LINGUISTIC DIMENSIONS OF VERNACULAR EDUCATION FOR SAIPAN CAROLINIANS

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ABSTRACT

Saipanese Carolinian is a Micronesian language spoken on the island of Saipan in the Mariana Islands by approximately four thousand people. Another ten thousand people on Saipan are speakers of a very different language, Chamorro. After several years of a successful Chamorro Bilingual Education Project, the Marianas Department of Education has instituted a pilot Carolinian Bilingual Project to help the minority population. Unfortunately, however, the Carolinian project has few tools to work with as there is nothing substantial written in the language and none of the proposed teachers or staff has received training that would give them knowledge of how to develop or teach materials in Carolinian.

This thesis investigates the phonology, morphology, and syntax of the Carolinian language to provide information that will be useful to the curriculum writers and teachers of the Carolinian Bilingual Project. This kind of linguistic information is essential for the design and utilization of a standard orthography that may be used in the writing of Carolinian, for the development of a style of punctuation that is appropriate for the language, and as a necessary step in the determination of "readability" levels for the children attending school.

The examination of major aspects of Carolinian grammar presented here will be suggestive of several ways

in which Project writers can control the materials they develop so as to make them more efficient instructional tools.

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CHAPTER I

Education and the Carolinian Language

1.0 Introduction

This study is concerned with a language, Saipan Carolinian, and with a projected vernacular education program soon to be instituted for Saipan Carolinians on their home island, Saipan, an island they share with three times their number of Chamorro speakers. The present study is intended as a contribution to the knowledge about the language needed if an adequate educational program is to be conducted in the Carolinian vernacular and is to be about the Carolinian language as well as Carolinian culture and history.

However, this study is not to be taken as an attempt to downgrade the use of English or of Chamorro in the schools of the Commonwealth of the Northern Marianas. Considerable progress has already been made on programs for both languages and cultures. It is now time to fill important needs for the third language and its speakers.

1.1 Vernacular Education

I will not in this study be concerned with any critical evaluation of the pros and cons of bilingual/bicultural education, nor with studies as to its effectiveness. Such discussions as Engle 1975 have already made valuable contributions to a debate which is still under way.

However, it seems reasonably clear that the present English-medium system has not worked well for Carolinians.

Few Carolinians have emerged as educational, political, or commercial leaders. The number of Carolinian legislators is far below what might be expected for a group making up almost one third of the population. There are no Carolinian judges, few civil servants, and few college graduates. The education of Carolinians is not of the kind that prepares them to participate in any but the lowest political and socioeconomic levels of the Saipanese community. Of course the problems of the Carolinians do not arise solely from the shortcomings of past and present education systems. Many other factors are involved. But it is evident that the educational system's past lack of respect for the Carolinian language and culture has done damage to the Carolinian self-image and has kept down Carolinian aspirations. Almost the same could have been said for the Chamorro language and culture until recently. For the Chamorros, who have the votes to obtain and retain political powers, some redress has already been achieved.

1.2 The Value of Vernacular Education

What can the use of Carolinian language and cultural perspectives contribute to the developing minds of our Carolinian children? Part of the answer to this question lies in the answer to a more basic question--what is the importance of a mother-gongue for its speakers. In a discussion of English in British schools, Frank Whitehead (1966) remarks:

> The fact is that our mother-tongue is something that is built into us at a very deep level of the whole personality. It is the medium in which we have evolved our most deeply ingrained modes of interpreting the universe in which we live; and our capacity for human relationships, our ways of perceiving, understanding and mastering the phenomena of our everyday existence are shaped and coloured by it in countless ways of which we are seldom aware. The work of certain Russian psychologists, notably Vygotsky and Luria, provides interesting indirect confirmation of the way in which the child's perception of reality takes its structure and patterning from language, as his acquisition of this enables him to sort out his impressions into generalised categories.... The normal five-year old comes to school already able to understand and employ almost all of the common structures of his native language, together with a considerable vocabulary.... This continues to expand and develop at many other times.... The true task of English teaching is to help children to refine, polish, raise to a higher level of sensitivity, effectiveness, and precision a language which they already possess in highly developed form.

Such considerations have not until recently had any effect on Micronesian educational planning. Suzanne Jacobs in an interesting paper on vernacular literacy training in Micronesia reports (1977):

> In the Micronesian Trust Territory, English has been the basic medium of education, although some of the vernaculars have been used to a relatively minor extent in the lower grades. In some schools, indeed, the native language has been proscribed, and punishments administered for using it. Textbooks have been in English (and, under earlier colonial administrations, in Japanese or German), and some of the teachers have been monolingual speakers of English. Children not used to the ways of a Westernized school system have had to struggle through the language barrier to master mathematical and scientific concepts, which present difficulties even for Americans using their own language. It is hardly surprising that for many Micronesian

> children, perhaps for most, their education has been of very limited value. It is a tribute to Micronesians and to their teachers that despite these handicaps there have been some who have broken through the language barrier--who have become skilled writers, thinkers, scientists, and teachers--in an alien tongue. One wonders what these might have achieved if the language handicap had been removed. Or perhaps it was the challenge of the handicap that stimulated their drive to achieve. This is not mere speculation. Recent studies of English reading ability in Micronesia have indicated that by ninth grade most Micronesian children read at third grade level. What problems this must present for classes in biology, mathematics, or social studies should be obvious, for their textbooks are universally English-language textbooks, typically textbooks written for U.S. mainland schools.

1.3 The Northern Marianas

The Commonwealth of the Northern Marianas occupies a chain of fourteen islands in the Pacific some 1,300 miles southeast of Japan. The total land areas is only 183.5 square miles and some of the islands are unpopulated. The population is 13,081 of whom 9,081 are Chamorros and 4,000 are Carolinians (U.S. Congress, 1975). Most Carolinians live on Saipan, the largest island, though a much smaller island, Agrigan, is reported to be populated almost solely by Carolinians speaking Carolinian.

I have been referring to the Marianas as a Commonwealth. This is, strictly speaking, incorrect since the region is still a part of the United Nations Trust Territory administered by the United States of America. In 1976 the voters approved Commonwealth status affiliated with the United States and it is planned that the Northern

Marianas will officially become a Commonwealth in 1981.

Although some Carolinians have traditions reporting much earlier settlement, the earliest documentary records report active Carolinian settlement beginning during the early eighteenth century at a time when the Spanish administration had removed the Chamorros to Guam. Later the Chamorros returned to form the dominant population group in the islands.

Ferdinant Magellan was the European "discoverer" of the Mariana Islands and the Spanish government established them as a Spanish colony in 1564. Since the Spanish remained in control until 1899, they have had considerable influence on the Chamorro people, language, culture, and religious beliefs. The Chamorro language is full of Spanish loanwords although its grammatical structure is much like those of most Philippine languages. Like them, it has an elaborate focus system of a type found only in languages on the Philippine Islands, Formosa, and certain areas of Indonesia.

The Carolinian language, like Chamorro, belongs to the great Austronesian family of languages but is only very distantly related to Chamorro and resembles it little although it does have a number of Chamorro loanwords including many originally borrowed from Spanish. Carolinian is descended from a number of languages and dialects belonging to the Micronesian branch of Austronesian. It is subgrouped with Sonsorolese, Ulithian, Puluwatese,

Satawalese, Woleaian, lagoon Trukese, and a number of other languages known as the Trukic continuum. The three dialects of Carolinian, differing only in the fairly minor aspects described in Chapter II, are descended from the Trukic languages spoken on the islands from which the early settlers came--Satawal, Lamotrek, and Puluwat.

The so-called Elle dialect is spoken on Saipan in the southern villages, such as Garapan, Oleai, and Chalan Kanoa. The Enne dialect is used in Tanapag Village. Since the two dialects are beginning to merge, the merger has been leading to a third dialect which draws from the other two. I shall call it here the Elle-Enne dialect.

1.4 Bilingual Education in the Marianas

Carolinians, like other Pacific islanders, have long been aware of the need for bilingualism. Successions of colonial administrations--Spanish, German, Japanese, and American--have brought home to them the need to read and communicate in some language other than their own. Until recently this need was used to justify the exclusion of the indigenous language from education. Within the last ten years, however, linguists, teachers, and administrators have come to recognize that absence of the vernacular in schools is an educational, cultural, and psychological impoverishment. Children were once punished for using their own language. Now, with the thrust for bilingual education, schools are admonished to develop vernacular programs using vernacular materials. The problem for

Carolinians is that no such programs exist, nor are there materials to use in them.

This is particularly true for the Carolinian population living on Saipan in the Northern Marianas. We have seen that the four thousand or so Carolinians are a minority, speaking a minority language, among 9,081 Chamorros speaking a distantly related but quite dissimilar language. Consequently, education in the Chamorro language has been assumed to be the first need. A good Chamorro grammar and dictionary have been developed, along with a useful orthography. Chamorro language development tests have been created for schools, teachers have been trained and attractive materials published to replace the old English language books, often bizarre cast-offs from American schools.

One unfortunate side-effect of these excellent developments has been a diminution of self-esteem among the Carolinian minority. Their language has no written grammar, no dictionary; there have been no Carolinian programs or materials. In practice Carolinians now need both English and Chamorro to obtain employment in the civil service. Knowledge of their own language is usually irrelevant. Carolinians are at an educational and social disadvantage from kindergarten on.

Realizing this, the Carolinian community has pressed for Carolinian language study and educational programs. Fortunately the Marianas Department of Education, already

concerned about the situation, has been willing to help. As a result, the Education Department has cooperated with the Carolinian community in formulating and developing a pilot Carolinian language program.

But, despite the progress, some essentials for such a program are still lacking or incomplete. There is no grammar of the language. Solid studies of children's acquisition of Carolinian will require one. Language arts materials will benefit from awareness, on the part of the materials writers of the syntactic, morphological, and phonological characteristics of the language. A practical orthography has to be developed and accepted by the Carolinian community.

The present study is a tentative step towards the implementation of one of these goals. It outlines some of the problems related to the development of an accepted orthography and explains the rationale behind a tentative one developed by Carolinians working with linguists at the University of Hawaii. The study attempts a first description of some major syntactic phenomena in Carolinian, phenomena which differ considerably from their Chamorro counterparts. Carolinian adults are not aware of the syntactic complexities of their language nor the problems such complexities might present for young readers and writers.

The syntactic description has been written within the theoretical framework of generative-transformational

linguistics. (See, for example, Chomsky 1965, Jacobs and Rosenbaum 1968.)

Although this framework has proven itself very useful for the study and description of Saipan Carolinian, its use here should not be taken as an endorsement of the theory for teaching in the schools. School grammars will be needed. It is hoped that this study will provide a useful basis for such materials.

CHAPTER II

The Development of a Carolinian Orthography

2.0 Introduction

The proposal for a Carolinian Bilingual/Bicultural Education Pilot Program that was submitted by the Marianas Department of Education in March 1976 stated that if the program were funded classes in arithmetic, social studies, science, and language arts would be conducted in Carolinian for grades one to three at Oleai Elementary School beginning in September of that year. The Carolinian language arts classes would consist initially of oral development and the establishment of reading readiness capabilities, most of the materials for which would be borrowed from the Chamorro program, but by the middle of the year the Carolinian children would begin to learn basic literacy skills in their language.

At that time, however, there was no standard alphabet for the writing of Carolinian, let alone a standard spelling system. (There had, however, been at least two attempts to establish one: first under the guidance of a linguist from the University of Hawaii, Gregory Trifonovitch, during the 1960's; and then under a Trust Territory-wide project to develop reference grammars and dictionaries for Micronesian languages under the Pacific and Asian Linguistics Institute (P.A.L.I.) at the University of Hawaii. Unfortunately, neither of these efforts resulted in an orthography which Carolinians

would accept.)

2.1 Steps Toward an Orthography

Therefore, it was essential to develop quickly an acceptable alphabet and writing system that could be used in the language arts program in the fall. A program of intensive linguistic research into the phonology of Carolinian had to be instituted to establish sound principles for the development of the orthography.

Because the only available linguists with any familiarity with Carolinian were the group working under Professor R. Jacobs and none of these at the University of Hawaii could come to Saipan before summer 1976, it was decided to conduct this research at the University. Accordingly, the Marianas Department of Education asked the United Carolinian Association (U.C.A.) to select a Carolinian to serve as linguistic consultant to aid research on the syntax and phonology of the language. As a result, the present writer came to Hawaii in January 1976.

Throughout the spring term this writer and Rosario E. Ngirbabul, who was already present in Hawaii attending Chaminade College, worked with Professor Jacobs, Frederick H. Jackson, Felicity Jane Peacock, and a number of others in Professor Jacobs' Linguistic Field Methods Class. In the middle of the term, Mrs. Catherine J. Porter, Director of the Chamorro Bilingual Program, came to Hawaii to establish a date for the convening of a Carolinian Orthography Panel in July for the purpose of deciding on

an orthography for the schools that would be acceptable to the Carolinian community. This writer was to chair the Panel and Frederick Jackson was to serve as linguistic advisor.

2.2 Carolinian Phonology and Morphology

In this section those aspects of the Carolinian sound system and grammar that were especially relevant to the development of a Carolinian orthography are discussed. Most of the discussion will focus on the Elle dialect, of which this writer is a native speaker, but brief mention will also be made of the sound systems of the other two dialects (see 4.4.0).

2.2.1 The Phonemes of the Elle Dialect

The single consonant phonemes native to the Elle dialect of Carolinian have been analyzed as follows (Johnson 1976; Jackson and Elameto 1977):

	Labial	Alveolar	Palatal	Retroflex	Velar
Stops [-voiced]	p	t			
Stops [+voiced]	b^w				
Affricate				ç̣	
Fricatives	f	s		ṣ	x
Nasals	m, m^w				ŋ
Liquids		l, r			
Glides	w		(y)		

The parentheses around (y) indicate a phoneme that is found some of the time in some speakers' idiolects.

The vowels of the Elle dialect are:

	Front	Central	Back	Diphthongs
High	i	ɨ	u	iu, eu, æu, au
Mid	e	ʌ	o	ou, ɔu, ei, æi
Low	æ	a	ɔ	ai, ui, oi, ɔi

All of the consonants may appear initially, medially, and finally. In final position all the obstruents are obligatorily released. All consonants except /ç/ are unaspirated, and all stops and /x/ are lenis.

The consonants /bw/ and /mw/ have coarticulated labial closure and rounding with a raising of the back of the tongue toward the velum. The /bw/ is often spirantized to /βw/ medially. The /r/ is a trill; it is voiceless word-finally.

2.2.1.1 Consonant Gemination

All of the following single consonants may also be geminate initially, medially, and, in their abstract representation, finally: /p, t, bw, f, s, m, mw, ŋ, l/. Geminate /bw/ is devoiced. In addition, Carolinian also has geminate but not single /kk/. (Single /k/ does, however, occur in borrowed words.) There are also the five consonants /ş, x, r, w, y/ which may be geminated medially in productive reduplication (see 4.2.1).

Geminate obstruents are tense and often give the impression of aspiration. For example:

Initially	Medially	Finally
ppekk 'shoot'	leppi 'beach'	paap 'plank'
ttou 'medical shot'	tattar 'to throw'	patt 'cold'
bwbwo (pwo) 'pound'	bwobwbwool 'smell'	ɔbwbw(ɔpw) 'hide'
ffas 'laugh'	faffai 'to call'	seff 'to snap'
ssogh 'plenty'	sossor 'turning'	kkess 'talkative'
mmat 'low tide'	mommotul 'cooking of'	rasiimm 'rainbow'
mwmwus 'vomit'	ṣimwmwel 'his head'	siimwmw 'awake'
ŋŋau 'bad'	ŋaŋŋas 'breath'	--
llus 'jump'	llallall 'taste'	mall 'fine grain'
kkaal 'these'	xekkei 'laugh'	sukk 'drunk walk'
--	ṣeṣṣelisel 'to drip saliva'	--
--	xoxxooṣ 'to be cutting tuba'	--
--	wewweeri 'to be seeing it'	--
--	yúyyúl 'to be drinking'	--

2.2.1.2 Vowel Length

All of the nine phonemic vowels may be long. Although in most cases this length is predictable (see 4.2.2), there are several cases where the length is phonemic. The following are examples of phonemic long vowels:

/i/	wii	'uproot'
/e/	reel	'from him'
/æ/	mææ	'to die'
/ɨ/	lɨɨ	'coconut'
/ʌ/	xʌ	'fish hook'
/a/	waa	'canoe'
/u/	ssuux	'open'
/o/	foo	'pole for boat'
/ɔ/	llɔɔl	'in it'

2.2.1.3 Phonemic Borrowing

In addition to its native vocabulary, Carolinian has borrowed considerable vocabulary from Chamorro, English, and Japanese. Understandably, this has also resulted in the "borrowing" of several phonemes from these languages as well. Although these "phonemes" appear only in borrowed words, many of these words undergo regular Carolinian phonological rules and the foreign segments are affected in the same way as native ones. For example, the Japanese word /dzori/ 'slipper' is borrowed into Carolinian and may be reduplicated thus: /dzodzdzoori/ 'to be wearing slippers'. Other borrowed phonemes are:

/b/	badu	'hunchback'
/d/	dasai	'to give hair cut'
/g/	gosa	'enjoy, satisfaction'
/h/	hara	'jug'
/k/	korehas	'belt'
/v/	verse	'a stanza'
/dz/	yo'ase'	'merciful person'
/n/	nana	'mother'
/ñ/	niño	'baby Jesus'

2.3.0 Syllable Structure

The canonical form of Carolinian syllables is either CV or, more typically, CVC, CVVC, or CCVC. The only possible consonant clusters within a single morpheme are geminates. Typically, Carolinian morphemes are no more than two surface syllables in length.

2.4.0 Morphophonemics

2.4.1 Reduplication and Consonant Gemination

The Elle dialect has medial consonant gemination which occurs in one highly productive pattern of reduplication used primarily to show durative aspect. In this pattern the initial CV is copied on the left, and the original initial consonant, which is now between two identical vowels, is doubled. We will represent this process as:

C_iV_jX $\qquad\qquad$ $C_iV_jC_iC_iV_jX$

This process also applies to borrowed words--even words which are otherwise completely unassimilated words. Examples of the process are:

Source	Reduplication	Gloss
loka	e lollokka	'she is wearing sandals'
xasulis	e xaxxasulis	'he is wearing pants'
tou	e tottou	'he is stabbing him'
siliila	e sissiliila	'she is wearing a dress'
sooŋ	e sossoŋ	'he is (being) angry'
mwuŋo	e mwumwmwuŋo	'he is eating'

For vowel-initial verb stems, a geminate /kk/ is inserted between the initial vowel and its reduplicated copy. Thus the verb aŋi 'eat-it' is reduplicated as akkaŋi, atara 'throw' as akkatara, and collɔ 'to lie' as okkoollɔ.

Less obvious examples are those like the following, in which the initial consonants and the doubles ones are qualitatively different:

ṣeeli	e ṣeccẹeeli	'he is helping him'
xutta	e xukkutta	'he is looking for her'
xopi	e xokkopi	'he is cutting it'
xiil	e xikkiil	'he is picking fruits'
ṣɔɔlimw	e sɔcc̣ɔɔlimw	'he is marrying'

The relationship between /x/ and /k/ and between /s̱/ and /c̱/ partly suggest a case of synchronic alternation reflecting a diachronic change. That is, there may be synchronic rules which spirantize single /k/ and affricate geminate /s̱/ and /ṟ/. It has been observed by Jackson and Elameto (1977) that if this analysis were carried out to its logical extent, then all cases of /x/ would derive from /k/, and all cases of /c̱/ would derive from underlying geminates. However, as they also point out, /x/ and /x̱/ can also be doubled medially as /xx/ and /s̱s̱/, as mentioned earlier, so that some speakers will produce, for example, [e xoxxoopi] 'he is cutting it', with doubling of the original initial consonant. Thus, it seems that this historical relationship has become increasingly opaque and is probably no longer synchronically valid for most speakers.

2.4.2 Final Vowel Deletion and Compensatory Lengthening

In Carolinian, the phonological process by which the front vowel /i/ and back vowel /u/ condition preceding and often following vowels is productive in both borrowed and native words. The process is a type of vowel harmony. In addition to the high front and back vowels, a third conditioning factor of this harmony is the velarization of consonants which causes preceding vowels to be back, and articulated further back in the mouth.

nana 'mother (from Chamorro)'

-i 'my' = nænææi 'my mother'

-l 'his' = nanaal 'his mother'

-ṣ 'our (incl.)' = nanaaṣ 'our mother'

-mem 'our (excl.)' = nænæmem 'our mother'

-r 'their (pl.) = nanar 'their mother'

-mi 'your (pl.)' = nænæmi 'your mother'

-mw 'your (sg.)' = nɔnɔɔmw 'your mother'

i 'I' + se 'neg.' + lɔ 'go' = isi lɔ 'I didn't go'

u 'you' + se 'neg.' + lɔ 'go' = usu lɔ 'you didn't go'

e 'he' + se 'neg.' + lɔ 'go' = ese lɔ 'he didn't go'

The following forms would suggest the presence of a deleted final vowel in the unsuffixed forms:

iimw 'house'	xiil 'skin'	bwoot 'nose'
imwei 'my house'	xilii 'my skin'	bwotɨi 'my nose'
imwɔmw 'your house'	xilɨmw 'your skin'	bwotumw 'your nose'
imwal 'his house'	xilil 'his skin'	bwotɨl 'his nose'
xumwuṣ 'hand'	saam 'father'	ṣaal 'water'
xumwuṣɨi 'my hand'	samei 'my father'	ṣalɨi 'my water'
xumwnṣumw 'your hand'	samɔmw 'your father'	ṣalumw 'your water'
xumwuṣul 'his hand'	samal 'his father'	ṣalɨl 'his water'

The stem morphemes for the underlying representations must be imwa, xili, bwotɨ, xumwuṣu, sama, and ṣalɨ.

The compensatory lengthening of the first stem vowel in unsuffixed nouns as shown above is found in many Micronesian languages. The stem-final vowel of bisyllabic unsuffixed nouns is deleted and the noun's first syllable is lengthened. A large proportion of the long vowels of Carolinian derive their length from this compensatory lengthening. However, the loss of a medial consonant some time between Proto-Micronesian and modern Carolinian has also created long vowels. Since there is no synchronic trace of these medial consonants, it is pointless to try to derive the resulting long vowels by a phonological rule in the synchronic grammar. For example, waa 'canoe' < PMC *waga, but the length is now phonemic.

When nouns are modified directly by adjectives whose initial consonants are not homorganic with the final consonant of the noun, there is further evidence for the underlying stem-final vowels. That is, the combination behaves phonologically like a compound: the vowel in the first syllable remains short while the stem-final vowel of the noun surfaces. For example:

iimw	'house'	+	xaç	=	imwaxaç	'good house'
tilixi	'book'	+	xaç	=	tilixixaç	'good book'
aramas	'people'	+	xaç	=	aramasaxaç	'good people'

xulɔx 'dog' + xaç = xulɔxuxaç 'good dog'

sææt 'ocean' + xaç = sætixaç 'good ocean'

maat 'farm' + xaç = mataxaç 'good farm'

2.4.3 Morphophonemics of Verb Phrase

The obligatory subject pronouns (SM), the optional negative marker (Neg) and the aspect markers (A) are the first three permissible elements in the Carolinian verb phrase. A list of these forms follows.

Subject Pronouns	Aspect Markers
i '1st sg.'	bwe 'Future/unrealized'
u '2nd sg.'	a 'Perfect/change of state'
e '3rd sg.'	se 'Simple negative'
si '1st pl. incl.'	sææl 'Perfective negative'
ai '1st pl. excl.'	te 'Imperative negative'
au '2nd pl.'	saabw 'Future negative'
re '3rd pl.'	"

The final /e/ of the SM and the /a/ of perfective A coalesce into the long vowel /aa/ when the third person subject pronouns are followed immediately by the perfective a (Jackson and Elameto, 1977).

i + a + tii-lɔ 'close it' = iya tii-lɔ 'I closed it'

u + a + tii-lɔ = uwa tii-lɔ 'you closed it'

si + a + tii-lɔ = siya tii-lɔ 'we closed it'

ai + a + tii-lɔ = aiya tii-lɔ 'we closed it'

e + a + tii-lɔ = aa tii-lɔ 'he closed it'

re + a + tii-lɔ = raa tii-lɔ 'they closed it'

When the subject markers are followed by the future marker, the only alternation is the raising and backing of the vowel, i.e., from final-vowel [e] to [u]. This is caused by the presence of the velarized [bw] and the preceding round vowel of the second person SM.

i + bwe + lɔ	'I will go'	ibwe lɔ	'I will go'
u + bwe + lɔ		ubwu lɔ	'you will go'
si + bwe + lɔ		sibwe lɔ	'we will go'
ai + bwe + lɔ		aibwe lɔ	'we will go'
au + bwe + lɔ		aubwu lɔ	'you will go'
e + bwe + lɔ		ebwe lɔ	'he will go'
re + bwe + lɔ		rebwe lɔ	'they will go'

But when the subject markers are followed immediately by simple negative se and te the same vowel harmony change occurs. That is, the vowel [e] is changed to [u] if the subject pronoun is second person singular or plural.

The future negative saabw seems likely to be a coalescence of the simple negative se and future bwe (Jackson and Elameto 1977:11).

2.5.0 Dialect Variations: Writing Systems in Use

When Carolinians did write, they called upon a wide range of experiences in selecting the alphabetic system they used. Many of the older Carolinians, for example,

are at least familiar with German from the German occupation. Accordingly, these people would often use umlaut diacritics for the writing of some of the vowels. Similarly, a German influence could also be detected in the writing of the coronal spirant /ṣ/ as sch. Other speakers, however, used their knowledge of Chamorro orthography to write Carolinian. As Chamorro has three fewer phonemic vowels than Carolinian and also does not contain Carolinian's distinctive vowel length, initial consonant gemination, or velarized labials (see section 3.1), the individual systems based on Chamorro contained excessive ambiguity. Still other Carolinians based their spelling on English, or on an eclectic combination of the three influences. Moreover, no individual writer was consistent in the system that he/she used.

In the Carolinian language, there are three dialects, one dialect in Tanapag--the northern end of Saipan and two in Oleai--the southern end. In order to identify the variations between these dialects, an analysis of phonemes of each is presented.

Tanapag Enne Dialect

	Labial	Alveolar	Palatal	Retroflex	Velar	Glottal
Stops [-voiced]	p	t			(k)	
Stops [+voiced]	bw	(d)			(g)	
Affricate				c̣		
Fricatives	f	(s)			x	h
Nasals	m	n			ŋ	
	m^w					
Liquids		l,r		ṛ		
Glides	w					

Oleai Dialects

	Labial	Alveolar	Palatal	Retroflex	Velar	Glottal
Stops [-voiced]	p	t			(k)	
Stops [+voiced]	bw					
Affricate				c̣		
Fricatives	f	s		ṣ	x	(h)
Nasals	m	n			ŋ	
	m^w					
Liquids		l,r				
Glides	w		y			

(Notes: The Elle and the Elle-Enne dialects are shown together since they differ only in that the former uses no /n/. The parentheses in the sounds above show that these phonemes are mostly found in borrowed words while the underlined n means that it is only found in one of the Oleai dialects.)

2.5.1 What Are the Major Sound Differences

If we look back at these two tables, we will see that the sound differences are that Tanapag dialect has the phonemes /ṛ/ and /h/ where Oleai dialects have /ṣ/ and /s/. Thus, for example, the form for 'nothing' in the Tanapag dialect would be written haar while Oleai would use saar. The word for 'woman' in the Tanapag dialect is /ṛaabut/, but in Oleai, /sɔɔbwut/. So we conclude that the retroflex /ṛ/ corresponds to Oleai /ṣ/ and the fricative /h/ corresponds to the single /s/ of Oleai. The only major sound variation in Oleai dialects is that Elle dialect uses the phoneme /l/ while Elle-Enne uses /n/. Appendix A presents a list of words showing other examples of dialectal variation.

2.6.0 The Selection of Orthographic Principles

It was clear that the only possible general principle on which to base the Carolinian orthography was the alphabetic principle, i.e., that it would be inappropriate to attempt to devise a logographic or syllabic writing system for Carolinian. First, both Chamorro and English, two languages which Carolinians must learn to be able to succeed on Saipan, are written only in alphabetic scripts. Second, all the other languages in the Pacific Basin except Japanese are written alphabetically. (There was, however, an attempt after World War II to devise a probably syllabic system for writing a dialect of

the related language of Woleaian, most likely as a secret script. See Koch 1976, and Reisenberg and Kaneshiro 1960.)

The most important reason, though, is that while all speakers of Carolinian are familiar with at least one alphabetic script and use the alphabetic principle in their own writing, very few are literate in a non-alphabetic system.

In attempting to determine exactly how the alphabetic principle should be applied to Carolinian, other Micronesian alphabets were examined. We shall here briefly review three of the more successful of those orthographies. The Chamorro orthography is examined for political and geographical reasons and because, as will be shown, it has had a large influence on how Carolinians write their language. The Trukese orthography is examined both because the language is the most closely related to Carolinian and also because of the way that the Trukese system attempts to deal with the problem of several competing dialects. In addition, the Ponapean orthography is described because of its exceptionally widespread acceptance and implementation and because it utilizes some spelling principles not found in the other orthographies.

2.6.1 The Chamorro Orthography

The Chamorro script that was agreed upon in 1971 is largely a regularization of the earlier Spanish-based orthography. The phonemes of Chamorro are as follows (Topping 1973):

Consonants

p	t		k	ʔ
b	d		g	
	č			
	dz			
f	s			h
m	n	ñ	ŋ	
	l,r			
w				

Vowels		Diphthongs		
i	u	ai	au	
e	o	ia	iu	
æ	a	oi	oe	ea

In addition, while the major dialect of Chamorro includes consonant gemination inter-vocalically, there is no distinctive vowel length.

The selection of symbols for the phonemes of Chamorro was largely based on Pike's principle that an orthography "should be phonemic. There should be a one-to-one correspondence between each phoneme and the symbolization of that phoneme." (Pike 1966). Due to the lack of Roman letters to represent the consonant phonemes /č, dz, ñ, ŋ/, it was decided to adapt the symbols ch, y (after Spanish), ñ, and ng. The consonant /w/, due to the fact that it only occurs after velar stops, is written u, as in Spanish. However, it was decided not to distinguish the vowel

phoneme /æ/, from /a/, and to use the same symbol a for both vowels. Although this causes some ambiguity, the result has been acceptable to the Chamorro writers and readers.

The taxonomic phonemic principle is also followed in the case of vowel harmony where if, for example, the phoneme /u/ is fronted to [i] because of preceding /i/, it is written as i, not u (Topping 1973).

Although there are marked differences between the dialects of Rota and of Saipan (e.g., Rotanese lacks the Saipanese final /h/ and geminate consonants), it was decided to base the orthography entirely on the Saipanese dialect, as Saipan is the seat of government.

2.6.2 The Trukese Orthography

The phonology and dialect variation of Trukese as reported by Goodenough and Sugita (1972) are almost directly comparable to those of Carolinian. The only phones in Carolinian that do not occur in Trukese are /bw/, which is voiceless /pw/ in all Trukese dialects, and /x/, which is Trukese /k/. Similarly to Carolinian, where some dialects have /n/, others have /l/ or /n (and) l/, where some have /ç/, others have /ṣ/ or /ṛ/, and where some have /s/, others have /h/. In dealing with this dialect variation, the Truk orthography board decided to devise a standardized system for representing Trukese sounds instead of a standard spelling system. That is, the Trukese orthography completely reflects all dialectal differences and words

are written differently by speakers of different dialects. (A similar system is used in the writing of Serbo-Croatian languages in Yugoslavia with some success (Lyovin 1976).)

To reflect the consonant phonemes /pw, c̣, ṣ, ṛ, mw, ŋ/, Trukese uses digraphs: pw, ch, sh, rh, mw, ng. In representing the four additional vowel phonemes /æ, ɨ, ʌ, ɔ/, however, Trukese uses the acute accent diacritic: á, ú, é, ó. The primary reason for this is to avoid possibly confusing clusters of vowel symbols if digraphs were used. (For example, if ae were used for /æ/, the form for 'my boat' would be waeaey [wææy].)

In selecting symbols to write Trukese words, the Trukese orthography uses a narrower transcription than that suggested by Pike, particularly in the representation of vowel clusters, where the phonetic glides [w, y] are written between all unlike vowels. Geminate consonants are represented by a doubling of the consonant symbol. Long vowels, similarly, are written by doubling the vowel symbol. In general, the Trukese orthography directly reflects the phoneme that most closely corresponds to the surface phone of a word, regardless of what the source phoneme of that phone might be. Thus, for example, the following paradigm, very close to the one for Carolinian:

'house'	/imwa/	[iimw]	iimw
'my house'	/imwa + y/	[imwey]	imwey
'your house'	/imwa + mw/	[imwomw]	imwomw
'his house'	/imwa + l/	[imwal]	imwal

2.6.3 The Ponapean Orthography

Ponapean has two major dialects which differ primarily in that in words where one has /ɔ/, the other has /ɛ/. As in the Chamorro case, the Ponapean orthography board decided to choose a standard spelling system, based on the /ɛ/ dialect (Rehg 1973).

The phonemes of the main dialect of Ponapean are as follows:

Consonants			Vowels	
p,pw	t	k	i	u
	ç		e	o
	s		ɛ	ɔ
m,mw	n	ŋ	a	
	l,r			
w				

Ponape was for some time under the control of Germany, and as a result the orthography reflects many German patterns. For example, Ponapean /t/ is written d (leaving t to represent the retroflex affricate). Similarly, vowel length is represented by writing -h after the single vowel symbol. The Ponapean orthography board consciously

decided to reject diacritics in their orthography in order to make the orthography easier to type. For the vowel /ɔ/, the symbol oa is used, but /ɛ/ is written together with /e/ as e.

The Ponapean board also established a principle for the representation of predictable morphophonemic alternation so that such alternations would be written only within the boundaries of a written word, but not across word boundaries.

2.6.4 Some Alternatives for a Carolinian Orthography

We have seen that although all of the Micronesian orthographies that have been developed and standardized use the alphabetic-phonemic principle, there are also differences in the details of how the principle is applied. In determining how the principle is to be applied to Carolinian, then, there were eight major questions to be answered:

(1) Should there be a standard spelling system in which all words are spelled the same regardless of the dialect of the speaker, as in Chamorro and Ponapean, or should there be only a standard representation of Carolinian sounds which would reflect the individual pronunciation of each dialect, as in Trukese?

(2) Should there be a separate alphabetic symbol for each consonant phoneme? If so, should those phonemes that cannot easily be represented by single Roman letters be symbolized with digraphs, as in Ponapean, Chamorro, and

Trukese; with the single unused alphabet letters, as in Yapese q for /ʔ/ and Chamorro y for /dz/; or with diacritics, as in Marshallese n̄ for /n/ and m̧ for /mw/?

(3) Should all phonemic vowels be represented, as in Trukese, or should a single symbol be permitted to represent more than one phoneme, as in Chamorro a and Ponapean e? If all vowels are to be represented, should digraphs be used, as in Ponapean oa for /ɔ/, or diacritics, as in Trukese á for /æ/?

(4) Should geminate consonants be represented as such? If so, should they be represented in all three positions (initially, medially, and finally), or in only one or two positions? (The Trukese orthography now represents gemination initially and medially, but not finally, and there is an influential group on Truk which wants to eliminate representation initially (Sugita, personal communication).)

(5) Should vowel length be represented as such? If so, should only unpredictable long vowels be represented or should all long vowels be separately symbolized, as in Trukese and Ponapean? If long vowels are to be represented, should they be symbolized with diacritics, as in Sāmoan use of a macron (ā for /aa/), or by doubling the vowel symbol?

(6) Should predictable morphophonemic alternations be reflected as such, or should the orthography attempt to

reflect base phonemes before the application of productive phonological rules? (Jackson and Elameto, 1977)

(7) What principles should be used in word division?

(8) How should foreign borrowings be represented in the orthography, particularly those borrowings that include phonemes that are not included in the basic Carolinian inventory?

2.6.5 Past Orthographies

Partly because of the fact that most Saipan Carolinians are bilingual or trilingual, their writing has reflected many foreign language orthographic systems. Despite the idiosyncracies of Carolinian writing, the following generalizations can be made:

(1) The velarized consonants (bw, mw, pw) were often written as digraphs when the following vowels are non-round. But a -w or -u was almost never indicated before rounded vowels or word-finally. This phenomenon can probably be traced to Chamorro writing where, as we have seen, there is a rounded velar glide that occurs only after consonants--and only before unrounded vowels. The Carolinians seem to have interpreted their velarized consonants as plain consonants followed by glides, like the Chamorro phones. For example, libual 'hole of' for /libwal/, but lib 'hole' for /liibw/; the form imual for /imwal/ 'his house', but imom /imwɔmw/ 'your house'; puel for /pwpwel/ 'dirt', but po for /pwo/ 'pound'.

(2) The geminate consonants were not represented as geminate initially and finally, though some wrote geminate consonants medially. This again is almost certainly a result of Chamorro influence. The only geminates in Chamorro are medial and as a result only these geminates are reflected in writing. For example: pi /ppii/ 'sand'; lepi, leppi for /leppi/ 'beach, sand'; mile, mille for /mille/ 'this one'; lol for /llɔl/ 'in it'.

(3) Carolinians are used to the five-vowel symbols of the Roman alphabet. These were used to indicate the nine distinctive vowels of the Carolinian language. Chamorro, too, as we have seen, uses five-vowel letters to represent the six phonemic vowels. So i corresponded to both /i/ and /ɨ/; e to /e/, /æ/, and /ʌ/; a to /a/, /æ/, and /ɔ/; u to /u/ and /ɨ/; and o to /o/ and /ɔ/. Occasionally, digraphs were used such as eu for /ʌ/ and iu for /ɨ/, but when they were used, they were not contrasted with the corresponding diphthongs.

(4) Long vowels were not represented, again probably due to Chamorro influence, as there are no distinctive long vowels in that language. For example, fi /fii/ 'star', set /sææt/ 'sea', il for /iil/ 'mother'.

(5) In writing morphophonemic regularities (such as the predictable vowel qualities before possessive suffixes), the Carolinian paid no attention to the underlying regularities. Instead, they focused entirely on the surface phones. This, too, is similar to Chamorro

practice (as well as to that of most other Micronesian orthographies). (See section 3.2)

(6) Directional suffixes were always attached to the preceding verbs. For example, muatiu /mɔɔttiu/ 'sit down', mela /mæællɔ/ 'die', touo /towou/ 'get out'.

(7) The subject pronoun was almost invariably attached to whichever part of the verb phrase immediately followed it, i.e., the negative marker, the aspect marker, an aspectual adverb, or the verb itself. For example, ese /e se/ 'he not', ebue /e bwe/ 'he will', eke, eghal /e kke, e ghal/ 'he progressive', and emuel /e mwmwel/ 'he can'.

(8) When the determiners were singular, they were usually attached to the preceding noun. For example, mualue /mwææl-we/ 'that man', mualie /mwææl-ie/ 'this man'. Plural determiners, however, were usually written separated. For example, mual kal /mwææl + kkaal/ 'these men', mual kelal /mwææl kke + laal/ 'those men', mual keue /mwææl kke + we/ 'those men in the past'.

(9) The longer object pronouns were occasionally separated from the preceding verb stem, while the shorter pronouns are invariably attached. For example, e weriei 'he sees me' versus e uri ghisch 'he sees us (inclusive)'.

(10) Occasionally morphemes were not written if they were phonologically assimilated to other morphemes. For example, ito for /i + itto/ 'I come' (phonetically [iitto]).

2.7.0 The Saipan Carolinian Orthography Committee

On July 21, 1976, a preliminary meeting was called at the Headquarters Education Department conference room. The site was agreed on in part because it was approximately equidistant from both the northern and southern Carolinian communities. The meeting was to discuss the initial steps for setting up an orthography acceptable to both communities and to select the members of the orthography committee. We include here a list of the convention participants selected at the preliminary meeting and a brief notation as to their background to indicate the interests represented. Speakers of all three Carolinian dialects were represented: Elle, Enne, and Elle-Enne. A complete list of the members of the Orthography Committee, including their positions in the community, is found in Appendix B.

The official orthography conference was held from July 26 to August 4, 1976. The meeting opened with an address by the Director of Education for the Marianas, Mr. Jesus M. Concepcion. Representatives from the Marianas Education Department and of the Chamorro Orthography Committee also attneded the convention on an irregular basis.

It was first decided that no dialect would be chosen as the official dialect for school and government documents, etc. Instead, the committee agreed to select a standard system of representing orthographically the pronunciations

of all three dialects, and that Carolinians should use that system to reflect the specific dialect pronunciations. Thus school teachers would not enforce the particular forms of one dialect but instead allow students to use the spelling appropriate for the dialect they speak. Bilingual program materials would be allowed to vary in orthography according to the dialects of the particular writers. It was also suggested that some materials might be printed in three dialect versions, if sufficient funds were available.

2.7.1 Selection of an Alphabet

In the selection of alphabet this writer, along with Frederick Jackson, recommended to the orthography committee members, the following graphic symbols:

Grapheme	Phoneme	Examples
a	/a/	fal 'hurt', faaliu 'island'
e	/e/	nge 'and', teefer 'able'
i	/i/	imwal 'his house', iit 'name'
o	/o/	rong 'hear', roong 'magic'
u	/u/	u 'you', tuugh 'punch'
å	/æ/	sså 'run'; fårh 'pandanus'
ė	/ʌ/	kkėlėl 'his singing'; tėė 'small island'
ó	/ɔ/	schóól 'person of'; ffót 'to plant'
ú	/ɨ/	ghú 'kindle'; lúú 'coconut'
f	/f/	faliu 'island'; ffót 'to plant'

Grapheme	Phoneme	Examples
h	/h/	hong 'mad'; hor 'have'
s	/s/	ese 'he not', ssogh 'plenty'
sh	/ṣ/	schól 'black'; schagh 'only'
gh	/x/	ghulei 'know'; masagh 'afraid'
k	/kk/	takk 'finish'; akkeu 'few'
l	/l/	llól 'in it'; lair 'theirs'
m	/m/	mille 'this one'; mmang 'crazy'
mw	/mw/	mwáál 'man'; mwomwmwongo 'eating'
n	/n/	nair 'thier (kids)'; nón 'in it'
ng	/ŋ/	nger 'scratch'; ngngau 'bad'
p	/p/	pei 'my hand'; ppi 'sand'
pw	/pw/	pwo 'pound'; pwel 'dirt'
bw	/bw/	bwal 'also'; bwi 'relative'
r	/r/	rel 'from him'; re 'they'
rh	/ṛ/	rhóbwut 'woman'; fárh 'pandanus'
ch	/ç/	chibw 'to pick'; chei 'to chase'
t	/t/	it 'name'; itto 'come'
w	/w/	waa 'canoe'; walawal 'trees'

The committee examined the alphabet symbols to be used. The adoption of vowel symbols a, e, i, o, u, and the consonants f, h, s, gh, l, m, n, ng, p, r, rh, t, and w required little discussion. But the representation of length on vowels and of the vowels /æ/, /ʌ/, /ɔ/, and /ɨ/ as á, é, ó, and ú respectively, however, occasioned considerable discussion. So too did some consonants.

The nine-vowel system of Carolinian is the same as that for Trukese. Frederick Jackson, who was familiar with the latter system, showed how the same problems had been dealt with in the Trukese orthography, using the following examples as illustration:

Phonemic Representations	Graphemic Representations	Gloss
/mææl/	mwáál	'man'
/pwel/	pwel	'dirt'
/fil/	fil	'choose'
/pwul/	pwul	'burn'
/mwoot/	mwoot	'cooked'
/fʌri/	fér̀i	'do it'
/lɨɨ/	lúú	'coconut'
/pal/	pal	'hill'
/sɔɔbwut/	schóóbwut	'woman'

After some further discussion, the committee settled on Trukese a̲, e̲, o̲, and u̲ for the phonemes /æ/, /ʌ/, /ɔ/, and /ɨ/.

2.7.2 Vowel Length

In deciding whether or not long vowel should be represented in the orthography, the committee at first favored long vowels. However, some members argued that most written materials that they were familiar with do not show double vowels, and that the incorporation of long vowels would confuse the readers. The committee

agreed for the time being not to reflect long vowels. However, at a later meeting, because of the problems arising from the omission of long vowels, this decision was reversed. The use of single vowel symbol a for the vowels in /ppal/ 'hill' and /paal/ 'his stool' would not normally confuse readers because sentence contexts will normally make the meaning clear enough. But such possibilities for ambiguity might slow down many Carolinian readers, it was thought. This was the major factor behind the decision to show length on vowels (Marck, personal communication).

2.7.3 Velarized and Retroflex Consonants

The selection of alphabet symbols for the consonants /bw/ and /mw/ was complicated by the fact that most committee members had not realized on a conscious level that these consonants formed part of the Saipanese Carolinian sound system. For these members, initial /bw/ and /mw/, as in /mwææl/ 'man' and /bwal/ 'also' were consonant clusters of /b/ or /m/ plus /w/. In final position, /bw/ and /mw/ were perceived as plain consonants. Indeed, where rounded vowels followed /bw/, as in /bwoot/ 'nose', /bw/ was also perceived as plain /b/, since there is little or no on-glide from velarized consonants to rounded vowels. It was therefore necessary to demonstrate to the committee that /bw/ and /mw/ were single phonemes, that, for example, the final consonants

in /iimw/ 'house' and /sɔɔbw/ 'village' were /mw/ and /bw/ respectively, not /m/ and /b/, as many believed. This was made clear to the committee in a contrast of the noun stem with forms which take possessive suffixes, which begin with vowels, where the velarization was obvious for the mw and bw and, of course, absent for m, as the following shows:

/sɔɔbw/	'village'	/sɔbwei/	'my village'
/iimw/	'house'	/imwei/	'my house'
/saam/	'father'	/samei/	'my father'

Had the final consonant of the word for 'father' been /mw/, then we would expect /samwei/ for 'my father'. Or if /iimw/ was really /iim/, we should expect /imei/ rather than /imwei/. This was sufficient to convince the committee to approve bw and mw as symbols for all positions where /bw/ and /mw/ occur.

Because sch and tch were already familiar symbols for the retroflex obstruents /ṣ/ and /ç/, and because the sounds were enough different from the English /š/ and /č/, the committee chose sch for /ṣ/ and tch for /ç/.

2.7.4 Glides

The committee decided to show /y/ as i and to use a w only in initial and medial position. But when /w/ immediately follows the rounded vowel /u/, it is not represented. When /w/ follows other vowels, it is written as u, so that /ttiiw/ 'nine' is written ttiiu.

However, for /aaw/ 'mouth', the committee was split as to aau or aaw.

2.7.5 Gemination

The next issue was the representation of consonantal gemination. Little discussion was needed before deciding to reflect medial gemination. But there was considerable disagreement as to initial and final position, since the committee members were unaware of the geminate nature of these consonants initially and finally. At one point after examples of initial and final gemination were presented, the members agreed to show gemination in all position, but later they revised their decision and decided not to use double consonants in word-final position. Thus /takk/ 'finish' would be written /tak/.

As for gemination of the Carolinian spirants /ṣ/ and /ç/, written as sch and tch, the committee decided against reflecting gemination in the orthography because the symbol was already complex. But in the case of the graphemes mw, bw, ng, gh, and rh, the first letter would be doubled to show gemination. So there will be representations like mmw, bbw, nng, rrh, or ggh.

It was explained--and the committee understood--that devoiced geminate /bw/ need not be shown as bbw, since it is phonetically realized as [pw] and can therefore be represented as pw.

2.7.6 The Carolinian Alphabet

The alphabet decided on at the meeting was the following:

Letter	Phoneme	Name of Letter
a	/a/	aa
á	/æ/	áá
e	/e/	ee
é	/ʌ/	éé
i	/i/	ii
o	/o/	oo
ó	/ɔ/	óó
u	/u/	uu
ú	/ɨɨ/	úú
f	/f/	fii
h	/h/	hii
s	/s/	sii
sch	/ṣ/	schii
gh	/x/	ghii
k	/kk/	kkii
l	/l/	lii
m	/m/	mii
mw	/mw/	mwii
n	/n/	nii
ng	/ŋ/	ngii
p	/p/	pii
pw	/pw/	pwii

Letter	Phoneme	Name of Letter
bw	/bw/	bwii
r	/r/	rii
rh	/ṛ/	rhii
tch	/c̣/	tchii
t	/t/	tii
w	/w/	wii

The graphemes h and rh above are for the Tanapag dialect and not for Oleai.

2.7.7 Word Division

In a number of cases past usage had been to collapse certain combinations of morphemes as a single word. Determiners, for example, had been written as suffixes on the nouns they followed, and aspectual and directional particles were shown as part of a single verb. Some of these combinations of morphemes, it was thought, might present difficulties for learners and even for adult readers. After some discussion, the following decisions were arrived at.

(1) It was agreed that possessive suffixes should always be written attached to the preceding nouns, and that the writing of the stem vowels should reflect the predictable alternation.

(2) All determiners should be written separately from the nouns they modify.

(3) Subject pronouns should be written attached to

following negative or aspect markers, but should be written separately from any other element in the verb phrase.

(4) All object pronouns should be attached to the preceding verb.

(5) The aspectual particles and directional suffixes should be written separately from the preceding verb.

(6) In the case of the prepositions me-, le-, and mele-, they would be attached to the nouns following them. Thus, forms like remw 'for you', maat 'farm', leeset 'at the ocean' would be combined with these prepositions, as in meremw 'from you', leemat 'on the farm', meleeset 'from the ocean'.

(7) The causative prefix a- should be attached to the verb like amååi 'to cause to die' from måå 'to die'.

2.7.8 Foreign Words and Punctuation

On the last day of the meeting, it was decided that foreign words which are assimilated into the Carolinian language would be spelled according to the new Carolinian system. For example, gako 'school' should be spelled gakko, bola 'ball' should be bwola, and chalao should be tchalau 'catch'. Unassimilated borrowings would be spelled as in their original language and would also be underlined, as for example, Commonwealth, United States, president, and education. Names such as James, John, or Jesse would retain their accustomed spelling. The system of

punctuation to be used is basically that used for English except that first person forms ngaang and i will only be capitalized at the beginning of a sentence. Since punctuation usage for English is not always consistent, further consideration of Carolinian punctuation may be needed.

2.8 Some Conclusions

Obviously these decisions mark only a significant start for users of the Carolinian language in their progress towards universal literacy for the Carolinian people. They have since stimulated the interest of numbers of previously uninvolved Carolinians in being involved in some way in the pioneering of literacy in the language and in work on a Carolinian dictionary. What in some cases had been a lack of interest and indeed a tendency on the part of Carolinians to disassociate themselves from the Carolinian culture and language has become, for some, a strong emotional interest in the development of their culture and language and in their own Carolinian identity.

It is reported that the new orthography is already in use even though discussions continue as to revising it in certain ways. Some Carolinian children in the first three grades have already begun to use the orthography. Since it has apparently presented few difficulties for the children, many parents have become very supportive of the new Carolinian program.

It should be clear from the foregoing account of the Carolinian orthography that developing an orthography is unlikely ever to be a simple matter involving only phonological and typographical considerations. Not only dialect variation but also a number of non-linguistic factors come into play. Past usage, typewriter symbols, community feelings as to "natural spelling," religious concerns, these and many other factors must all be weighed in arriving at an acceptable orthography. And by "acceptable" I mean "acceptable to the Carolinian people" for they are th e ones who must determine the fate of the Carolinian culture and language. In this respect, the orthography and the decisions involved in it are of more immediate significance than the grammatical considerations to be discussed in the next two chapters.

CHAPTER III

Simple Sentence Formation

3.0 Introduction

At present, those preparing Carolinian language reading materials are, of necessity, working without guidance from first-language acquisition data based on longitudinal studies of the language behavior of Carolinian children. Even the most basic word frequency counts are lacking. Of crucial importance to language acquisition research in the future is a thorough knowledge on the part of the investigators of the phonological, morphological, and syntactic characteristics of Carolinian. An understanding of how Carolinian sentences are formed should be useful both for reading and for writing instruction. The rather sketchy discussion of syntax in this chapter and the next is intended as a first step towards a fuller analysis and to provide a minimal framework for the syntactic aspects of language acquisition research.

The forms illustrated below are basically those one is likely to hear, except that in a few cases I have represented morphemes which are elided in normal speech. For example, when the third person subject copies e 'he, she, it' and re 'they' occur before the perfective aspectual particle a, they combine as aa and raa respectively. However, they are shown here as e a and re a, so that the underlying morphemes are clearly identifiable.

3.1 The Major Constituents of Simple Sentences

The term "simple sentence" is used here as a convenient label for those sentences which themselves contain no other sentences. This is a fairly superficial analysis from the theoretical point of view that derives many of these sentences from more complex underlying forms. However, the purposes of this analysis are more practical.

Simple sentences consist of two major constituents, which I refer to as the Subject Noun Phrase and the Predicate Phrase. The following are fairly typical simple sentences:

	Subject Noun Phrase	Predicate Phrase
1.	Wan	e seng
	John	he cries
	'John is crying.'	
2.	Mwåål ke-laal	re-bwe weri nånå-ei
		they-will see mother-my
	'Those men will see my mother.'	
3.	Ø	e-ior laai-l iååt schóóbwut
		it-exist child-her little-one female
	'She has a daughter.'	
4.	Bwoot la	nge wa-ei
	boat that	Linker boat-my
	'That boat is mine.'	

	Subject Noun Phrase	Predicate Phrase
5.	Wan	e dokto
	Juan	he doctor
	'Juan is a doctor.'	
6.	Wan	e-se fattabw
	Juan	he-not run
	'Juan isn't running/didn't run.'	
7.	Iååmem	ai-a mwungo llól iimw
	we	we-Perfective eat in house
	'We ate in the house.'	
8.	Rita	ngale-i tilighi iååt we
	Rita	give-him book little-one the
	'Rita gave the boy the book.'	

Note that, as in sentence (3), the Subject Noun Phrase position is not always occupied. This is, of course, fairly common for imperative sentences in many languages but much less common for declarative sentences. However, in Carolinian it is common to omit the subject noun phrase in those contexts in which the subjects in English would be pronouns. Typically this happens in two situations: When the noun phrase that would have been subject has been referred to in a previous sentence, or when its referent is obvious from the situation in which the sentence is uttered.

The Predicate Phrase in sentence (3) employs the special existential verb form e-ior, often translatable as 'there is', to form a possession construction with the possessed noun phrase laai-l iáát-schóóbwut. The representation of possession in Carolinian, as in other Micronesian languages, is too complex a phenomenon to explore in detail here. Possession in laai-l iáát-schóóbwut is not marked on the noun iáát-schóóbwut but on the special form laai-, known as a classifier. There are a number of such classifiers, each used for marking possession on particular groups of nouns. In nánâ-ei 'my mother', and wa-ei 'my boat' possession appears to have been marked directly on the noun. However, wa- is in fact the classifier for vehicles. Since it also means 'boat', the noun bwoot is omitted.

The Predicate Phrase nge wa-ei 'is my boat' in sentence (4) is interesting in that it contains no verb. Carolinian has no verb corresponding to the English copular verb be. So when Carolinians want to identify one definite noun phrase to another in the same sense as the English translation 'That boat is my boat', we separate the subject noun phrase from the predicate noun phrase with the special linker nge, instead of is. Sentences like these are sometimes called Equational Sentences.

In sentence (5) the predicate phrase e dokto 'is a doctor' looks like another verbless predicate phrase. But

the appearance is misleading for dokto has been converted into a verb, despite its English translation. There is good evidence for this conversion. The predicate phrase begins with the subject copy e. Subject copies only occur with verbs. That is why the predicate phrase in (4), nge wa-ei had no subject copy. Furthermore, no articles or demonstratives may co-occur with dokto. Thus (9) is ungrammatical:

9. *Wan e dokto ieel.
   Juan he doctor this
   'Juan is this doctor.'

Moreover, especially when future time is referred to, directional suffixes otherwise found only on verbs also appear:

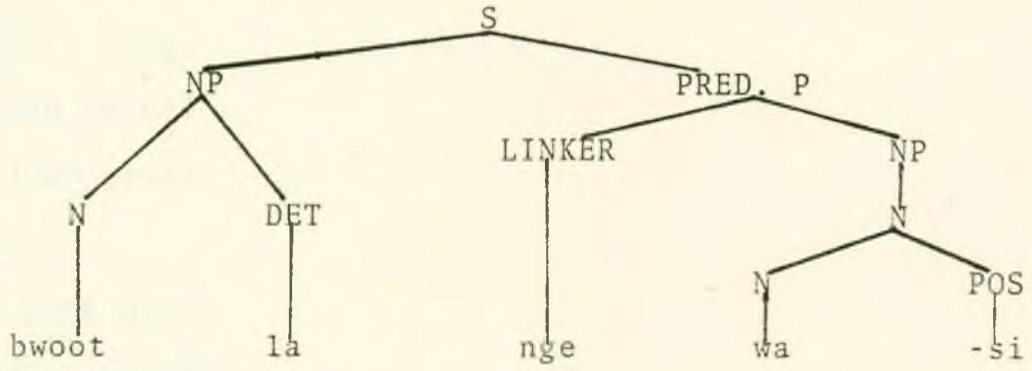
10. Wan e dokto-lɔ.
    Juan he doctor-Directional
    'Juan has become a doctor.'

11. Wan e-bwe dokto-lɔ.
    Juan he-will doctor-Directional
    'Juan will become a doctor.'

The directional suffixes are discussed later in this chapter. Finally, dokto can be reduplicated, just as other verbs are: doddokto.

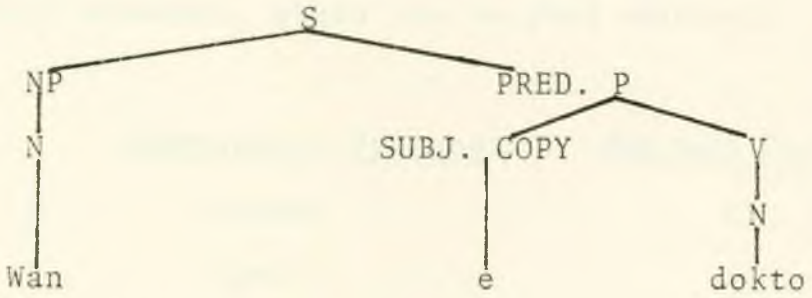
So, sentences (4) and (5) might be represented thus to indicate their constituent structure:

12.



'That boat is my boat.'

13.



'Juan is a doctor.'

3.2 The Subject Copying Transformation

At a deeper level I would consider the subject copy in (13) to be absent from the predicate phrase, since it has no necessary semantic role. What this entails is a subject copying transformation. This rule attached a pronominal copy of the subject noun phrase as the leftmost branch of the predicate phrase. These subject copies enable the speaker to avoid repeating full noun phrases when the same one has been used previously and also to extrapose the subject noun phrase, so that

14. Wan e seng.

Juan he cry

'Juan cried.'

becomes

15. E seng Wan.

'Juan cried.'.

The subject copy forms are not the same as the forms of the independent pronouns, which are in fact emphatic pronouns:

16.

	Independent Pronouns	Subject Copies
1st sg.	ngaang	i
2nd sg.	ieel	u
3rd sg.	ii	e
1st pl. incl.	ghisch	si
1st pl. excl.	iååmem	ai
2nd pl.	iååmi	au
3rd pl.	iir	re

Unlike the subject copies, which never occur in surface structure before a predicate noun phrase, the emphatic pronouns do occur there, especially in topicalized sentences like (17):

17. Wan, ii dokto la.

Juan, he doctor that

'As for Juan, he's that doctor.'

Wan in (17) is not the subject noun phrase but simply a topic noun phrase in apposition to the real subject noun

phrase ii 'he'. The independent emphatic pronoun can in fact co-occur with the subject copy:

18. I e-bwe mwungo.
he he-will eat
'He will eat.'

The absence of subject copies before predicate noun phrases could be accounted for in either of two ways. The subject copying transformation could be formulated so as to exclude them before noun phrases, or a more general formulation of the subject copying rule allowing subject copies on all predicates would then have to be followed by a copy deletion rule deleting subject copies in just those environments in which they would not occur in surface structure. The first solution involving a constraint on the copying rule seems simpler. However, Jacobs (1977) has presented some interesting evidence from Gilbertese as well as the Trukic languages which supports the second solution. I shall take no position here.

3.3 Aspect in the Predicate Phrase

Except as noted above, the predicate phrase begins with the subject copy and may be followed by the negative particle se and then an aspectual particle. As I pointed out earlier, the subject copy and the aspectual particle combine under certain conditions. If there is no aspectual particle the sentence may be interpreted as referring either to an ongoing event or to one that has

just happened. The perfective aspectual particle a more unambiguously refers to past completed actions or to states which are already in existence, as in:

19. Iååt laal e-aa somwai.
boy that he-Perfective sick
'That boy is already sick.'

The future or unrealized aspectual particle bwe merges with a preceding negative as saabw 'won't'. Whether this is historically se + bwe is not clear. There may indeed have been an aspectual a between se-a-bwe saabw, but such an a cannot be posited synchronically. There may also be a bwel aspectual particle referring to 'immediate future'. It is translatable as 'begin to' or 'be going to'. This is probably bwe plus an l that indicates 'immediate' and is probably related to the l that appears on the demonstrative ieel 'this here', in contrast to ie 'this'. The form is shown in (20) below:

20. E bwel le-mwungo.
he Aspectual at-eat
'He begins to eat.'

It may be, however, that the l on bwel in (20) is a misanalysis triggered by the le- form that follows it.

The negative particle såål 'not yet' as in

21. E-såål mwungo.
He-not yet eaten
'He hasn't eaten yet.'

also has a final l on what must have been the negative se, but here it is not followed by the le- form and, indeed, cannot be.

3.4 Aspectual Adverbs

The position after the possible aspectual adverbs belongs typically to the main verb. But we also find forms preceding the main verb, forms which seem to represent aspect and aspect-like senses. We shall call these aspectual adverbs. The form kke is used as a kind of durative, or repetitive marker, as in

22. I bwe kke tarabwagho reel gobientno alangal råål.
I will Durative work for government every day
'I'll be working for the government every day.'

The forms gha and ghal appear to overlap kke's semantic range in some respects. They mark habitual actions, e.g.,

23. E ghal penta iimw.
he Habitual paint house
'He paints houses' or 'He's at painting a house.'

but also allow a durative interpretation.

The precise meaning of gha is hard to determine since its occurrence is in general restricted to first person singular subjects. In the dialect of Saipan Carolinian spoken by the present writer it appears to be no more than an allomorph of ghal. Since this topic is somewhat outside the scope of this discussion, we shall not attempt a more detailed analysis.

The kke and ghal forms may co-occur, as in (24):

24. E kke ghal fattabw.
he Durative Intensifier run
'He is running.'

which can also be translated 'He's doing just running'. One function of all these particles is that of intensifying or emphasizing the action or state referred to by the verb. Indeed, an additional intensifier ghi sometimes occurs, as in (25):

25. E kke ghal ghi fattabw.
he Durative Intensifier Intensifier run
'He's really running.'

3.5 Verbs

Verbs may, of course, be transitive or intransitive. There is in fact a class of verbs which may take non-specific object noun phrases, yet otherwise look like intransitive verbs, allowing no object noun suffixes, with the object noun phrase--if it really is a noun phrase--not allowing any demonstrative determiners such as -we or -ie. Ʊʊl 'drink' is such a verb. A verb like iɑɑf 'swim' is intransitive, i.e., it cannot have an object noun phrase:

26. E ghal iɑɑf.
he Aspectual swim
'He's swimming.'

3.6 Adverbials and Prepositions

Adverbials of location or time may follow the verb:

27. E ghal kkanta llól iimw.
    he Aspectual sing in house
    'He's singing in the house.'
28. E ghal kkanta ighila.
    he Aspectual sing now
    'He is singing now.'

As in English, when both time and location forms occur, the location adverbial is usually closer to the verb:

29. Paluma kke-laal re tittigh wól trongko le-sor-we.
    bird Pl.-that they sing on tree in-morning-the
    'The birds sing in the trees in the morning.'

3.7 Prepositions

The prepositions llól 'in', wól 'on', reel 'from, because', and ngeli 'towards' might better be considered as relational nouns (llól, wól, reel) or relational verbs (ngeli). The relational nouns drop the final l when their objects are pronominal and take the possessive suffix. Thus there is reel Wan 'because of John' and reemw 'because of you'. The relational verb ngeli, as in ngeli Wan 'towards John' takes object suffixes rather than possessive suffixes: ngeli-ir 'towards them'. A fuller discussion of these forms is not possible here since we would need to consider beyond the scope of this brief survey.

There are three forms--me 'from', li 'at', and the compound mele--that look like true prepositions.

They precede their noun phrase object.

30. Mwåål ieel e itto me Lataal.
man this he come from Anatahan
'This man came from Anatahan.

3.8 Directional Suffixes

Many verbs, both transitive and intransitive, allow directional suffixes on them.

Directional Suffixes

-to	'here'
-lo	'there'
-tå	'up'
-tiu	'down'
-lóng	'inside'
-woou	'outside'

The meanings given to verbs with these suffixes are usually what one would expect:

31. Wan e fattabw -woou.
John he run Directional
'John ran outside.'

32. Wan e fattabw -tiu.
John he run Directional
'John ran down.'

33. Wan e fattabw -lóng.
John he run Directional
'John ran inside.'

But some of the directional suffixes have an intensifying sense when they are used with non-motion verbs. Thus, måå can mean 'be sick' or, in certain contexts, 'die', but måå-lo can mean only 'die'. The transitive verb lii means either 'beat him up' or 'kill him', while lii-lo normally means just 'kill him'.

3.9 Adjectives

One subclass of intransitive verbs corresponds in some ways to English adjectives but the correspondence is not exact. The verb soong is used for 'be angry'; there is no Carolinian adjective meaning 'angry'. Words belonging to this subclass for which the label ADJECTIVE will be used, participate in a syntactic process that we shall refer to as the Adjective Transformation. This transformation converts a relative clause with an adjective as predicate into a single adjective modifier immediately after the noun phrase head. So:

34. I weri mwåål -ie e tomwogh.
    I see man -this he big
    'I saw the man who was big.'

becomes

35. I weri mwååli-tomwogh -we.
    I see man big -the
    'I saw this big man.'

Other such adjectives include parapar 'red', mwamwai 'beautiful', and ghittighit 'small'.

Note that only those intransitive verbs which may undergo this transformation are classified as adjectives. Although (29) is grammatical,

36. I weri mwåål -we e kanta 'sing'
I see man -the he seng 'cry'
soong 'angry'
fattabw 'run'

'I saw this man who was singing/crying/angry/running.'

the reduced version (36) is not:

37. *I weri mwåål kanta -we
seng
soong
fattabw

(If these intransitive verbs are reduplicated, however, the structure is grammatical, e.g., I weri mwååli sossoong we 'I saw the angry man'. This evidence, as well as diachronic evidence too complicated to go into here, suggests that reduplicated intransitives are, in fact, adjectives.)

3.10 Transitive Verbs

Transitive verbs have object markers suffixed:

E ffati-gh
he kick-you
'He kicked you.'

E seråghi-iei
he lift-me
'He lifted me.'

E tai-ghisch
he drag-us(incl.)
'He dragged us.'

U ffåti-ghemem
you kick-us(excl.)
'You kicked us.'

E weri -i
he see-him/her/it
'He saw him/her/it.'

E afeschi-ghemi
he like-you(pl.)
'He likes you.'

Re a-tůůtůů-ir
they Causative bathe-them
'They bathed them.'

When a directional affix such as woou 'outside' is used on a transitive verb, the object marker precedes the directional:

38. Isaak e ffåti-ir-woou.
Isaac he kick-them-out
'Isaac kicked them out.'

39. Rosita e seråghi-ir-tå
Rosita she pull-them-up
'Rosita pulled them up.'

Object suffixes may be omitted when a full noun phrase object follows the verb. Thus both (40) and (41) are grammatical:

40. I -bwe ti -ir -lå asam -kkaal.
I -will close-them-Directional door -those
'I will close those doors.'

41. I -bwe ti -la asam -kkaal.
I -will close-Directional door -those
'I will close those doors.'

3.11 Transitive and Ditransitive verbs

Only a few verbs in Saipan Carolinian may have double objects, i.e., two object noun phrases neither of which is part of a prepositional phrase. Such verbs are ngalei 'give', amwungo 'feed', and aiéghi 'ask', angeli 'tell'. The indirect object noun phrase precedes the direct object.

42. Ai ngale-i Wan tilighi.
We give-him John book
'We gave John a book.'

43. I amwungooi silo bweibwai.
I feed-it pig papaya
'I fed papaya to the pig(s).'

But amééu 'buy' requires the use of the preposition ngeli for the additional noun phrase:

44. Ai amééu ngeli-i Wan tilighi.
We buy for-him Juan book
'We bought Juan a book.'

The verb amééu is one of a number of transitive verbs ending in a vowel that does not appear to have a suffix for the third person singular form. However, we might well consider the final vowel as the object marker, since some of these verbs have corresponding intransitive forms without the final vowel.

3.12 Existential and Possession Sentences

Sentences corresponding to English 'there is/are' sentences begins with either the so-called subject copy e or what may be an old demonstrative form, mal. The verb used is ior.

45. E ior tilighi wól lamasa.
    it be book on table
    'There is a book on the table.'

46. Mal ior malle e lo llól iimw.
    it be someone it is-located in house
    'There is someone in the house.'

The negative form of ior is saar or haar.

47. E saar mestro llól kótto.
    not-be teacher in room
    'There isn't a teacher in the room.'

The verb ior and its negative saar/haar are also used in possession sentences. The noun phrase after ior or saar/haar is always a possessed noun phrase:

48. E ior schal -ůi.
    it be water -my
    'I have water.'

49. E saar mangg-ei.
    not-be mango-my
    'I have no mangoes.'

3.13 Equational Sentences

In equational sentences in Saipan Carolinian, the predicate phrase comes first and there is no subject copy.

50. Aschâi mestro aramas laal.
one teacher person that
'That person is one of the teachers.'

51. Saabw aschâi mestro aramas laal.
not one teacher person that
'That person is not one of the teachers.'

The sentences (50) and (51) could be translated 'That person is a teacher' and 'That person is not a teacher', respectively. But 'a teacher' here is a specific indefinite noun phrase, not a generic indefinite, i.e., both noun phrases in each sentence have reference. In equational sentences both the subject and the predicate phrase are noun phrases. The predicate phrase may not include any aspect marking.

If the subject is a pronoun or if additional emphasis is needed, the predicate noun phrase occurs after the subject:

52. Ii mestro.
he teacher
'He is a teacher.'

53. Iimw la iimw -ei.
house that house-my
'That house is my house.'

3.14 Yes/No Question Sentences

Questions, whose English counterparts can be answered with a yes or no in English, have exactly the same order as ordinary declarative sentences, except that the sentences are marked with rising intonation:

54. E bwe lɔ́?
he Aspectual go
'Will he go?' or 'Is he going?'

55. Wan me Maria re bwe awungo?
Juan and Maria they Aspectual eat
'Will Juan and Maria eat?'

However, it is also possible to introduce such questions with meta 'what', which makes the question a little stronger:

56. Meta Toni e bwe lɔ́?
what Tony he Aspectual go
'Is Tony going?'

57. Meta Wan me Maria re bwe mwungo?
what John and Maria they Aspectual eat
'Are John and Maria going to eat?'

3.15 Noun Phrase Questions

These correspond to English questions beginning with who, what, when, where, why, which, how, whose, etc., which do not require yes or no as an answer. The

Carolinian words are:

io	'who?'
meta	'what?'
ileta	'when?'
eifaisil	'how?' (manner)
fitoou	'how?' (many)
(bwe) meta faal	'why?'
Ifa leil	'which one?'
iaal io	'whose?'
ia	'where?' (location)
ifa	'where?' (where did you put it?)

Corresponding to the declarative sentences

58. Aschåi aramas e ghalutia mwåål la.

    one person he hit man that

    'Someone hit the man.'

59. Aschåi aramas e kkapas.

    one person he talk

    'Someone is talking.'

are the interrogative sentences:

60. Io e ghalutia mwåål la?

    who he hit man that

    'Who hit the man?'

61. Io e kkapas?

    who he talk

    'Who is talking?'

The question word replaces the noun phrase subject. Now when a speaker wishes to know the identity of an object noun phrase, he has two choices. Corresponding to the sentence

62. Re fattabwe-i aschâi aramas.
they chase-him one man
'They chased someone.'

are two sentences:

63. Re fattabwe-i io?
they chase-him who
'Who did they chase?'

or

64. Io re fattabwe-i?
who they chase -him
'Who did they chase?'

If the questioned noun phrase is not at the beginning of the sentence, it may be shifted to the beginning. Likewise

65. E fattabw -lǒ ieeu bwulei.
he run Directional one place
'He ran somewhere.'

corresponds approximately to two question forms

66. E fattabw -lǒ bwulei ia?
he run Directional place where
'Where did he run to?'

67. (Bwulei) ia (igha) e fattabw -lɔ́?

place where he run Directional

'Where did he run to?'

The bwulei may be omitted or may be moved to the front with ia. If ia is fronted, then the special pronoun igha can follow it. The presence of igha does little except add a little emphasis 'where ...?'. Instead of where?, one could ask 'what place?':

68. Bwulei ifa (igha) e fattabw -lɔ́?

place what PRO he run Directional

'What place did he run to?'

The sentence

69. E-bwe fattabw -lɔ́ ileta?

he-will run Directional when

'When will he run away?'

and also

70. Ileta (igha) e-bwe fattabw -lɔ́?

when PRO he-will run Directional

'When will he run away?'

Reason questions allow similar alternations:

71. E fattabw -lɔ́ re -l meta?

he run Directional Preposition-it what

'He ran away because of what?'

or the meta can be fronted:

72. Meta e fattabw -lȯ re -l?
what he run Directional for-it
'Why did he run away?'

When the noun phrase is the object of a relation verb form like ngeli, the io may stay in the sentence-final position:

73. E -amėėu -ngeli- io?
he -sell -to- who
'Who did he sell it to?'

or it may be fronted and, optionally, be followed by a demonstrative.

74. Io ie e-amėėu ngeli?
who this he-sell- to
'Who did he sell it to?'

Question on possessive noun phrases correspondingly follow the same pattern.

75. I weri iaar ghareta.
I see their car
'I saw their car.'

76. Iaar io ghareta (we) u weri?
their who car (the) you see
'Whose car did you see?'

3.16 Imperative Sentences

As in English most affirmative imperative sentences begin with the verb and we understand them as having a second person singular or plural semantic subject. The

verb form can include a directional and/or an object pronominal suffix:

77. Fattabw-e-lǒ le-imw!
run-him/her-Directional at-home
'Run him/her home.'

78. Mwǒǒt-tiu!
sit-Directional
'Sit down.'

79. Kkǽǽl!
'Sing!'

There are polite request forms using the Chamorro fan 'would you', as in:

80. Kkǽǽl fan.
sing
'Would you sing.'

This is also phraseable using special Carolinian masculine and feminine pronouns when the addressee is an adult:

81. Kkǽǽl lie.
sing that one (female)
'Sing, please.'

82. Kkǽǽl ole.
sing that one (male)
'Sing, please.'

Speakers sometimes use the second person subject copy when there is more than one person addressed:

83. Au-mwungo måå̀i.

you-eat breadfruit

'Eat breadfruit!'

Yet another option for Carolinians is to use the ordinary future construction with a second person subject copy:

84. U-bwe kkèè̀l!

you-will sing

'You sing!'

85. Au-bwe kkèè̀l.

you-will sing

'You (all) sing!'

This often seems stronger as an imperative than the ordinary imperative.

The "Let's ...!" imperative, sometimes called the hortative, has a first person plural inclusive subject copy si, corresponding to the independent subject pronoun ghisch, rather than the exclusive form ai which corresponds to iåå̀mem.

86. Ghisch saa kkèè̀l.

we we sing

'Let's sing!'

The saa is really a contracted form of si-a, the first person plural inclusive subject copy plus the aspectual particle a, usually considered to be the perfective particle. Here a has no perfective sense. The uncontracted form is also grammatical.

87. Ghisch si-a kkéél.

we we-Perfective sing
incl.

'Let's sing.'

The negative hortative:

88. Si-ti kkéél.

we-Negative sing

'Let's not sing.'

is used much less frequently than the ordinary future negative:

89. Si-saa-bw kkéél.

we-not-Future sing

'Let's not sing.'

Negative imperatives ("prohibitives") begin with the second person subject pronoun copy u- 'you' (corresponding to the independent pronoun ieel) followed by a special negative element -tu translated as 'don't':

90. U-tu mwóót-tiu.

you-Neg. Imp. sit-Dir.

'Don't sit down!'

91. U-tu lál mwungo mwo commonly--U-taal mwungo mwo.

you Neg. about to eat yet you-Neg. Imp. eat yet

'Don't eat yet!'

(It seems clear that the negative tu is really an allomorph of te, the functions of which are not yet completely understood.)

CHAPTER IV

Complex Sentence Formation

4.0 Introduction

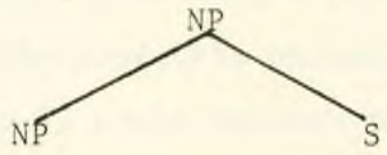
This is, of necessity, an incomplete account which covers some of the major types of complex sentence. We will consider complex sentences to be those sentences which contain an embedded sentence, whether it be a subordinate clause with a tensed verb, or a clause converted into, say, a possessed nominal much like the English nominalizations:

1. my shooting (of) him. (cf. I shot him.)
2. his destruction of the tapes (cf. He destroyed the tapes.)

4.1 Relativization

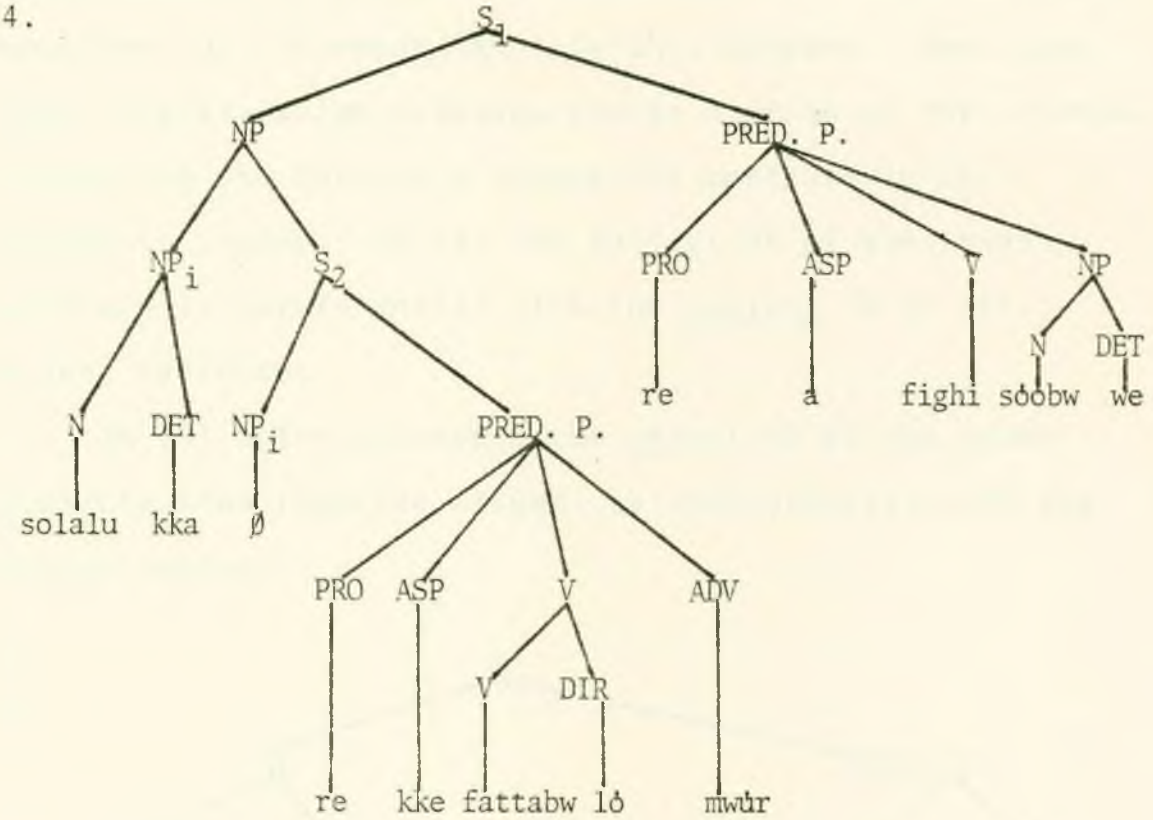
Relative clauses are sentences embedded after a head noun phrase, to which is added a further description in the form of a modifying clause. The relative clause and its head together constitute a noun phrase which can, like other noun phrases, function as subject of a sentence, direct object of a predicate phrase, indirect object, or object of a prepositional construction. We will assume therefore that relative clauses with their head noun phrases form a noun phrase constituent like this:

3.



The highest subject noun phrase in (4) is just such a constituent:

4.



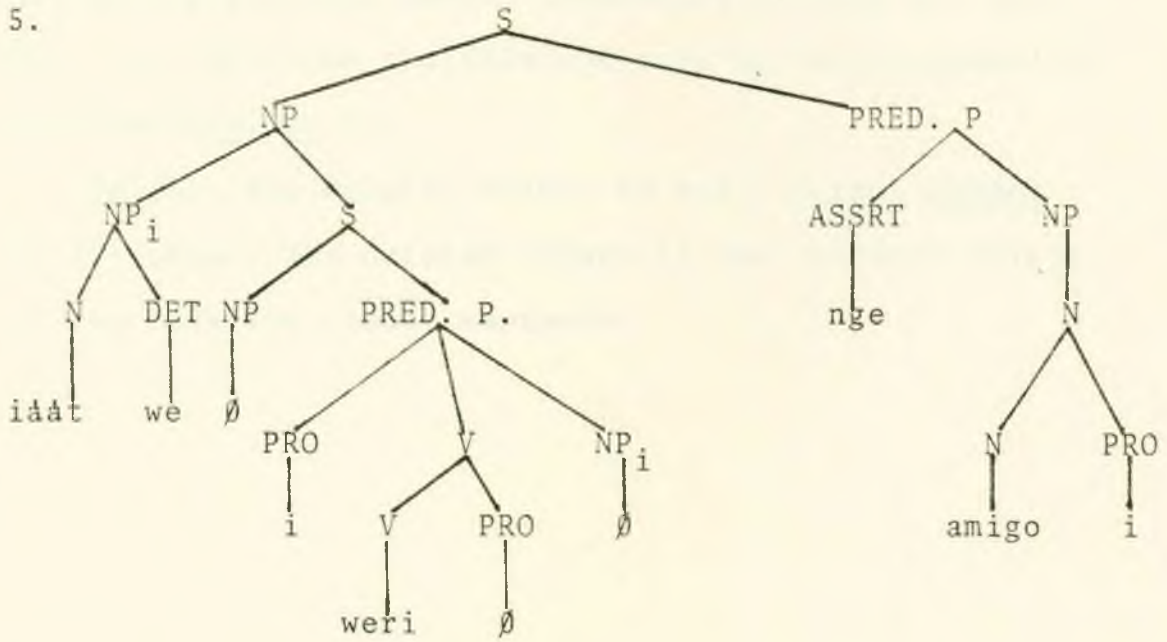
Solalu-kka re-kke-fattabw-lǒ mwǔr ra fighi wóóbw-we.
Soldier-these they-DUR-run-DIR back they-PFCT burn town-the
'The fleeing soldiers burned the town.'

The Ø NP subject in S_2 is a deletion site marking an underlying NP solalu kka which referred to the same soldiers as the head noun phrase. After subject noun copy has been applied on the S_2 cycle, attaching a pronominal copy of the S_2 subject onto the predicate phrase, a relativization transformation on the S_1 cycle deletes the lower of the

two coreferential noun phrases. The tree for (4) marks the coreferential noun phrases with a subscript i. This deletion rule is probably a subpart of Equi NP Deletion, which we shall discuss later in this chapter. Note that this relativization deletion leaves a trace of the deleted subject in the form of a pronominal particle in the predicate phrase. In (4) the subject NP of the lower sentence is coreferential with the subject NP of the higher sentence.

In (5) below, however, the object NP of the lower sentence (the relative clause) is coreferential with the higher subject:

5.



Iååt-we i-weri nge amigo-i.

boy-the I-see is/was friend-my

'The boy whom I saw was my friend.'

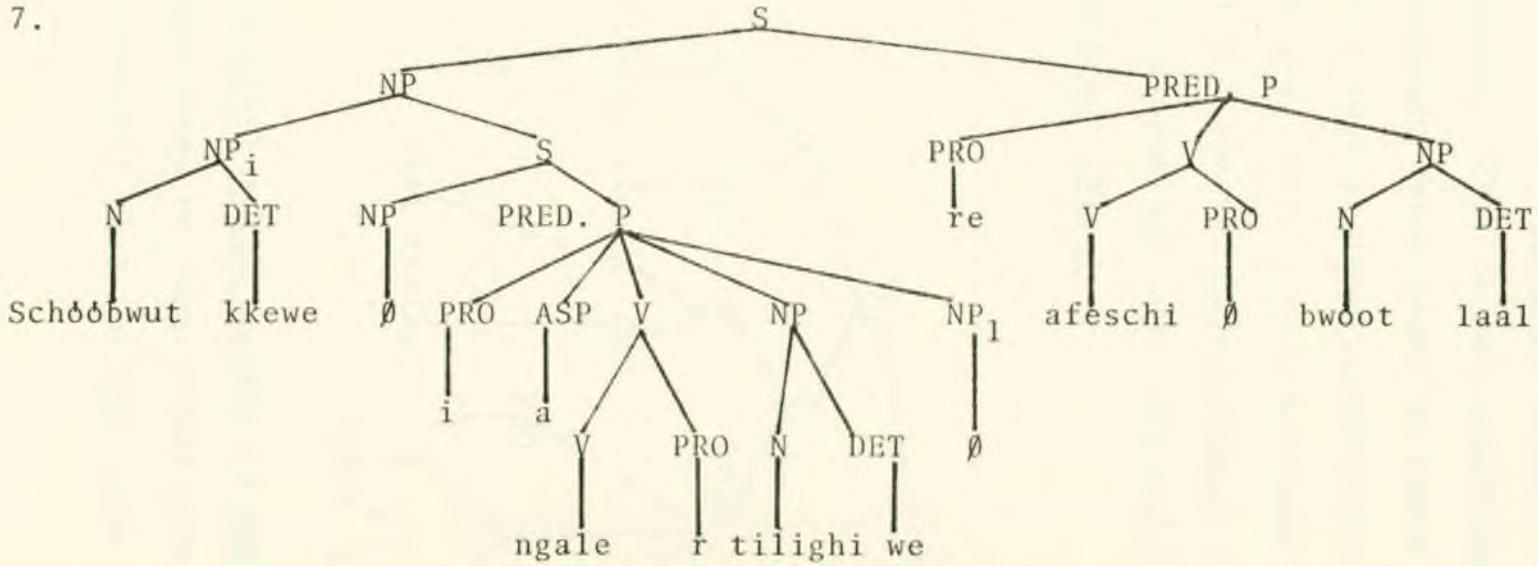
Here, as elsewhere, the coreferential noun phrases are marked with a subscript NP_i. The Ø in the lower subject position results from a different transformation, Pronoun Deletion, which optionally deletes subject pronouns after Pronoun Copy has been applied:

6. Ngaang i-weri iååt-we. I-weriiååt-we.
I I-saw boy-the 'I saw the boy.'
'I saw the boy.'

The Ø object pronoun copy in (5) marks a third person singular object and presumably also results from a pronoun copy rule, this time copying from the subsequent object noun phrase. The NP_i Ø is, of course, the site of the deleted noun phrase coreferential with the head NP_i. So this time the deletion rule has been applied to the lower object NP.

In (5), the deleted object NP was a direct object. In (7) below, the deleted object is the indirect object of the relative clause sentence:

7.



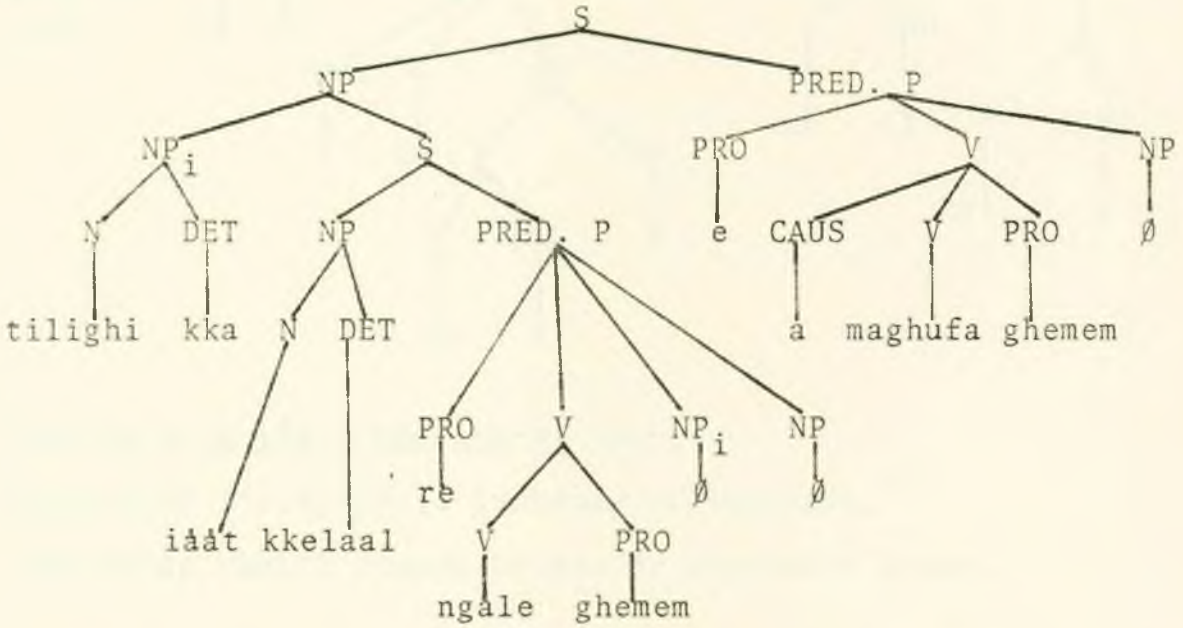
Schóóbwut-kkewe i-a-ngale-r tilighi-we re-afeschi bwoot-laal.

firl-those I-PFCT-give-them book-the they-like boat-that

'The girls that I gave the book to like that boat.'

Note that the pronominal object copy on the verb is the copy of the indirect object, not the direct object, noun phrase. This is not surprising since Carolinian is a language which tends to leave pronominal traces of deleted NP's near or immediately adjacent to the deletion site. However, when a verb has both an indirect and a direct object and the direct object is coreferential, as in (8), the pronominal copy suffixed to the verb is that of the indirect object.

8.

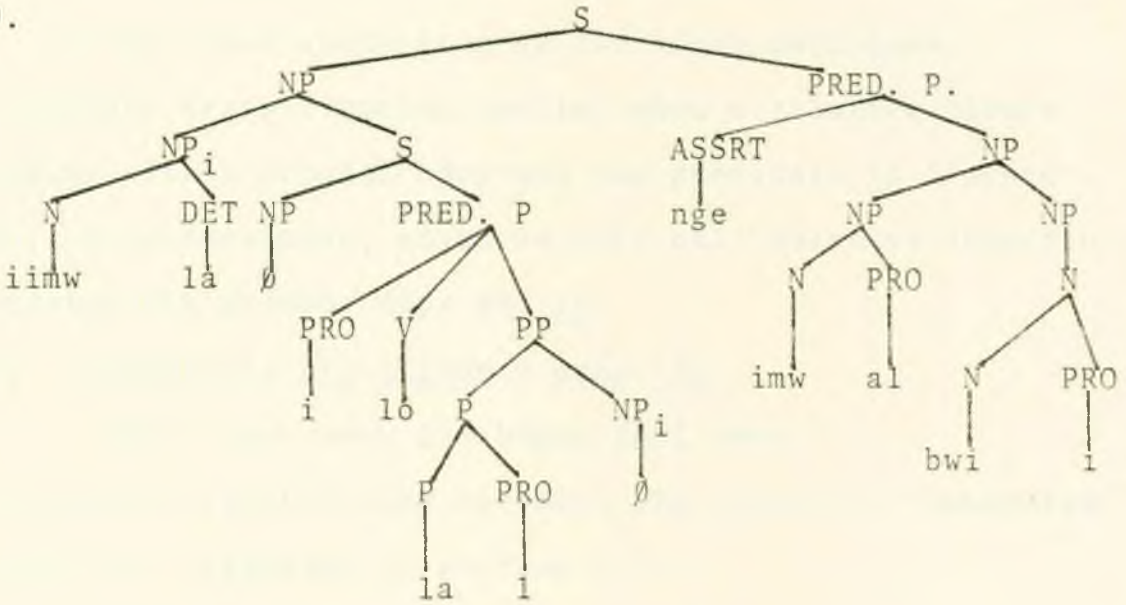


Tilighi-kka iååt-kelaal re ngale-ghemem e a-maghufa-ghemem.
book-those boy-those they-give us it CAUS-happy-us
'The books that the boys gave us made us happy.'

The e form is used as the pronominal copy in the higher sentence because plurality is often not marked for the pronoun copies of inanimate subjects.

Object noun phrases of prepositional phrases may also be deleted if coreferential with the clause head, by means of this Relativization transformation:

9.



Iimw-la i-lo llå-l nge imw-al bwi-i.

house-that I-stay in-it is house of-brother

'The house that I stayed in was my brother's house.'

Compare the deleted object of the instrumental prepositional phrase in:

10. Sar-la Wan e-kke-falafal ngeli lůůreel nge afeschi-al.

knife-that Juan he-DUR-cut to coconut with-it is favorite-his

'The knife that Juan was curring the coconut with is his favorite.'

Sentence (11) below is an equational sentence:

11. Trongko-la e lo aro-l iimw.
tree-that it is/locate near-it house
'The tree is near the house.'

Sentence (12) has (11) embedded as a relative clause:

12. Trongko-la e lo aro-l iimw a-pung-tiu.
tree-that it locate near-it house(it) PRFT-fall DIR
'That tree which is near the house fell down.'

A further transformation applies when a relative clause begins with a pronoun copy and the predicate lo 'locate'. This transformation, which we will call Relative Reduction, deletes the pronoun copy and lo:

13. Trongko-la aro-l iimw a-pung-tiu.
'That tree near the house fell down.'

A possibly related kind of rule, the adjective transformation, was discussed in section 3.9.

4.2 Complementation and Nominalization

It is far from clear that there is any clear differentiation between sentences embedded as noun phrase complements and sentences converted into nominal structures, i.e., nominalizations. Both function as noun phrases, i.e., both may be exhaustively dominated by an NP node in a tree representation. However, complement sentences retain their sentencehood internally. They retain all the characteristics described in the previous chapter and differ from main clause sentences only in

their external positioning as noun phrases in a superordinate clause and in the embedding markers that introduce them.

Nominalizations on the other hand lack many of the properties shared by main clauses and noun phrase complement sentences. They differ from the former in functioning as noun phrases. They differ from the latter in that they have many internal characteristics of nominal constructions and lack many internal characteristics of sentences.

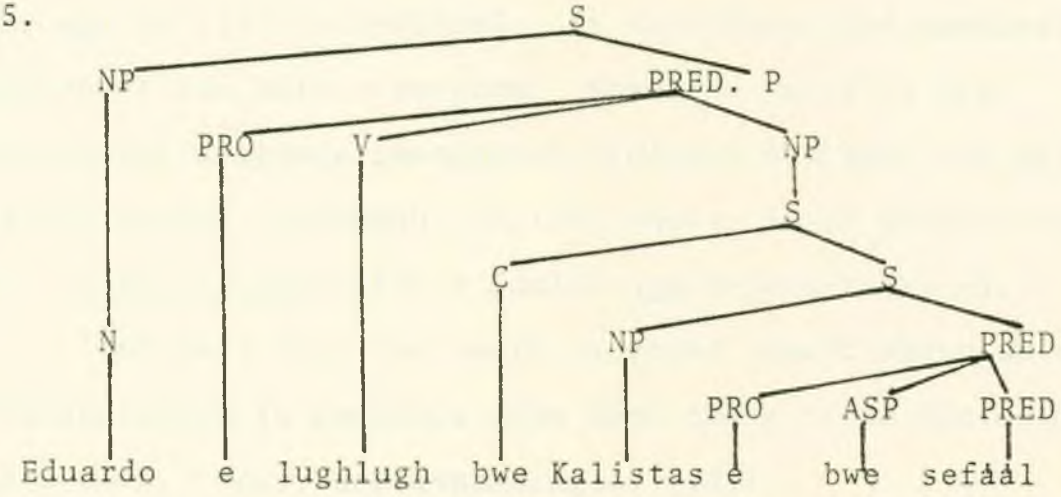
4.3 Noun Phrase Complements

The sentence

14. Kalistas e-bwe sefåål.
Kalistas he-will return
'Kalistas will return.'

can be embedded into the object noun phrase of the verb lughlugh 'believe':

15.



'Edward believes that Kalistas will return.'

The embedded sentence is introduced by the complementizer bwe, usually translatable as 'that'. Occasionally such complements have an abstract noun as head:

16. I-afeschi mengimeng ie bwe ai-bwe mwungo llɔ́-l iimw.
    I-like idea this that we-will eat in-it house
    'I like the idea of eating in the house.'

17. Facto bwe faliu e-faulul e-se ariu-ei.
    fact that earth it-round it-now CAUSE-surprise-me
    'The fact that the earth is round didn't surprise me.'

Sentences like these, however, look suspiciously like borrowing from English. Such sentences allow the extraposition of the embedded sentence. Corresponding to (17) is (18) to which extraposition has applied:

18. Fakto nge e-se a-riu-i-ei bwe faliu e-faulul.
    fact and it-not CAUSE-surprise-me that earth it-round
    'The fact didn't surprise me that the earth is round.'

The nge in (18) is required. It introduces the predicate phrase of the main assertion. When, as in (17), the complement sentence immediately follows its head the nge is not needed, although, as (19) shows, it is permissible:

19. Fakto ie bwe faliu e faulul nge e-se a-riu-i-ei.
    'The fact that the earth is round didn't surprise me.'

Extraposition is possible even when there is no lexical head noun. Thus, corresponding to (20):

20. Al bwe Eduardo e-somwai e-welewel.

Its that Edward he-sick it-true

'That Edward is sick is true.'

is (21) with the complement sentence extraposed and the preceding possessive is optional:

21. E-welewel (al) bwe Eduardo e-somwai.

it-true its that Edward he-sick

'It is true that Edward is sick.'

To ensure that a subject prefix is on the predicate phrase, the Subject Copy transformation must precede Extraposition. It appears that Extraposition is only allowed if the predicate refers to a state, i.e., is "stative" in a sense comparable to Lakoff's use of the term for English (Lakoff 1969).

In (17), (19), and (20), the bwe clause is part of the subject noun phrase of the main clause. In none of these was bwe the first word in the sentence. When bwe occurs initially, it most frequently is understood to mean something like English because, and this is often made more explicit by the addition after it of the adverbial igha of the special prepositional noun reel after it. Occasionally all three words are used. Both igha and reel supply the notion 'reason' here.

22. Bwe igha faliu e faulul i-a meseeigh.

that REASON earth it round I-PFCT happy

'Because the earth was round, I was happy.'

23. Bwe (igha) reel faliu e faulul i-a meseeigh.

'Because the earth was round, I was happy.'

In neither of the last two sentences does the bwe S function as the subject NP, but rather as a preposed adverbial.

However, especially in the speech of younger Carolinians, bwe S does sometimes appear to serve as subject:

24. Bwe i-bwe lɔ́ e-nngau.

that I-would go it-bad

'That I would go is bad.'

It is interesting that even here, many Carolinians would first think of the translation 'because' for bwe. For most speakers bwe does not sound natural as the initial constituent of a subject noun phrase. It must normally be preceded by abstract nouns like fakto 'fact' and mengi 'thought, belief', or by such pronominal possessives as iáái 'my', iaar 'their', and iaal 'his, her, its':

25. (Iaar) bwe re-bwe le-lɔ́ e-stoba-i-ei.
(Iaal)

(Their) that they-will ADV go it-surprise-me
(Its)

'It surprises me that they are going.'

The initial possessive form may either be the third person singular form iaal or a form agreeing in person, number, and where relevant, inclusiveness/exclusiveness with the subject of the embedded sentence.

4.4 Nominalizations

The sentence

26. Maria e siilɔ me kalabwos.

Maria she escape from jail

'Maria escaped from jail.'

can become a noun phrase through Nominalization transformation. This places the appropriate possessive pronominal (as described in Chapter III) at the beginning, followed by the former subject noun phrase, if it is not a pronoun, and then the verb:

27. Iaal Maria siilɔ.

'Maria's escape.'

The word siilɔ can now be considered a noun. The rest of the underlying sentence is unchanged. Now the nominalized form:

28. Iaal Maria siilɔ me kalabwos

'Maria's escape from jail'

can like any simple noun phrase function as a subject.

29. Iaal Maria siilɔ me kalabwos e-a-songa-i-ei.

her Maria escape from jail it-CAUSE-angry-me

'Maria's escape from jail made me angry.'

A further process which is optional preposes the former verb and attaches the possessive pronoun as a suffix:

30. Iaal Maria silɔ.

Silɔ-1 Maria

'Maria's escape'

31. Iaal Eduardo itto

itto-l Eduardo

'Edward's coming'

32. Iaal itto (a stoba-i-ei)

itto-l

'his coming (surprised me).'

4.5 Adverbial Complement Structures

We have discussed sentences embedded in noun phrases functioning as subjects or objects. One other significant grouping consists of sentences whose content represents a number of diverse semantic relations--time, place, condition, purpose, concession, reason, manner--which do not correspond to any grammatical relations. The clauses underlined in (32) through (37) are just such sentences:

32. Inaamwo igha akkaschigh nge aa schoscho bwe e-bwe a-takka-lǒ tarabwagho.

no-matter-when he-PFCT tired and he-PFCT try that he-will CAUSE-finish-DIR work

'Though he was tired, he tried to finish the work.'

33. U-appek ngere u-a listo.

you-PFCT shoot when you-PFCT ready

'You may fire when you are ready.'

34. Ngere u angi iigh ieel, u-bwe oromå.

if you eat fish this you-will sick

'If you eat this fish, you will get sick.'

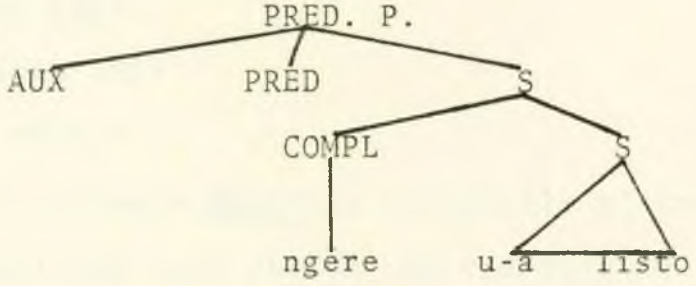
35. Antis kke ai-bwe-le lɔ́, nge i-a kkapas ngeli-ir.
before we-will go I-PFCT talk to-them
'Before we left, I talked to them.'

36. Re-ghal tittilap bwe e-bwe ior salili lai.
'They tell stories so that there will be meat tomorrow.'

37. Ai-a sefååli schaurasch bwe-le-igha e mmwel re-bwe purufa sengighisch.
We-PFCT refuse treasure because it perhaps they-will steal from us
'We refused the treasure because they might steal it from us.'

As in other languages, the exact status of such adverbial clauses in surface structure is unclear. It may be that, as Jacobs (personal communication) suggested, most if not all adverbial clauses are really sentences embedded in oblique noun phrases, though there is little evidence of any noun-like properties in the Carolinian data. They might alternatively be considered as predicate phrase complements, i.e., sentences embedded thus:

38.



We could, of course, posit higher-order constituents, such as Time, Place, Reason, etc., corresponding to the semantic roles of the adverbials, but this seems to overcomplicate the grammar.

A more detailed analysis of these adverbial clauses must await further investigation for they present serious problems for current theories. From our point of view, these clauses are simply clauses functioning as modifying or context-providing subordinate clauses. Simple adverbs like ighila 'then' and a-la-sais 'at six o'clock' have the same function. This function is one of modifying the main clause (which is often introduced with a nge to indicate non-subordination if the adverbial is a clause).

4.6 Topicalized Sentences

In the sentence

39. Iigh ieel mille i-a angi.
fish this that I-PFCT eat
'This fish is what I ate.'

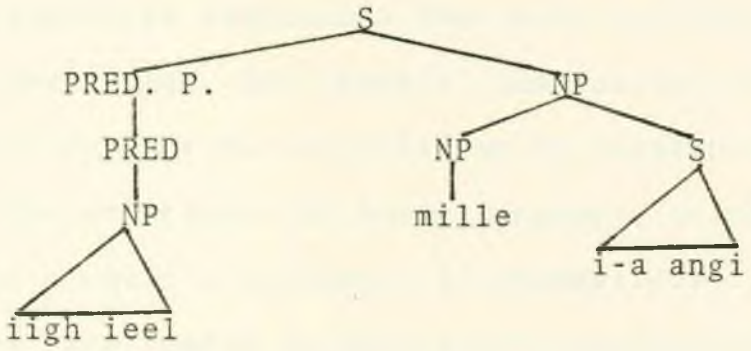
the object noun phrase iigh ieel has been fronted from its post-verbal position in a structure like that of (40):

40. I-a angi iigh ieel.
I-PFCT eat fish this
'I ate this fish.'

In (39), the topic pronoun mille is optionally placed between the topicalized noun phrase and the rest of the sentence. We might call such topicalized constructions

cleft sentences since they bear interesting resemblance to the English constructions which are so named.

However, it seems simple to consider these as a type of equational sentence in which mille serves as the pronominal head of a postposed subject noun phrase:



In fact, there is an alternative version in which the subject noun phrase is still in initial position:

41. Mille i-a angi nge iigh ieel.
what I-PFCT eat fish this
'What I ate is this fish.'

where nge serves to introduce the predicate. Where the topicalized noun phrase is human, malle is sometimes used instead of mille:

42. Mwáál laal malle e-li paluma laal.
man that who he-kill bird that
'That man is the one who killed that bird.'

43. Malle e-lii paluma laal nge mwáál laal.
who he-kill bird that man that
'The one who killed that bird is that man.'

4.7 Some General Considerations

The description of Carolinian syntax in this chapter and in Chapter III is obviously sketchy and incomplete. There is an obvious need for a more detailed description of the language. Our own preliminary analysis indicates some of the syntactic dimensions that must be taken into account in considering, for example, the reading level of a Carolinian story, or the acquisition by Carolinian children of the structures of their language, or the "maturity" of a child's writing. If grammatical "explanations" are needed to describe to students certain characteristics of good or bad writing, then such "explanations" will lack validity if they are not supported by an adequate body of good syntactic description. This chapter and the previous one are but first steps towards such a description.

CHAPTER V

Some Conclusions and Proposals

5.0 Introduction

A central assumption of this study is that the language of a people is the core of its culture. It is the major medium through which a person can communicate his deepest thoughts, feelings, and perceptions. The most effective way to stunt or even destroy the spirit of a people is to deprive them of their language, to prevent them from learning through their language, to force them to use someone else's language so that eventually they will assimilate to another culture, yet never truly belong. This has happened to the Hawaiian people, it has been happening to the Chamorro people on Guam, and it has perhaps irreparably damaged the cultures of the native peoples of the Americas. The results have too often been a subculture providing cheap labor for tourism, and other poorly paid service occupations, one with all the problems of a people cut off from its spiritual roots--problems of alcoholism, unemployment, juvenile delinquency, and near illiteracy in the language which has replaced their own. Some will be determined enough to fight against the pressures and will lead productive and healthy lives, lives indistinguishable from those of the successful in the majority cultures. The cost is high and there are many who cannot pay it.

We in the Marianas, both Carolinians and Chamorros, have the opportunity to help our culture and our ideals to continue and flourish. We can contribute more to the larger community by retaining our own pride and identity. We should learn to speak each other's languages. We need English. But we also need our own languages, and our children need them too.

5.1 Needs and Possible Solutions

But enthusiasm and energy is not enough. We must have knowledge. We must know ourselves and our cultures. And this means we must know our language in a deeper sense. Carolinians and Chamorros should learn how their language works, should know and practice writing in their languages, and read in it--read about their culture and history but also about the sciences and the arts, politics and education. This is the task before us. It seems formidable, almost impossible.

But is it really? Must it cost millions, even billions, of dollars? Carolinians and Chamorros can meet together to read (in English) and discuss with the help of suitable university people and other professionals. Discuss what? Perhaps talk about articles in Scientific American, short stories, automobile design, medicine, economic affairs, education--and then they can and must write. They must write about their talk in their own languages, helped and encouraged by the professionals

they have brought in.

Indeed, it is not necessary to restrict participation to Chamorros and Carolinians. Invite the participation of people and governments of other parts of Micronesia, of American Samoa, and of other Pacific peoples so that they will join with us. If we all contribute to the costs, we will be able to afford more--good people to help us write, to help us study the way our children learn, and even to type up on stencils what we have written. Then our people will have language to read and to talk about.

5.2 A Summation

In this study I have attempted to focus on some aspects of our language, the Carolinian language, that have seemed to me important for the development of Carolinian literacy and education. The coverage has of necessity been limited and at times superficial, for it has been restricted by the time and resources available to me and by my own abilities.

We have seen how our people and the helpers from the University of Hawaii have worked and interacted together to develop a writing system based upon careful investigation of our language and some knowledge of the burdens such a system will have to bear in a multilingual community. The syntax of our language is a rich and complex structure that needs further, more detailed study if we are to investigate children's language, as we must.

There is a great need for more intensive work on the Chamorro language too. The two communities must recognize each other's needs and respect each other's identities. If we fight, we all lose.

Finally, we all want to help our children so that their education will be challenging yet not a source of frustration and shame. They will learn to read and write in their native language, as well as listen and speak. But we must not forget the adult population--ourselves--for, whether we like it or not, we are the models, good or bad, before them. If we do not read, why should they? If we do not write, why should they? If we spend all our evening hours before a television set, why shouldn't they?

But we cannot read in our language unless there is interesting and adult matter to read. Those who write must not forget adults. For every three books, articles, or stories written for children, there should also be at least one for adults. If we deny adults the opportunity to read, we will find that our children will not read either. The costs are not so great if we are determined enough.

APPENDIX A

Sample List of Dialectal Variations

The table below contains some examples of variations in the three Carolinian dialects. There is not only phonological variation but also some lexial variation.

1. Phonological Differences

Elle	Elle-Enne	Enne	Glossary
pal	pal(n)	pan	'hill'
palawal	palawal(n)	panawan	'his partner'
ila	ina	ina	'that one'
bwil	bwil(n)	bwin	'sea shells'
ikkaal	ikkaan	ikkaan	'these ones'
mwææl	mwææn	mwææn	'man'
faliu	faniu	faniu	'land'
tal	tan	tan	'dream'
e saar	e saar	e haar	'nothing'
sooŋ	sooŋ	hooŋ	'angry'
sɔɔbw	sɔɔbw	hɔɔbw	'village'
sææŋ	sææŋ	hææŋ	'cry'
siŋ	siŋ	hiŋ	'let gas out'
aramasal	aramasal(n)	aramahan	'people of'
siliila	siliina	hiniina	'shirt'
kkapas	kkapas	kkapah	'speech'
masax	masax	mahax	'afraid'
ʂɔɔbwut	ʂɔɔbwut	ɾɔɔbwut	'woman'
ʂɔɔl	ʂɔɔl	ɾaan	'group of'

Elle	Elle-Enne	Enne	Glossary
ṣax	ṣax	ṛax	'only'
ṣɨɨmw	ṣɨɨmw	ṛɨɨmw	'head'
akkaṣix	akkaṣix	akkaṛix	'tired'
bweṣebweṣ	bweṣebweṣ	bweṛebweṛ	'white'
afʌṣi	afʌṣi	afʌṛi	'like it'
ruuṣai	ruuṣai	ruuṛai	'two (people)'
fææṣ	fææṣ	fæṛ	'pandanus'
ṣɔçɔɔlimw	ṣɔçɔɔlimw	ṛɔçɔɔlimw	'to be marrying'
alaŋal	alaŋal	alaŋan	'all'

2. No Differences (small sample)

gakko	gakko	gakko	'school'
misa	misa	misa	'mass'
muŋo	muŋo	muŋo	'eat'
sena	sena	sena	'dinner'
bwola	bwola	bwola	'ball'
lios	lios	lios	'God'

3. Lexical Differences

mwmwel	mwmwel(n)	teefʌr	'able'
aŋet	aŋet	arau	'fire'
tomwox	tomwox	likkep	'big'
ixafalafal	ixafalafal	libwootmehe	'unicorn fish'

APPENDIX B

List of Members of the Carolinian Orthography Committee

A. Elle Dialect

1. Iginoef, Cynthia T.

   Elementary school teacher

2. Kaipat, Antonio F.

   Elementary school teacher

3. Kileleman, Miguel

   Junior High School teacher

   Language informant for Peace Corps Volunteers training

   Member of United Carolinian Association (U.C.A.)

4. Kileleman, Prepedigna P.

   Elementary school teacher

   Language informant for Peace Corps Volunteers training

   Member of U.C.A.

5. Olaitiman, Donicio R.

   Consultant in the current linguistic investigation of the Saipan Carolinian language

   Active member of U.C.A.

   Active in church's activities for Chalan Lau Lau Carolinian

6. Olopai, Dominina F.

   Translator of Chamorro hymns into Carolinian

   Senior nurse at Saipan Hospital

   Active member of U.C.A.

7. Olopai, Margarita R.
   Northern Marianas High School counselor
   Secretary of U.C.A.
8. Omar, David
   Elementary school teacher
9. Rabauliman, Felix F.
   President of the U.C.A.
   Trust Territory Government Adult Basic Education Coordinator (A.B.E.)
   Co-writer of the Carolinian translator of the Northern Marianas Covenant and Constitution
   Member of the Marianas Political Status Commission
   Former Representative for Congress of Micronesia
   Former Legislator for Saipan Municipal Council
   Former Village Commissioner for Oleai Village (San Jose) District, #7
   Consultant to Gregory Trifonovitch in linguistic investigation of Saipan Carolinian from 1963 to 1970
   Consultant to the first Peace Corps Volunteers for Marianas
10. Warakai, Rosa R.
    Elementary school teacher
    Member of U.C.A.

B. Elle-Enne Dialect

1. Igisomar, Mariano R.
   Elementary school teacher

2. Iguel, Silvestre

   Curriculum writer for Micronesian Culture and Language (MICAL)

3. Limes, Canisio M.

   Elementary school teacher

4. Limes, Luis M.

   Former Legislator for 5th Marianas District Legislature

   Co-writer of Carolinian translation of Northern Marianas Covenant and Constitution

   Member of U.C.A. standing committee

   Consultant to Trifonovitch investigation, 1963-67

5. Rasiang, Dolores S.

   Elementary school teacher

6. Tebuteb, Isidro

   Respected community elder knowledgeable in traditional Carolinian vocabulary and customs

   Employee of Northern Marianas Land Commission

   Active member of U.C.A.

C. Enne Dialect

1. Ruak, Felipe

   Northern Marianas Government Land Management Officer

   Language informant for Peace Corps Volunteers training

2. Pua, Jesus

   Present Village Commissioner for Tanapag Village District, #8

   Photographer for Marianas Education Department

3. Taitano, Cypriano L.

   Former elementary school teacher

   Former Village Commissioner for Tanapag Village

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   Language consultant for University of Hawaii
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   Frequent assistant in elementary school in-service
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