these points in turn.

#### 11.2.1 Violating the Proposed Universal of Synchronic Tense-Aspect Based Splits

Dixon (1979:95) makes the strong claim that “if a split is conditioned by tense or aspect, the ergative marking is ALWAYS found in either past tense or perfect aspect” (emphasis in the original). Dixon explains this split in terms similar to those with which I explain the evolution of A and O nominalizers into nonpast and past-perfective tense-aspects respectively— and in fact the Cariban tenses derived from A nominalizers do become nominative and those from O nominalizers do become ergative, just as Dixon would predict.<sup>3</sup> Comrie (1978) ascribes this split to the passive etymology of most ergative systems. Restricting the scope of the claim to aspect, and translating Dixon’s term “perfect” to “perfective”,<sup>4</sup> Hopper and Thompson (1980:271-4) take this pattern to be an argument that perfective is more transitive than imperfective; DeLancey (1982) also restricts the claim to aspect, offering a theoretical explanation for the correlation between perfective and ergative, and imperfective and non-ergative, respectively.

In the Cariban family, there are several clear violations of the tense-based universal. In the Mixed Language Cariña, the only ergative tense is the future (cf. Chapter 8, §8.2.1). In the Mixed Languages Panare and Yukpa and the Ergative Languages Kapóng and Pemóng, the nominative Set I system is retained only in past

tenses, which also indicate perfective aspect. The Set II system which has begun to move in carries with it its own split, such that imperfective aspect is completely nominative, but nearly all other tenses and aspects are ergative, at least to some degree. I qualify this last statement because in many of the Set II tenses in Panare and Yukpa, the A does not receive an ergative case-marker. However, ergativity is manifested in that either the absolutive noun or an absolutive clitic must occur immediately preceding the verb (in Panare, this preverbal absolutive marker already functions as agreement with a postverbal absolutive nominal, cf. Chapter 8, §8.1.2.2, and as such is either well on the way to becoming — or might already be considered — morphological marking on the verb). The cases of Kapóng and Pemóng are considerably stronger in that all Set II tenses except the imperfective require the case-marker suffix on the A, leaving only the imperfective and the Set I past-perfective tenses as nominative.

Since the claimed universal is convincingly violated by several languages, one might ask what value remains in the universal, and also in explanations which have been advanced to account for it. Although the universal is no longer exceptionless, the Cariban case does not violate the the semantic/pragmatic explanations put forward to account for the universal, but rather the Cariban case validates such explanations. This somewhat counter-intuitive statement requires elaboration.

The first step in sorting out Cariban violations of the universal is to note that the aspect-based universal can be salvaged — the Set II imperfective aspects which have developed in Apalaf, Cariña, Panare, Yukpa, Pemóng, Kapóng, and Makushi are all nominative, whereas the Set II perfective aspects are all either ergative or passive. In these languages, it is the continued existence of the nominative Set I past-perfective which violates the universal. Although the perfective is not always ergative, the imperfective is always nominative, so the universal could be rescued by restating it in negative terms: if there is an aspect-based split, the imperfective is never ergative.

Although the tense-based universal remains convincingly violated, actually most theoretical generalizations have been advanced either based on, or to account for, the aspect-based universal. For example, Hopper and Thompson (1980) have claimed that the most transitive clause type in a split ergative language will be ergative, and thus perfective is more transitive than non-perfective. In Kapóng and Pemóng, where the past perfective can be expressed either by nominative Set I or ergative Set II, I would argue that it is Hopper and Thompson's premise which fails, rather than their conclusion: the nominative perfective is probably more transitive than the ergative perfective (at least the verb marks more features of finiteness), although both are more transitive than the nominative imperfective. As another example, consider DeLancey's (1982) claim that perfective/passive represents terminal viewpoint, with respect to both the transitivity vector (Agent —> Patient) and the time vector (Onset —> Termination), while imperfective represents nonterminal viewpoint with respect to the same vectors. DeLancey's claim is that the ergative-nominative split is a particular example of morphosyntax which marks this distinction in viewpoint. The emerging aspect-based split in the Set II system is actually a very strong piece of evidence in support of this generalization, in that the diachronic mechanism which leads to the split system can be seen as motivated by assignment of viewpoint.<sup>5</sup>

The violation of the universal is thus a function of idiosyncratic diachronic development rather than synchronic functional demands. The violation is a direct consequence of two facts (which are doubtless causally connected): (1) the nominative Set I verbal system is lost first in nonpast tenses, and retained longest in past-perfective tenses; and (2) the ergative Set II verbal system appears first in nonpast tenses and evolves most slowly in past-perfective tenses. Had the directionality been the reverse (i.e. had the nominalizers which developed into the ergative Set II past-perfective tenses

been the first to be reanalyzed, and the nominative Set I future tenses retained longest), main clauses would have conformed to the universal at all times.

In sum, the universal is no longer exceptionless, but the violation does not call into question the basic validity of the almost-universal pattern, nor does the violation obviate the need to explain the almost-universal pattern. The almost-universal split is motivated by semantic and pragmatic factors (= the assignment of viewpoint), whereas the Cariban counter-universal split is an almost coincidental result of diachronic change, and is apparently unstable in those languages where it is found (note that Makushi has already lost all Set I tenses, and now conforms to the universal once more).

#### 11.2.2 Violating the Proposal that Passive is the Universal Source for Ergativity

Estival and Myhill (1988:445) propose “the hypothesis that in fact all ergative constructions have developed from passives, given the above definition of passive.”

Their definition of passive is:

- a. The verbal or deverbal form must be intransitive, and is not necessarily derived from a transitive verb.
- b. The argument having the thematic role usually associated with O, i.e. patient or theme, or with either of the objects of a ditransitive verb, i.e. patient or beneficiary, bears the same marking as an S.
- c. The argument having the thematic role usually associated with A, i.e. agent or experiencer, if present, is given oblique marking.

In some ways, this definition of passive is so broad as to trivialize the claim being made: for example, Anderson (1977) shows several cases of possessive constructions becoming ergative, and argues that these reanalyses are quite different from the passive-to-ergative reanalyses (which he also discusses at length). However, by using a definition which treats passive solely in terms of surface case-marking facts, Estival and Myhill effectively collapse such important distinctions. Further, the definition of ergative is based only on the marking of nominals, whereas Comrie (1978) and Dixon (1979) both

use the label ergative for systems with no nominal case-marking, but where person marking in the verb is organized according to an ergative alignment. Both case-marking and verbal marking are important for the Cariban case, but even using Estival and Myhill’s broader definition of passive and more restrictive definition of ergative, the future tenses in Cariña, Pemóng, Kapóng, and Makushi all constitute counter-examples to the proposed universal.

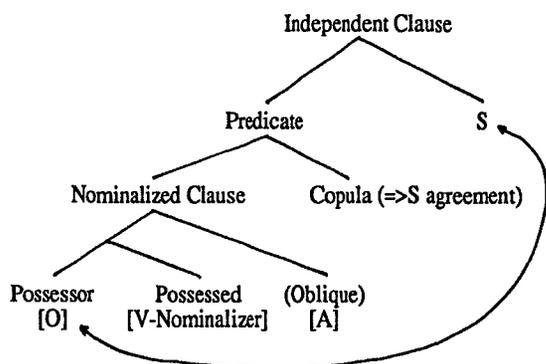
On a first impression, one might think that since the entire Cariban Set II reanalysis is from nominalizations, the passive analysis fails immediately. However, this line of reasoning has been anticipated in Comrie (1978:376-7), who explains that although the Iranian ergative construction can be reconstructed ultimately to a nominalization,

Cardona (1970) suggests that this nominalization was reinterpreted as a passive in the development of Iranian, so that the ergative construction would derive most directly from a passive, and only indirectly from a nominalization. In all instances known to me where ergativity is alleged to derive via nominalization, it seems at least a priori plausible that a development similar to that in Iranian occurred, with nominalization originally a device for forming passive constructions, and subsequent reinterpretation of these passives as ergatives.

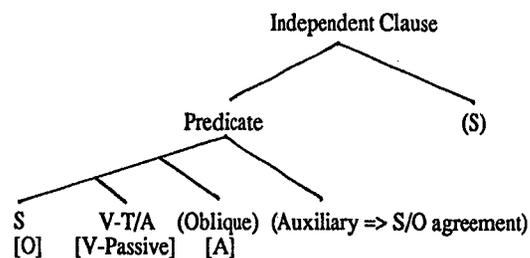
The Cariban Set II past tenses can all be shown to have gone through just such a passive stage en route to ergativity. The route of reanalysis is modeled in 188a-c.<sup>6</sup> The source construction (188a) is biclausal, with the independent clause being a predicate nominal and the dependent clause nominalized. The S of the independent clause is coreferential with the O of the dependent clause. In independent clauses, neither S, A, nor O are case marked, and similarly, the possessor (O) of the dependent clause is not case-marked, so purely in terms of surface marking, the dependent O is marked the same as S (thus matching one of Estival and Myhill’s criteria for a passive).<sup>7</sup> At the first stage of reanalysis (188b), the biclausal construction has become monoclausal, but the oblique A is still optional and the auxiliary agrees with the notional O, thus indicating that the

clause is truly passive (by any definition). At the final stage of reanalysis (188c), the ergative A is obligatory and the superordinate S and auxiliary are completely lost, leaving behind no vestige of the passive stage.<sup>8</sup>

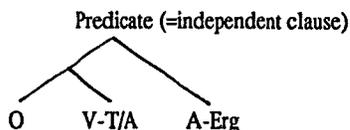
(188) a. The biclausal source construction for Set II past tenses



b. The reanalyzed monoclausal passive (Panare)



c. The reanalyzed monoclausal ergative (Makushi)



To illustrate the passive, consider the following examples from Panare. In 189a, all of the etymological syntactic slots are filled, with the result being that the patient of

the verb is indexed with both the verbal prefix *y-* '3' and with the free noun *manko* 'mango' following the auxiliary *mën*; the latter agrees for (in)animacy with the patient (labelled S in the top line of the example). In 189b only the preverbal reference to S occurs; the auxiliary still agrees with it. In 189c the auxiliary, too, is omitted. In this last example, the fact of passive cannot be deduced from the surface form of the clause, and it is ripe for the reanalysis which has taken place in Makushi (cf. 190).

(189) a. The Panare passive with both the auxiliary and the superordinate S

S-V	Aux	S	A-Oblique
<i>y-ikiti-sa'</i>	<i>mën</i>	<i>manko</i>	<i>Toman uya</i>
3-cut-T/A	is.Inan	mango	Thomas Dat

'The mango has been cut by Thomas / Thomas has cut the mango.'

b. The Panare passive with only the auxiliary

S	V	Aux	S	A-Oblique
<i>naro</i>	<i>yikitsa'</i>	<i>këj</i>	Ø	( <i>tëëna uya</i> )
<i>naro</i>	<i>y-ikiti-sa'</i>	<i>këj</i>	Ø	<i>tëëna uya</i>
parrot	Ø-PO-cut-T/A	3.is.Proximate	Ø	<i>Tëëna</i> Dat

'The parrot is cut (by Tëëna).'

c. The Panare passive with neither auxiliary nor superordinate S

S-V	Aux	S	A-Oblique
<i>yikitsa'</i>	Ø	Ø	<i>tyuya</i>
<i>y-ikiti-sa'</i>	Ø	Ø	<i>ty-uya</i>
3-cut-T/A	Ø	Ø	3-Dat

'He cut it / it has been cut by him.'

In Makushi, the Completive Aspect inflection is cognate to this Panare passive. The completive aspect clause is displayed in 190a, with the obligatory A and O and no auxiliary. Adding a Set II auxiliary (190b) changes the tense (to past perfect); the auxiliary is not marked for person, so the patient is no longer treated like an S in any way.

(190) The Makushi Completive aspect tense

a. Obligatory A and O, no auxiliaries

<i>yei</i>	<i>ya'ti-yonpa-sa-i'-ya</i>
tree cut-Conative-Completive-3-Erg	

'He tried to cut the tree.' (Abbott's 487, p. 118)

- b. Auxiliary changes meaning of tense, does not agree w/A or O

i-nĩmĩ-sa-i'-ya                      wani'-pi  
 3-leave-Completive-3-Erg be-Past  
 'He had left it' (Abbott's 484, p. 117)

There is one form in Makushi which was arguably finite within the historical Set I system (but which does not bear Set I morphology) — the Proximate Tense auxiliary/copula which varies for person. When the Proximate Tense auxiliary is added to the completive -sa', the resulting combination expresses an “action or state already completed today”, and when added to the past tense -pi', the combination “makes it more vivid and emphasizes the certainty of the action” (Abbott 1991:115). As seen in 191a, the Proximate Tense auxiliary does agree with the first person S, but we cannot determine whether it agrees with A or O in a transitive clause, because in Abbott's only examples, both A and O are third person (e.g. 191b). A conservative prediction would be that it agrees with O, but I would not be surprised to find that this property of subjects has changed to align with A as well.

- (191) Makushi Proximate Tense Auxiliary agrees w/S, but no evidence for transitive

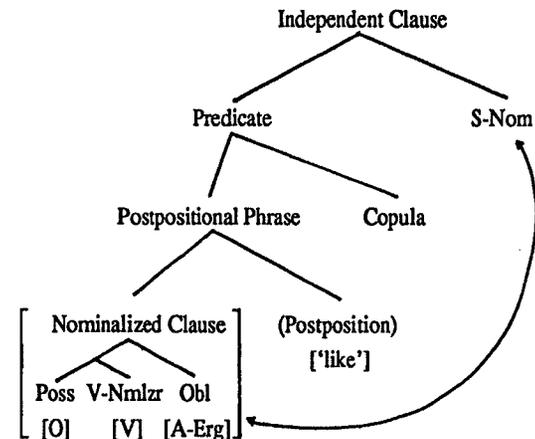
- a. entamo'ka-sa' wai  
 eat-T/A                      1.be  
 'I have eaten (today).' (Abbott 's 471, p. 115)
- b. u-nyo                      Ø-wĩ-sa'                      pemonkon-ya man  
 1-husband; Ø-kill-T/A person-Erg                      3<sub>ijp</sub>.be.Proximate  
 'The man killed my husband.' (Abbott's 485, p. 118)

So the chain of reanalysis outlined in 188 allows us to maintain that a portion of the Set II ergative system is “most immediately” derived from a passive, as is claimed to be true of all ergative systems. However, the other Set II ergative tenses did not go through a similar intermediate passive stage. In particular, the ergative Set II future tenses in Cariña, Kapóng, Pemóng, and Makushi appear to be reanalyzed in such a way that (1) the notional O could never be considered the S of a clause at any level, and (2) the dependent verb which becomes the main verb never goes through a stage we would

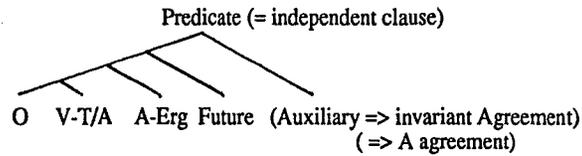
want to call “intransitive” (unless one wishes to call all nominalized verbs intransitive). The etymology of the Cariña future differs from that of the futures in Kapóng, Pemóng, and Makushi in that the latter include an etymological postposition. I address first the reanalysis in Kapóng, Pemóng, and Makushi, and next the reanalysis in Cariña.

The diagram in 192a represents what I call the attributive source construction for future tenses. In the attributive source construction, the independent clause is an intransitive attributive clause and the nominalized dependent clause is embedded in a postpositional phrase. The independent S is not coreferential with either the A or the O of the dependent clause, but rather refers to the entire predication, with a translation something like English It is [like [the destroying of the city by the enemy]]. The future meaning in this construction could have evolved from the irrealis meaning of ‘(be) like’, or perhaps from a future meaning brought by the auxiliary. Further research is needed to identify the semantic source of the future meaning. In the reanalysis (192b), the superordinate S is lost (doubtless because of its “dummy” pleonastic nature) and the auxiliary either optionally shifts from invariant third person agreement to A agreement (Makushi, Pemóng) or is lost (Kapóng).

- (192) a. The “attributive” source construction for the ergative Set II future tenses



## b. The reanalyzed monoclausal Set II ergative



I illustrate each of the synchronic futures in turn. In 193 the Kapóng future marker is *-dok bee*, etymologically \**-topo* 'locative/purpose nominalizer' plus the postposition \**pe* 'like'. The auxiliary does not occur in the only examples I have found.

(193) The reanalyzed future in Kapóng, *-dok bee* with no auxiliary.

*eegii suuruuruui adokgong bee*  
*eegii suuruuruui Ø-arð-dok-gong bee*  
 casava flour Ø-carry-Future-Pl Future  
 'We (Incl) will carry casava flour.' (Edwards 1972)

In Pemóng, the synchronic reflex of \**pe* follows a verb bearing the etymological

*-Ø* nominalizer and its ergative suffix. The auxiliary does not vary for person.

(194) Pemóng *-pe* with invariant third person auxiliary

*upon kokayapeman penanne*  
*u-po-n Ø-koka-Ø-ya-pe-man penanne*  
 1-clothes-Poss Ø-wash-1-Erg-Future-3.be tomorrow  
 'I will wash my clothes tomorrow.'

The Makushi future is formed exactly like that of Pemóng, except that the auxiliary sometimes agrees with A (195a), and sometimes takes an invariant third person form (195b).

(195) Makushi *pe* with auxiliary that alternates between A and third person agreement<sup>9</sup>

a. *pe* and proximal tense auxiliary which agrees with A

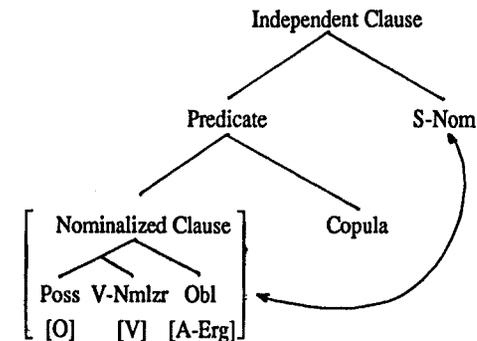
*maasa mĩkĩri Taitai Ø-wi-Ø-u-ya pe wai*  
 later 3.Pro Taitai Ø-kill-Univ-1-Erg Future 1.be.Proximate  
 'Later I'll kill Taitai.'

b. Makushi *pe* with non-agreeing third person proximate tense auxiliary

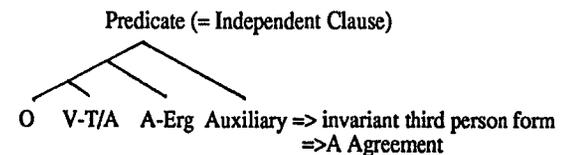
*more Ø-yenpo-Ø-Ø-ya pe man*  
 child Ø-birth-Univ-2-Erg Future 3.be.Proximate  
 'You will give birth to a child.'

The future tense in Cariña (expressed by *-ri ma*) and another future tense in Pemóng (expressed by *-mä* or *-see*) appear to be formed by a different process, in which the dependent clause serves as the predicate of the independent predicate nominal clause without being made first the object of a postposition. The source construction would thus read something like this in English: "[The having of you by me] exists" (Cariña), or "It<sub>i</sub> is [the having of you by me]<sub>i</sub>" (Pemóng).

(196) a. The source construction for the Cariña and Pemóng Set II future tenses



b. The reanalyzed monoclausal Set II ergative



Due to the fact that other dialects of Carib retain the Set I future *-take/-tañ* I presume that the Cariña future is very recently reanalyzed, and thus can be taken as showing the form of the new tense which has undergone the least additional change. The

glosses in 197 are taken from Mosonyi (1982), and reflect the source meanings rather than the reanalyzed meanings. The verb bears the etymological nominalizer -rii (which Mosonyi labels the “infinitive”), the ergative A bears the etymological dative suffix -wa, and the invariant third person form of the copula occurs following the A (see Chapter 8, 8.2.1 for further variations).

- (197) adeenarii            ii'wama  
 a-eena-rii            ii-'wa-ma  
 2-have-Infinitive 1-Dative-3.be  
 'I will have you.'

I assume that the Pemóng future -mä / -see comes from this same type of source construction, but has gone through additional changes since the original reanalysis. The differences between the Cariña future and this particular Pemóng future are (1) the nominalizer used on the Pemóng verb is -Ø, and (2) the Pemóng auxiliary mä has developed a variant form see to agree with first person nominative. In 198a-b, the Pemóng future varies for the person of the A, -se for first person and -mä for second or third person. In 198a the first person ergative suffix occurs on the verb and is followed by the first person future auxiliary -see; in 198b the ergative A precedes the verb and the 2/3 future -mä is suffixed to the end of the verb. The etymology of -see is not entirely clear, but by syntactic position it appears to be derived from either an auxiliary or a postposition. In contrast, -mä is clearly derived from the copula (cognate to Cariña ma). On synchronic distributional grounds, it appears that -se should be considered an auxiliary as well.

- (198) The Pemóng -se and -mä as future tense auxiliaries

- a. Pemóng -se as the first person future auxiliary

upon            kokayase            penanne  
 u-po-n            Ø-koka-Ø-ya-se            penanne  
 1-clothes-Poss Ø-wash-1-Erg-1.Future tomorrow  
 'I will wash my clothes tomorrow.' (Tuggy 1989)

- b. Pemóng -mä as the 2A/3A future auxiliary

märänö'ya ayennawakonmä  
märänö'-ya a-ennawa-Ø-kon-mä  
 Märänä-Erg 2-teach-Present-Plural-2/3.Future Auxiliary  
 'Märänä will teach you.' (Tuggy 1989)

The attributive source construction and the source construction just illustrated represent two evolutionary scenarios which are apparently unique in the typological literature: that they are direct reanalyses of ergatively organized nominalizations into the main clause verbal system without an intervening passive stage. That is, at no point in the reanalysis could we argue that the verb has been made intransitive, nor (using a more traditional sense of passive than that offered by Estival and Myhill 1988) could we argue that the notional O of the verb is ever the S of any clause. The fact that S and O are marked similarly is a function of the fact that both serve as possessors of nominalized verbs in dependent clauses, rather than a reflection of any historical passive stage in the reanalysis.

### 11.3 On Syntactic Innovation and Genetic Classification

Given that the synchronic verbal systems fall into two fairly discrete categories, Set I and Set II, and the languages which utilize these systems fall into somewhat discrete categories (Nominative, Mixed, and Ergative Languages), one might hypothesize that the categories Nominative, Mixed, and Ergative might correlate with genetic subgroups of the family. For example, a first rough hypothesis might have been that all Ergative Languages represent a single case of shared innovation, and that they thus belong together in a single sub-branch of the family. One might extend this hypothesis to Mixed Languages as well, supposing that Ergative Languages are perhaps more closely related to the Mixed Languages, which represent earlier stages of the innovation, and that the conservative Nominative Languages would then fall into one or more clusters of their

own. Although the Ergative Languages do cluster into two relatively low-level subgroups, the Mixed Languages show no evidence of shared innovation.

Consider the nature of the various language-specific Set II systems which we have seen. Nearly each language shows some similarity with the others, but each language also shows evidence of having innovated independently as well. Even the very closely related languages Kapóng, Pemóng, and Makushi do not show identical Set II systems: although each language shows the same set of imperfective, “universal”, past-perfective, and perfect-completive markers, in the future tense, each shows a different system, and both Kapóng and Pemóng have retained vestiges of the Set I system as well.<sup>10</sup>

Similarly, in virtually all of the Mixed Languages, different nominalizers have entered the reanalysis process in different ways. To extend the example of future, the Cariña action nominalizer *-ri* combines with an auxiliary to mark an ergative future, whereas in the Panare nominative future *-sejpe*, the suffix (etymologically nominalizer ?) *-sej* combines with the postposition *pe* and an auxiliary. In Yukpa, the nominative future is formed from the suffix *-se* co-occurring with an auxiliary. Each of these looks different from the ergative futures found in the northern Ergative Languages, Kapóng, Pemóng, and Makushi. And the differences amongst the Mixed and northern Ergative Languages pale beside the vast differences between all the other languages described in this study and the southern Ergative Languages Kuikúro and Kalapalo (with the possible exception of Bakairi, about which there is still relatively little information).

In sum, although the existence of the Set II system in main clauses shows that a language is innovative to some degree, enough of the innovations within the overall system appear to be independent that the occurrence of the Set II system in independent clauses does not a priori guide us in forming hypotheses about genetic relationships within the family. Despite these precautions, some limited hypotheses do seem in order. For example, since the overall evolution of a language from fully Set I to fully Set II

presumably takes a good deal of time, we would expect that low-level sub-groups of the family (representing more recent divisions between synchronic languages) would not contain both Set I and Ergative Languages, but (to the extent that they contain more than one type at all) would more likely contain Set I with Mixed, or Mixed with Set II. The more time depth spanned by a branch, the more likely it would be for that branch to contain both Set I and Set II verbal systems, but it would not be surprising to find no branches with both systems until a branch is at almost the same time-depth as Proto-Cariban.

Taking this hypothesis, let us look again at the classifications discussed in Chapter 1. Tables 11.2, 11.3, and 11.4 show how the languages treated in this study are classified by Girard (1972), Kaufman (1989), and Durbin (1977). In all three tables, the languages treated in this study are printed in Helvetica typeface, with Nominative Languages printed with no modification, Mixed Languages with a single underline, and Ergative Languages with a double underline.

As expected, at the lowest, most detailed level of classification, all three classifications show great homogeneity between group and verbal system.<sup>11</sup> In each classification, only two groups show more than one kind of system: (1) the Carib Group (Durbin's Galibi), which contains the conservative Set I Carib of Surinam along with two apparently very recent Mixed innovators, the Venezuelan dialect Cariña and another Surinam dialect of Carib proper; and (2) the Bakairí group (Durbin's Xingu Basin), which contains extremely innovative Ergative Languages Kuikúro and Kalapalo, and also Bakairí, which I tentatively label Set I, but which, after further inspection, may turn out to be Mixed.<sup>12</sup> All other groups are homogenous, containing only Set I, or Set II, or Mixed Languages. Durbin's (1977) large group East-West Guiana Carib is an exception, which suggests that it represents a much older genetic relationship than his other groups.<sup>13</sup>

Table 11.2. Nominative, Mixed, and Ergative Languages in Girard (1972)

Proto Carib (Girard 1972)

1. Cumaná	2. Makiritare	3. Pemon	4. Wayana	5. Wayway	6. Carib	7. Tiriyo	8. Yawarana	9. Aparai	10. Paushiana	11. Bonari	12. Arara	13. Bakairí	14. Motilon	15. Miscellaneous
Chayma	Maionggang	<u>Arekuná</u>	Wayana	Wayway	Carib	Tiriyo	Yawarana	<u>Aparai</u>	Paushiana	Bonari	Apiaká	Bakairí	Motilon	Opon-Carare
Cumanágotó	Yekwana/Dekwana	Ingarikó	Upurui	Hishkaryana	Galibi	Kumayena	Mapoyo?		Paravilhana	Crishaná	Arara	<u>Kwikurú</u>	<u>Yukpa</u>	<u>Panare</u>
†Palenque	Makiritare	<u>Kamarakoto</u>	Arakwayú	Kachuyana	<u>Kaliña</u>	Pauxi			Sapará	Ipurukoto	Parirí	Nahukwa	Japrerfa	†Palmella
†Píritu	Wayumurá	<u>Taulipang</u>	Tiverikoto	Parukoto	<u>Akawoyo?</u>	Pianakoto				Porokoto	Yarumá	Yamarikuma	etc.	†Pimenteira
†Avaricoto	†Tamanaco?	<u>Makuchi</u>	Yao			Saluma				Purukoto				
†Tamanaco?	Mapoyo?					Tiriometesem				Yawaperi				
Mapoyo?						Urukúena								
						Wama								
						Carijona								
						Guake								
						Hianákoto-Umawa								

Table 11.3. Nominative, Mixed, and Ergative Languages in Kaufman (1989)

Kariban Family (Kaufman 1989)

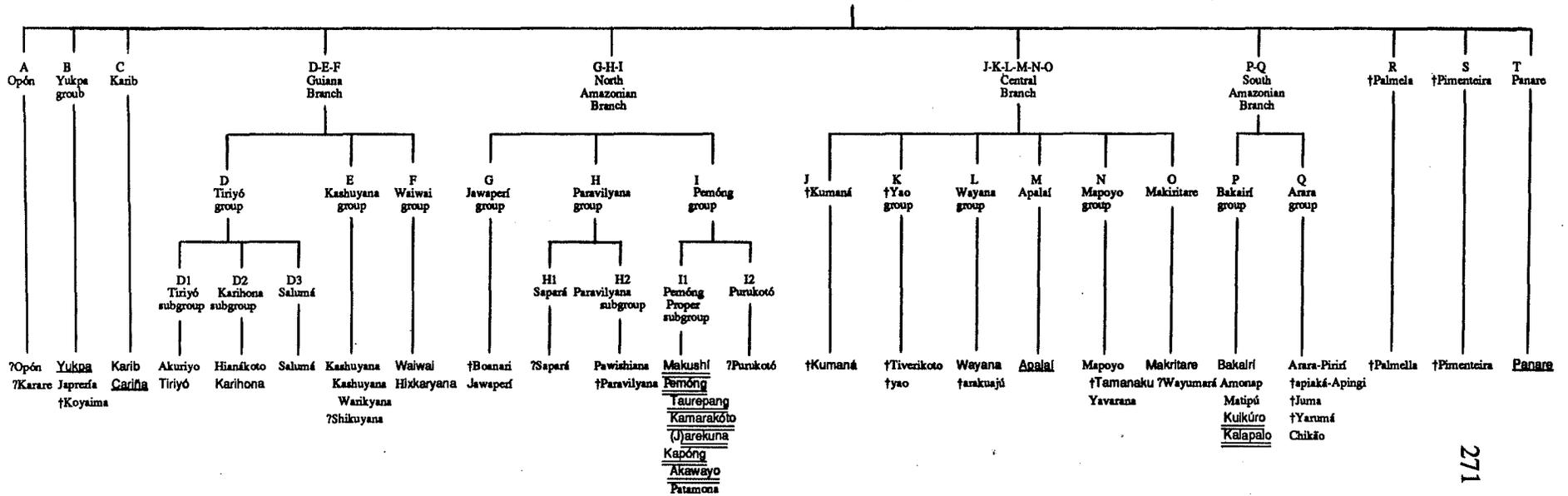
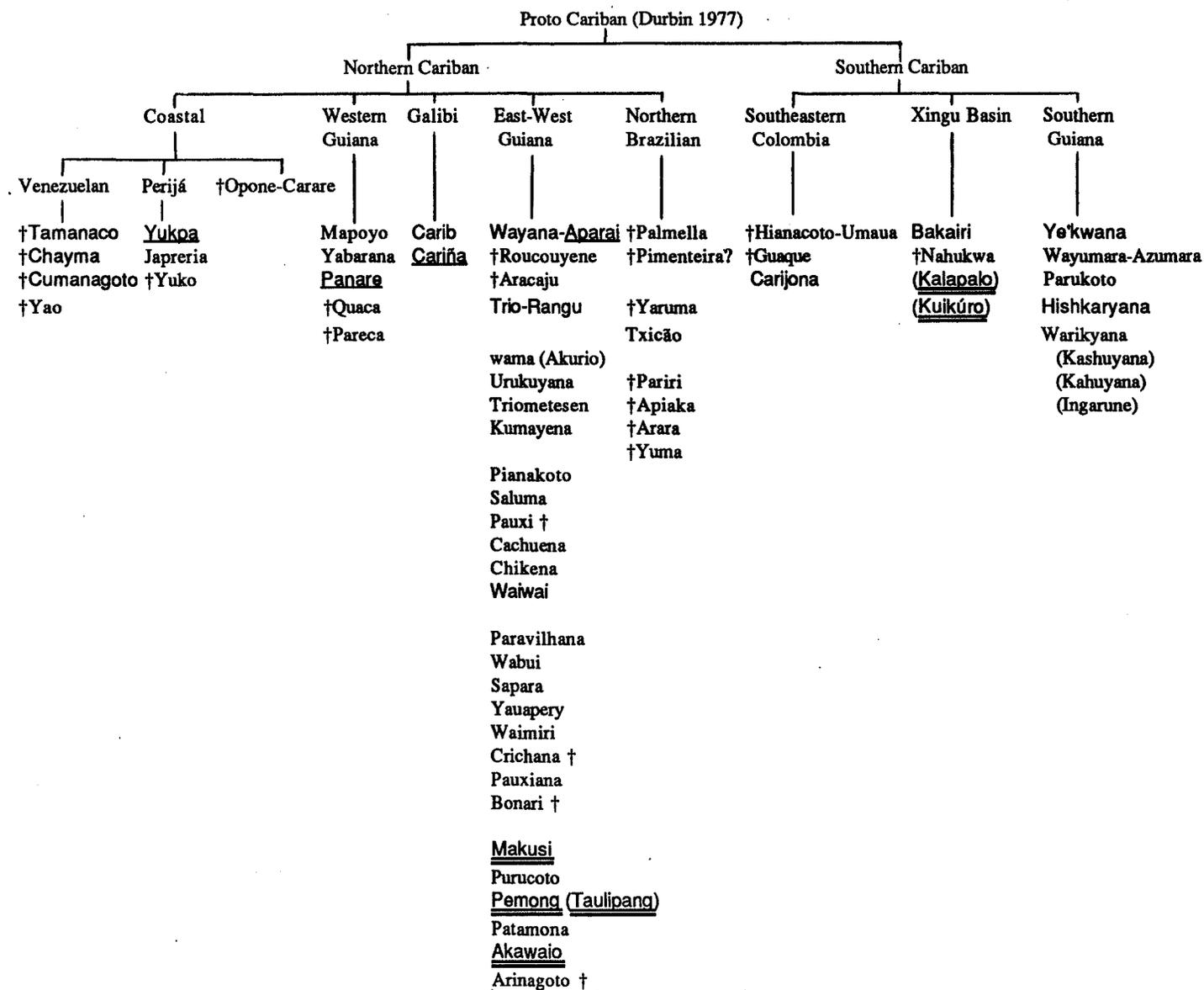


Table 11.4. Nominative, Mixed, and Ergative Languages in Durbin (1977)



Girard (1972) refuses to posit any higher-level groupings which we could compare for consistency of verbal system, but Kaufman (1989) combines many of his groups into branches, and Durbin (1977) divides all of his groups between Northern and Southern branches. As might be expected for a so deep a grouping as a binary division (representing the first split of the Proto-Cariban tribe), Durbin's two branches each show the full range of reanalysis, from Set I to Mixed to Set II. Kaufman's branches represent more recent divisions in the family, and again the evidence from grammatical systems is consistent with his subgroupings — all attested languages from the Guiana Branch are Set I, all from the North Amazonian Branch are Set II, and the Central Branch contains three Nominative Languages and one barely Mixed Language, Apalaf. One might expect that further field research in all three of these branches might uncover Mixed Languages, and that in subsequent classifications, the new data for Panare (discussed in Chapter 1), and perhaps for Yukpa, will aid in placing these Mixed Languages into currently existing branches (I tentatively hypothesize that both will end up in the Central Branch).

In conclusion, the fact of grammatical innovation in any two languages does not automatically entail that they are more closely related than any two languages which do not show innovation. It appears that much of the grammatical innovation in the Cariban family is so recent as to be specific to individual languages. In order to test a hypothesis of genetic relationship, it is necessary to reconstruct both grammar and lexicon for the various groups, and then for branches. The morphological cognate sets gathered here should be useful in this undertaking, but a great deal more basic field research is necessary to even begin this task: of Kaufman's (1989) four branches, the Central Branch is moderately well-described (four of six groups represented in this study) and the Guinea Branch has three of five groups represented here, but the North Amazonian Branch is represented only by the Pemóng Proper Subgroup (members of which, as Kaufman (pc) points out, are so closely related that they really only count as one language for the

purposes of reconstruction to the Proto-branch level), and the South Amazonian branch only by Bakairi, Kuikúro, and Kalapalo, none of which has been thoroughly described to date. Thus, despite the number of new studies which have appeared in recent years, the need for basic description remains huge. It is to this need that I turn in the final section of this chapter.

#### 11.4 Towards Further Descriptions of Synchronic Cariban Languages

Synchronic Cariban languages have proven quite difficult to describe, especially in terms of the main clause verbal system. The Set I verbal system is old, and thus full of idiosyncracies: the personal prefix set contains several sub-divisions and a great deal of allomorphy (some of which is not phonologically motivated, cf. Chapter 5, §5.2); the Set I O-oriented prefixes and the 3A prefix are in complementary distribution with a free (pro)noun O; the Set I suffixes contain a fair amount of suppletion; and the verb complex can easily contain five or more morphemes, each of which conditions allomorphy in its neighbors.

The Set II verbal system has also proven difficult to describe, not least because of the polysemy of the morphemes which compose it: the personal prefixes also occur on possessed nouns to mark person of the possessor; the personal suffixes sometimes occur before, and sometimes after, the tense-aspect suffixes; the tense-aspect suffixes also derive nouns in dependent clauses (with no further subordinating morphology); and sometimes it is difficult to decide whether a clause contains one complex predicate or a complement-taking verb with a nominalized complement.

The complications inherent within each system make description difficult enough, but then these complications are compounded in the Mixed Languages, where both systems are competing for expression in main clauses. We can tell from the comparative evidence that the Set II system will likely win out (eventually), but in the meantime, a

descriptive linguist must decide which apparent Set II tenses and aspects actually represent reanalyzed complex predicates and which are biclausal constructions that simply function occasionally to indicate nuances of meaning not covered by more established tenses.

This study highlights the value of bringing a diachronic perspective to the analysis of synchronic morphosyntax. In particular, knowing that the nominalizers become verbal markers of tense and aspect in some Cariban languages, linguists approaching a previously undescribed language can now look for the beginnings of such a change, or perhaps for the conclusion to such a change. Knowing that polysemy is to be expected as a result of reanalysis, we should seek out polysemy as evidence for change, rather than suppressing it in the interests of seeking more inclusive synchronic generalizations. It is my hope that this study will serve to inspire further field research, and that future descriptions will successfully capture other synchronic snapshots of the family-wide change in progress.

### Notes to Chapter 11

1 It is yet one more indication of the strength of the ergative organization of Cariban nominalizations that we find A nominalizations and absolute nominalizations, rather than the more traditionally expected subject (nominative) and object (O) nominalizations. Derbyshire (1985) reports an independent S nominalizer in Hixkaryana (-mi), but for the most part, S patterns with O.

2 As explained in DeLancey (1985), the notion of agentivity actually constitutes a two-part source, in that the prototypical agent internally decides "to perform an act, which causes the performance of the act, which in turn causes an event external to the agent:

Act of Volition ———> Action ———> Event"

DeLancey illustrates this chain of causation with the English sentence "I broke the cup":

Decision to break the cup ———> action ———> cup breaks

In this schema, the role of agent can be defined in terms of either the decision to break the cup, the act of trying to break the cup, or both. The role of agent can thus be completely separated from any action which takes place (since the decision to act already makes a referent a potential agent), or even if associated with the action, the role of agent can be identified with the initiation of an action, whether or not the actual result ensues (so that trying to break the cup, but failing, still might qualify a referent as an agent). Such a schema undoubtedly underlies the grammaticalization of verbs of volition as future markers (cf. Bybee et. al. 1991), but is more specific than that needed to account for the Cariban reanalysis.

3 In work in progress, I connect these two issues, the evolution of tense-aspect and the evolution of split ergativity. In Cariban, both come about by means of the same diachronic mechanism, which operates according to the same underlying functional motivation — the expression of viewpoint (cf. DeLancey 1982).

4 It appears that Dixon (1979) uses the terms "perfect" and "imperfect" in the same sense that Hopper and Thompson (1980) and DeLancey (1982) use the terms "perfective" and "imperfective". Following Comrie (1976), the latter works reserve the term "perfect" for completed acts which contain a reading of "present relevance", and do not oppose this term with the term "imperfect". It is clear from Dixon's arguments about the semantic basis for this split that he considers the completion of the act to be of primary importance, and present relevance does not enter into the discussion at any point.

5 See note three.

6 To enhance the clarity of this presentation, I represent the structure of both independent and dependent clauses with tree diagrams. I emphasize that these diagrams do not represent any current theoretical framework, nor do they imply any kind of claim about how syntax should be represented in theory — they are simply a useful metaphor for the constructions which enter into the diachronic processes in question. In these diagrams, I continue to use the same terminology I have used throughout the previous description. At the core of the reanalysis process is the nominalized dependent clause.

In representing dependent clauses, one must decide whether to represent the notional arguments (OVA) or the actual morphosyntax (Possessor-Possessed-Oblique). Since both are in question here, I represent both.

7 Note that a deeper analysis of case arrives at a different conclusion, since word order facts and morphological marking of co-constituents of O and S in the respective clauses differ. That is, the O possessor must precede the possessed (Nominalized V), whereas the S subject follows the finite Set I verb; similarly, the Set I verb varies for person in agreement with S, where the nominalized verb does not vary for person of the O (=possessor).

8 The claim that the auxiliary is lost must actually be qualified, since an auxiliary is allowed to occur with any verb in Makushi (cf. Chapter 9, §9.1.3.1), but the addition of an auxiliary changes the aspectual meaning of the clause.

9 Abbott (1991) considers the form *pe* to still be a postposition synchronically, and hence she labels it 'DENOM' for 'Denominalizer' (which has a semantic effect similar to English 'like'). In other Makushi examples, I have followed her convention, but here, where reanalysis to a future tense has arguably taken place, I gloss *pe* as 'Future'.

10 One might take such variation as evidence that the future tenses have evolved more recently (as opposed to the scenario I posit in Chapter 10, and in §11.2.1). That is, if the languages show identical past tenses, etc, then those must have been shared innovations, and since the futures are not identical, those must be independent (and hence more recent) innovations. I suggest that the evidence might go the other way, i.e. that at least one of the several futures was a shared innovation prior to the break-up of the parent language, but that this happened so long ago that there has been time for additional idiosyncratic futures to develop in each of the three daughter languages. Also, despite the relatively large amount of source material for Pemóng, no thorough syntactic study has been done, and Kapóng is barely described at all. Perhaps future research will reveal both further differences among the three, and also further similarities.

11 Kaufman 1989 and Girard 1972 both use the term group in their classifications (presumably for groupings of roughly the same time depth) and Durbin 1977 offers no term, so I use the term group for all three.

12 Bakairi certainly retains some part of the Set I system, but the descriptions available to me do not indicate whether the Set II system has begun to operate in Bakairi as well. Given the great variation seen in verbal prefixes (Souza 1991), and the use of the etymological adverbializing prefix \**t-* on main clause verbs (cf. Chapter 5, §5.1.3 and examples in Souza 1991) I suspect Bakairi to be Mixed (and perhaps even to have incorporated the idiosyncratic O nominalizing prefix into the Set II system like its close neighbors Kuikúro and Kalapalo). But in the absence of a fuller description of the verbal system, I can only hypothesize.

13 Recall from Chapter 1 that this is the branch of Durbin's classification which has received the most criticism. Rather than representing greater time-depth in their relationship, the lack of correlation between verbal system and genetic group might indicate instead mistakes in classification; perhaps after further study, languages in this

group will be found to belong to other groups and branches (including, if Kaufman and Girard are correct, some of the groups which Durbin has already posited).

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