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T H E O K I N A W A N L A N G U A G E

(A SYNCHRONIC DESCRIPTION)

by

Owen Loveless

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INTRODUCTION

This is the first attempt at a comprehensive description of the Okinawan language (ʔucinaa-guci), which was the language of prestige in the former Okinawan kingdom. The most extensive descriptions of this language heretofore produced are those of Chamberlain[1] and Hattori.[2] The former's work, a monument in the literature of Luchuan linguistics, is not a technical description. Hattori's admirable summary describes principally the so-called "male gentry speech" (sizoku dansi no kotoba)--a class dialect formerly spoken by the male elite. The "popular speech" (referred to by Hattori as ippannin no kotoba), which was the speech of residents of Shuri (capital of the Kingdom) in general, is the object of this description.

The Okinawan language is a member of the same linguistic family as is Japanese, and the respective standard languages (class dialects of Shuri and Tokyo) stand in approximately the degree of relationship of Spanish and Italian. Okinawan however has never been used as a vehicle of written communication. Among the numerous dialects of the Luchuan

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[1]Basil Hall Chamberlain, Essay in aid of a grammar and dictionary of the Luchuan language. Yokohama, 1895.

[2]Shirō Hattori, "Ryūkyū-go" (The Luchuan language), An Introduction to the languages of the world, ed. Sanki Ichikawa and Shirō Hattori (Tokyo: Kenkyusha, 1955), II, pp. 308-356.

archipelago are several which are mutually unintelligible with the standard language and with each other. All of these dialects are now being gradually replaced by Japanese.

During the past ten years, the writer has collected data on the standard Shuri speech from many persons, of whom the following may be mentioned as principal informants: Mrs. Tsuru Kabira was born in Shuri in the last century at a time when Japanese education for girls was still unusual. She was one of the first women of Shuri to become completely bilingual. Mr. Sēgyū Yonaha is a well-kmown musician and author of Shuri, specializing in Okinawan music. Mr. Kintaro Yogi of Chicago is originally from Shuri. The latter two are men of the older generation, and their childhood in Shuri pre-dated the general use of Japanese. Mr. Shimei Nashiro, Professor of Psychology at the University of the Ryukyus, although of a younger generation, is quite conversant with the momolingual style of Shuri speech. Monolingual informants included Mr. Jushitaka Uyezu (grandfather of the preceding) and Mrs. Tsuru Tanabara.

The corpus consists of:

1) 29 tapes of recordings made with various informants, totalling about 50 running hours.

2) 500-odd typewritten pages (double spaced) of transcriptions of the above.

3) About 100 pages of direct transcriptions of elicitations from informants.

4) A number of tapes of radio broadcasts in the Okinawan language over stations KSBK and KSAR, recorded in 1961-2.

5) About 15 pages of collated material from (4)

6) Files (resulting from collation of above):
   a) lexical section--about 5000 items
   b) inflectional system
   c) morphology
   d) syntax
   e) miscellany

The general order of presentation is synthetic, beginning with the smallest units and building up level by level. Certain departures from this order seemed desirable and were made. The chapters fall into the following groups:

Phonology	I - V
Inflection	VI - VIII
Word-Classes	IX - XVII
Misc. Processes	XVIII - XXI
Syntax	XXII - XXIV
Structural Theory	XXV

In order to avoid cumbersome repetitions, the following conventions are followed in descriptive statements:

'is' (or a verb in the general aspect) means that something is either always so, or that exceptions are minor.

'can' refers to what is called "privilege" by Bloomfield[1] and others. 'Can occur' means 'has privilege of occurrence'.

'may' indicates that pre-conditions exist for privilege of occurrence.

In addition, 'is called' means that a choice of terminology was made by the writer for purposes of this description.

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[1]Leonard Bloomfield, Language (New York: Henry Holt and Company, 1933), p. 265.

CHAPTER I

THE PHONEMIC SYSTEM

1.0 Introductory

Suprasegmentals of stress, pitch and intonation are not included in this study, except to the extent that pitch and stress are involved in the so-called "toneme", which is discussed in Chapter IV. The term "extrasegmental" is chosen to apply specifically to the two phonemes in the inventory under that heading.

The arrangement of phonemes in the inventory is affected by functional considerations. For instance, while /f/ has a bilabial component, /h/ is actually [h]. Its position in the labial line results from its functional relationship within the phonemic system.

Compound symbols are used for phonemes which have either a palatalized (as /py/) or a labialized (as /kw/) release. These entities function in the system like their simple counterparts, except that their functional load is lexically very light.

The consonant system falls into three groups, the largest of which, called the "obstruents", has functionally determined "hard" and "soft" subdivisions. The vowel system is functionally divided into "prime" and "oblique" members.

1.1 Phonemic Inventory

1.11 Consonants (24)

0

	Obstruents Hard		Obstruents Soft		Liquids	
Labial	p	f h	b		w	m
Labial(pal.)	py	hy	by			
Dental	t		d		r	n
Palatal	c	s	j		y	
Velar	k		g			
Velar(lab.)	kw		gw			
Glottal				ʔ		
Glottal(lab.)				ʔw		
Glottal(pal.)				ʔy		

1.12 Vowels (5)

Prime	i	u	a
Oblique	e	o	

1.13 Syllabics (2)

Nasal	ŋ
Mute	q

1.14 Extra-segmentals (2)

Moreme	:
Toneme	'

1.2 Phonetics

1.21 Articulation of Phonemes

CONSONANTS

1.211 Hard Obstruents(voiceless) (10)

1. /p/ bilabial stop
2. /py/ " " , palatalized
3. /t/ alveolar stop
4. /c/ alveopalatal affricate[1]
5. /k/ velar stop
6. /kw/ " " , labialized
7. /f/ bilabioglottal spirant
8. /h/ glottal spirant
9. /hy/ " " , palatalized
10. /s/ alveolar or alveopalatal blade spirant

1.212 Soft Obstruents(voiced) (6)

11. /b/ bilabial stop
12. /by/ " " , palatalized
13. /d/ alveolar stop
14. /j/ alveopalatal affricate
15. /g/ velar stop
16. /gw/ " " , labialized

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[1]As functional members of the phonemic system, /c,j/ are stops, and will henceforth be dealt with as such.

1.213 Liquids (5)

17. /w/ labiovelar or labioprepalatal glide
18. /r/ alveolar flap
19. /y/ palatal glide
20. /m/ bilabial nasal
21. /n/ alveolar nasal

1.214 Glottals (3)

22. /ʔ/ glottal stop
23. /ʔw/ " " , labialized
24 /ʔy/ " " , palatalized

1.215 VOWELS (5)

25. /i/ high front vocoid
26. /u/ high back rounded vocoid
27. /a/ open central vocoid
28. /e/ mid front vocoid
29. /o/ mid back rounded vocoid

1.216 SYLLABICS (2)

30. /ŋ/ nasal pulse of articulation, adopting point of articulation of following phoneme, or having a lax velar articulation when final
31. /q/ contoidal voiceless pulse of articulation, adopting point and manner of articulation of following phoneme

1.217 EXTRA-SEGMENTALS (2)

32. /:/ time increment, increasing duration of preceding vowel or nasal pulse
33. /ˊ/ a wave of pitch and stress, in which the fall from high to low is most prominent

1.22 Allophonics

1.221 Distribution of Varieties of /k,g/

Velar stops vary in point of articulation in accord with the following vowel, fronting before front vowels and backing before back vowels. Fronted velars maintain phonemic distinction from neighboring palatals:

kí:	cí:	'fur'	'hook'
ʔǎgi	ʔǎji	'land'	'gills'

1.222 Distribution of Varieties of /s/

/s/ is a voiceless spirant with friction between the blade of the tongue and an area of the front of the roof of the mouth. As the vowel following /s/ advances from back to front, this area of articulation increases, and in the case of front vowels, laps over into the pre-palate. Palatalization before /i/ is more marked than that before /e/:

[s]		[š]	
sába	'sandals'	sisi	'meat'
sáni	'seed'	sini	'shin'
sa:ji	'towel'	si:ja	'elder sibling'
físa	'leg'	nísi	'north'
súku	'desk'		
su:	'father'		
ma:su	'salt'		
so:ki	'basket'	ɕe:	'shrimp'
so:ma:	'squinter'	se:ku	'carpentar'
haŋso:	'flute'	ni:ɕe:	'young man'

1.223 Fronting of /w, kw, gw, ʔw/

The tongue position in /w/ and in the labialized release of other consonants is fronted before a front vowel:

[w]		[ɥ]	
wa:	'I'	wikiga	'man'
warabi	'child'	winagu	'woman'
		wi:ru:	'string'
wútu	'husband'		

[kw]		[kɥ]	
kwa:gi	'mulberry tree'	kwi:	'voice'
qkwá	'offspring'	kwé:	'adze'

[gw]		[gɥ]	
ʔiŋgwa:	'pup'	mijigwe:	'fertilizer'

[ʔw]		[ʔɥ]	
ʔwa:	'pig'	ʔwí:	'top'
		ʔwe:ki	'rich'

1.224 Unvoicing of Vowels

Vowels are typically voiced. Partially or completely unvoiced allophones occur under certain circumstances, the basic one being an unvoicing environment. Such an environment is constituted by contiguously surrounding phonational voicelessness, as presented by voiceless phonemes, or cessation of phonation(#). Thus all of the vowels in the following sequences are in unvoicing environment:

tici#	tucici#	qcu#	kuqpi#
kata#	kukuci#	qkwa#	kaqpa#

Unvoicing in such positions is however not automatic, for the following factors are necessary in contributing to the effect:

a) faster rate of speech
b) less precise enunciation
c) lack of stress on the vowel
d) absence of high pitch of the toneme on vowel

With sufficient coincidence of the above four factors, the high vowels, and considerably less frequently /a/, are partially or completely unvoiced.

All of the participants in unvoicing environment (hard consonants, /q/, and #) are not equal in their effect. The palatal /c/ and the palatalized allophone of /s/ have greater unvoicing effect than the other hard consonants[1], while # has less effect.

Among the vowels undergoing the process, /a/ shows much more resistance to unvoicing than do the high vowels.[2] The oblique vowels /e,o/, because of their limited distribution, are not found in unvoicing environments.[3]

In the course of an utterance, or in comparing similar utterances by the same speaker, the same item is often found with unvoicing in one instance and without it in another. The difference is attributable to variation in the above four factors--and in others less definable.

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[1]Due presumably to greater length of closure, which may be seen on spectrograms.

[2]Possibly because of the greater aperture.

[3]/e,o/ are almost invariably followed by the moreme.

In the following examples taken from tape recordings, only the relevant part of the environment is quoted. Complete unvoicing is indicated by an undercircle, and partial unvoicing by an underline:

Examples of Unvoicing:

/i/	citu	'present'	kúsi	'back'
	ciké:	'message'	sa:si	'lock'
	fiku:	'shorty'	ta!ci	'two'
/u/	kusa	'grass'	ʔweŋcu	'rat'
	kukuci	'feeling'		
	sutáŋ	'he did'		
/a/	cakó:	'guest'	--	
	tatáŋ	'mat'		
	hasiru	'door'		

Examples of Multiple Unvoicing:

kusukwe:	'Bless you!' (after a sneeze'
tucíci	'ten months'
hanasici kakato:ŋ	'I've caught a cold.'

Examples of unvoicing as shown in high vowels are normal, except for the final unvoicing, which is less frequent. As for the low vowel, while examples are not hard to find, occurrence is statistically much less, and no example of final unvoiced /a/ is found.

1.3 Internal Functional Relationships

1.31 Softening

It sometimes happens that morph-initial hard consonants shift to their corresponding soft consonants when buried within a compound. This is a morphophonemic phenomenon which will be discussed later, but it is necessary at this time to be aware of it in order to appreciate this feature of the structure of the phonemic system as a system.

The following alternation of initials and medials is observed:

Initial Voiceless Stops to Voiced Stops			Initial Spirants to Voiced Stops		
t-	→	-d-	f-	→	-b-
c-	→	-j-	h-	→	-b-
k-	→	-g-	hy-	→	-by-
kw-	→	-gw-	s-	→	-j-

1.32 Relationship of /f/ and /h/

It is seen that two separate spirants, /f/ and /h/, soften into the same voiced stop /b/. Both of these spirants share a glottal component, and the evidence that phonemically separates them bears scrutiny. The following pairs exist:

/f/	/h/		
fí:	hí:	'fire'	'yes?'
fá:	há:	'leaf'	'Ha!'
kufasaŋ	guhaŋ	'is soft'	'rice'

Aside from such rather labored examples, /f/ and /h/ are found in complementary distribution as follows:

Initially			Medially			
h	+	a,o	V	+	f	+ V
f	+	i,u,e	:	+	f	+ V

1.33 Behavior of /p/ and /py/

Two hard consonants, /p/ and /py/, did not appear in the above scheme of softening of initial consonants (§1.31) because they have not occurred in that particular way /p/ is a phoneme of infrequent (lexical) occurrence, while /py/ just barely occurs at all. When /p/ does appear, its favorite position is following a syllabic:

/-qp-/		/-ŋp-/	
kuq́pi	'this little'	ciŋpe:	'spittle'
ʔiq́pe:	'very'	raŋ́pu	'lamp'
tiq́pu:	'rifle'	ŋpana	'nose' (polite)

Aside from a very small number of items, the post-syllabic position is not occupied by /f/ or /h/, which means that the the group of phonemes /p f h/ occur in general in complementary distribution. Instances such as the following where initial /p/ stands in contrast with /f/ or /h/ are mostly loan words:

/p/		/f-h/	
píŋ	'pin'	fiŋ	'vicinity'
pè:ku:	(name)	fe:ku	'early'
pe:ji	'page'	fe:re:	'robber'
páŋ	'bread'	haŋso:	'flute'

/py/ occurs in only two forms, in morphophonemic alternation with /hy/:

hya:ku	'100'
ruq-pyaku	'600'
haq-pyaku	'800'

Although /py/ thus remains in complementary distribution with /hy/, it is accepted as a distinct phoneme on the basis of pattern congruity.

1.34 Complementary Phonemes and Structural Relevance

To a very large extent, /p,f,h/ and /py,hy/ share in the occupation of functional spots just as allophones do. It is convenient for certain purposes to view such sets as constituting marginal allophonic sets, the members of which are in quasi-allophonic relationship with each other. They may be referred to as "complementary phonemes".

The phenomenon of softening may now be restated more simply and completely by utilizing these sets:

Initial (or after /q/)		Medial (except after /q/)
p-f-h	→	b
py-hy	→	by
t	→	d
c	→	j
s	→	j
k	→	g
kw	→	gw

The above chart shows how softening involves the entire group of obstruents, distinguishing functionally between hard and soft consonants.

CHAPTER II

DISTRIBUTION OF PHONEMES

The distribution considered in this chapter is restricted to that of sequences which can occur between gaps, but which do not contain partials so occurring themselves.[1]

2.1 General Principles of Phonemic Distribution

1. Clustering does not occur.[2]
2. The predominant pattern is CV in series.
3. C does not occur finally.
4. V does not occur initially.
5. Oblique vowels when occurring are followed by the moreme.
6. The nasal syllabic may occur wherever CV can occur.
7. The mute syllabic occupies a medial CV spot.
8. The moreme can occur after all V, and after the nasal syllabic; it can occur befor all C and either syllabic.
9. The toneme is distributed with relation not to segmental units as such, but to sequences of syllables of varying length, called the tone span. (See Chapter IV)

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[1] For example, 'gooseberry' would be restricted because it is a berry, and 'berry' can occur in isolation. The main effect of this restriction is to set aside internal glottals and /h/ + /a,o/, which are created by close juxtaposition of elements.

[2] C + C, V + V, syllabic + syllabic, moreme + moreme, are not found.

2.2 Distribution of Consonants

2.21 /t c k s/

The following arrangement schematizes all environments of the above four hard consonants:

#		
a		a
i		i
u	+ C +	u
ŋ		e:
q		o:
:		

Using the symbols # for gap, V for the trio of prime vowels, and S for the syllabics, the above design may be reduced to the following:

Scheme I: # V S : + C + V

The scheme may be read as follows: The (specified) consonant can occur after a gap, any prime vowel, either syllabic, and the moreme; it can occur before any vowel. It does not occur otherwise.

2.22 /b d j g m n w r y/

Scheme I holds for this group of soft consonants and liquids, except that the mute syllabic cannot precede.

2.23 /f-h-p/

This set of complementary phonemes (§1.34) shares in general the distribution of Scheme I, as follows:

#	+ h +	a,o:
#	+ f +	i,u,e:
V,:	+ f +	V
S	+ p +	V

2.24 /kw gw/

For /kw/, suppress following back vowels in Scheme I.

For /gw/, the same as /kw/, and in addition the mute syllabic cannot precede.

2.25 /ʔ/

The glottal stop typically follows #. It patterns according to Scheme I with what follows it, except that /ŋ/ also may follow.

2.26 /ʔw/

The labialized glottal stop has the pre-distribution of the glottal stop (§2.25) and the post-distribution of the other labialized consonants (§2.24).

2.27 /py by hy ʔy/

These phonemes have the pre-distribution of the onset, and post-distribution of the release. They are infrequent.

2.3 Distribution of Vowels

Scheme II: C + V + : S C # (*)

*Limitations:

1. When V is oblique, /:/ follows.[1]
2. C following V is not /h.p/ (§2.23)
3. When C is labialized, /u,o/ do not follow(§2.24-6)
4. C following V is not a glottal (§2.25-6)

2.4 Distribution of /ŋ/

Scheme III: # V : ʔ + /ŋ/ + : C # (*)

*Limitations:

1. C ≠ /ʔ ʔw ʔy h f hy r/
2. /:/ follows only when /ŋ/ is initial.

---

[1]Exceptions to /e/ + /:/ rule are /ʔweŋcu/'rat', meŋse:yi/'going', /ʔweŋdasa/'gentleness'.

It may be observed that pre-/ŋ/ environment resembles pre-C, while post-environment resembles post-V:

	Pre-Environment	Post-Environment
Pre-C (Sch. I),	# V S : + C	
Post-V (Sch. II),		V + : S C #
Scheme III:	# V ʔ : +/ŋ/+ :	C #

In comparing the summation of Pre-C and Post-V with Scheme III, the lack of the syllabic(S) in the latter is canonical(§2.1/1). In case of /ŋ/ preceded by /ʔ/, it is assumed on grounds of pattern congruity that /ŋ/ is functioning exceptionally as a vowel.

Thus /ŋ/, with the above restrictions, has the pre-distribution of C and the post-distribution of V.

2.5 Distribution of /q/

Scheme IV: V + /q/ + C(*)

*Limitations: C is a hard consonant.

2.6 Distribution of /:/

Scheme V: ŋ V + /:/ + S C #

The moreme may be interpreted as a unit having CV distribution (i.e. Pre-C distribution with canonical and natural limitations, and Post-V distribution). The sense of this would be that /:/ is like a structural CV unit in the segmental flux.

The moreme may also be interpreted as a unit having the distribution of a structural zero inserted after V[1]

[1]Except insofar as /:/ facilitates occurrence of oblique vowels.

or /ŋ/. The sense of this would be that /:/, like a supra-segmental, is irrelevant to segmental distribution. Both interpretations are retained, as there are structural reasons to be seen later for so doing. (§18.D)

2.7 Summary of Distribution

Scheme III may be derived from I and II. Scheme IV differs from II in ways that are attributable to the articulatory and auditory nature of /q/.

Schemes I(for consonants) and II(for vowels) may be regarded as basic. They are mutual mirror-images, showing the bipolarity of C and V structural elements:

I	# S :	V	+ C +	V		
II		C	+ V +	C	: S	#

CHAPTER III

SYLLABIFICATION, MINIMAL WORD PATTERNS, AND PATTERN UTILIZATION

3.1 Syllabification

A usual Okinawan verse form comprises four lines, as in the following well-known example:[1]

tiŋ nu buri-busi ya (8)
yumi ya yumari: siga (8)
ʔuya nu yusigutu ya (8)
yumi nu naraŋ (6)

The number following each line is a count of its rhythmic pulses, and this verse conforms to a prosodic type. It is seen that in order to come to the canonical number of pulses, the syllabic in line one counts as a pulse, while the moreme in line two counts for nothing. Examination of other verses as well confirms the fact that the syllabic (nasal or mute) constitutes a rhythmic pulse in verse, sung or spoken, while the increased length produced by the moreme is not taken account of.

These phonological units which constitute rhythmic pulses in verse are felt likewise in prose. They are called

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[1]Translation: The thronged stars of heaven ...
If you count, can be counted, but
Parents' acts of care
Cannot be counted.

syllables, and are found in the following seven types:

	short	long
normal	CV	CV:
nasal	ŋ	ŋ:
nasal	ʔŋ	ʔŋ:
mute	q	

3.11 Long versus Short Syllables

Long syllables are usually a bit more than double the length of neighboring short syllables. Since this length operates in the production of phonemic contrasts, it is accounted for in the phonemic system. Of the three possible solutions for this length--separate long phonemes, geminate vowels, and length as a phoneme--the latter is most in harmony with the structural facts of the language, not only on the phonological, but on the morphological level.

The phonemic distinction of length is however not observed in sung verse, where short syllables are lengthened in conformity with the time value of the notes.[1] In spoken verse, the phonemic distinction is made--but without affecting the prosody, as illustrated in the above verse.

3.2 The Mora as Structural Unit of Length

There are morphophonemic reasons, as will be seen below (§18.4) for considering that a long syllable contains the length of two short syllables. Thus it is assumed that the CV, a minimal unit of structural length, constitutes one mora of length, and that the moreme adds a mora, giving

[1]The toneme is also disregarded in melody.

the long syllable a length of two morae.

3.3 Structural Interpretation of Syllabics

In the previous chapter it was seen that syllabics distribute neither like consonants nor like vowels, but like CV units (§2.4). It was seen above (§3.1) that syllabics have a rhythmic pulse like CV units. Later will be seen morphophonemic changes from CV to syllabic, the reverse, and alternation between syllabic and CV.

In the light of the facts, it is reasonable to assume that syllabics are structural variants of CV, and such an assumption is made in this description.

3.4 Patterns of Phonemic Distribution

A complete pattern study does not come within the scope of this paper. What is presented is basic and sufficient to indicate the general tendencies. Patterns studied include the most frequent types, and most of the items are of the same word class. In order to provide a more comparable group of forms, and to bring the study within manageable proportions, only simple and independent forms are included.[1] Presence or absence of the toneme is disregarded as irrelevant in segmental patterns.

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[1]This means (as in Chapter II) that the form can occur meaningfully between pauses, and that it does not contain a related partial which can do so. Also, inflectional and derivational forms must be omitted because of their great number and their own peculiar patterns, which would largely blur the picture. Derivative forms are included only when they occur rather frequently--thus showing a degree of independence from the underlying form.

3.41 Minimal (Monosyllabic) Forms

The minimal independent form has no less than three phonemes and is of the monosyllabic type /CV:/. Many of the most basic and frequently used words of the language are of this form.[1] The total number of such forms cannot however be large in comparison with bi- and trisyllable combinations. Also many of the theoretically possible CV: forms are not found in words because of distributional restrictions.

3.42 Bisyllabic Forms

The seven types of syllables (page 21) may be arranged in accordance with their binary permutations:

	-CV	-CV:	-ŋ	-ŋ:	-ʔŋ	-ʔŋ:	-q
CV-	CV-CV	CV-CV:	CV-ŋ	CV-ŋ:	CV-ʔŋ	CV-ʔŋ:	CV-q
CV:-	CV:-CV	CV:-CV:	CV:-ŋ	CV:-ŋ:	CV:-ʔŋ	CV:-ʔŋ:	CV:-q
ŋ-	ŋ-CV	ŋ-CV:	ŋ-ŋ	ŋ-ŋ:	ŋ-ʔŋ	ŋ-ʔŋ:	ŋ-q
ŋ:-	ŋ:-CV	ŋ:-CV:	ŋ:-ŋ	ŋ:-ŋ:	ŋ:-ʔŋ	ŋ:-ʔŋ:	ŋ:-q
ʔŋ-	ʔŋ-CV	ʔŋ-CV:	ʔŋ-ŋ	ʔŋ-ŋ:	ʔŋ-ʔŋ	ʔŋ-ʔŋ:	ʔŋ-q
ʔŋ:-	ʔŋ:-CV	ʔŋ:-CV:	ʔŋ:-ŋ	ʔŋ:-ŋ:	ʔŋ:-ʔŋ	ʔŋ:-ʔŋ:	ʔŋ:-q
q-	q-CV	q-CV:	q-ŋ	q-ŋ:	q-ʔŋ	q-ʔŋ:	q-q

The above forty-nine combinations are reduced to fifteen possible patterns by application of distributional restrictions (beginning from the right-hand column):

Restrictions	Reference	Result
final /q/	§2.1/7	-7
medial /ʔ/	§2.25	-14
final /ŋ:/	§2.4	-7
cluster	§2.1/1	-4
initial /q/	§2.1/7	-2
Total Restricted Forms		-34

[1] See Appendix A.

49 less 34 leaves a remainder of 15 forms which are allowed by the distribution formulas. Examples of all types except /ŋCV:/ are found among the items of the distribution study, and may be found below.

3.43 Structural Type Formulas

Syllabics and /ʔŋ/ are to be considered as structurally CV (§3.3, §2.4). Hence the fifteen possible bisyllabic patterns are either normal or variant types as follows:

Bisyllabic Structural Types

	Normal	Variant
2.	CVCV	(ŋCV ʔŋCV CVŋ qCV)
3.	CV:CV	(ŋ:CV ʔŋ:CV CV:ŋ)
4.	CVCV:	(ŋCV: ʔŋCV:)
5.	CV:CV:	(ŋ:CV: ʔŋ:CV:)

The monosyllable /CV:/ is Type 1, and Type 6 is /CVCVCV/, the simplest of the trisyllables. Together these six structural types comprise a great body of simple forms of the language, which is the object of this pattern study.

The following chart lists these types, providing after each formula the number of simple independent items (including variants) which are listed from the corpus.[1] The total number of forms of each variant type is shown in parentheses.

[1]Lists of simple independent forms of Types 1 to 6 are provided in Appendices A-F. These lists are complete, so far as the corpus is concerned.

Basic Structural Types 1 - 6

Type No.	Pattern		Examples	Gloss
1.	CV:	134	su:	father
2.	CVCV	400	ʔíyu	fish
	ŋCV	(3)	ŋna	clam
	ʔŋCV	(6)	ʔŋna	dung
	CVŋ	(22)	jiŋ	money
	qCV	(2)	qcú	person
3.	CV:CV	133	ti:da	sun
	ŋ:CV	(2)	ŋ:cu	year before last
	ʔŋ:CV	(1)	ʔŋ:ca	soil
	CV:ŋ	(3)	ya:ŋ	next year
4.	CVCV:	66	mayaa	cat
	ŋCV:	(0)		
	ʔŋCV:	(1)	ʔŋmii	elder sibling
5.	CV:CV:	73	ni:se:	youth
	ŋ:CV:	(1)	ŋ:di:	turnip
	ʔŋ:CV:	(1)	ʔŋ:me:	grandmother
6.	CVCVCV	245	warabi	child
	ŋCVCV	(3)	ŋkaji	centipede
	ʔŋCVCV	(4)	ʔŋnaji	eel
	CV ŋCV	(26)	ciʧsi	knee
	CVCVŋ	(35)	gajaŋ	mosquito
	ŋCVŋ	(0)		
	CV qCV	(4)	ʔuqtu	younger sibling

3.44 Relative Frequence of Types 1-6 in Sample

Type	Formula	Percent
2	CVCV	38.06
6	CVCVCV	23.31
1	CV:	12.75
3	CV:CV	12.65
5	CV:CV:	6.95
4	CVCV:	6.28

3.5 Matrices

A convenient and meaningful way of viewing certain types of linguistic phenomena is in matrices. A matrix as used here is basically the same as a system of mathematical coordinates in two dimensions. In general however, the vertical axis of the matrix will be primary and the horizontal axis secondary:

Sample Matrix

	a	b	c	d	e
1	.	.	.	.	.
2	.	.	.	.	.
3	.	.	.	.	.

In this sample matrix, the vertical axis has points 1,2,3; the horizontal axis has points a,b,c,d,e. There are thus 15 elements (1a,1b,1c,1d,1e,2a ...) in the matrix.

A block of a matrix is any rectangular portion of it. The sample matrix contains a horizontal "2-3" block (of 10 elements), a vertical "bc" block (of 6 elements) etc.

Any element of the matrix as used here is occupied if a form corresponding to its coordinates exists in the corpus. If there is more than one form for an element, this is called multiple occupation.

The quotient of occupation of a matrix (or of a block) is the number of forms in occupation divided by the number of elements. For instance, if forms occupy 1a, 2b, and 3c in the sample matrix, the QO of the matrix is 3/15; of the vertical "abc" block is 3/9.

3.51 Matrix Tables

The two simplest form types, Types 1 and 2, are placed in matrices in order to furnish a clear picture of distribution of the functional load. Each pattern is divided into an initial and a final part, these being ranged along the vertical and horizontal axes respectively. Intersection of initials and finals forms elements of the matrix, which may not be occupied, or may be occupied--singly or multiply. In Table 1 (which see), the number of occupants of an element is shown in parentheses after the phonemic shape of that element.[1]

Since the purpose of the matrix table is to bring the functional load into focus, initials and finals which produce few forms are placed outside the table in a residue. Thus, common characteristics of each group, so far as they exist, are more readily comparable.

Complementary phonemes /f-h/ (§1.34) are combined in matrix tables and other distributional studies.

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[1] Tonemic distinctions between different items occupying any element are available in the respective Appendices.

3.6 The Monosyllabic Pattern

The structure /CV:/, the long monosyllable, is an outstanding one of the language. The following table shows the pattern of activity in the sample:

TABLE 1

STRUCTURAL TYPE 1: CV:

C#	V	/a/	/i/	/u/	/e/	/o/	Tot.
3.		ta:(3)	ti:(3)	tu:(2)	-	to:(2)	10
4.		ca:(3)	ci:(5)	cu:(1)	-	-	9
5.		ka:(2)	ki:(2)	ku:(3)	ke:(1)	-	8
7,8.		ha:(2)	fi:(3)	fu:(6)	fe:(3)	ho:(1)	15
10.		-	si:(8)	su:(3)	se:(1)	so:(3)	15
13.		da:(1)	di:(1)	du:(1)	de:(2)	do:(1)	6
14.		ja:(1)	ji:(2)	ju:(1)	-	jo:(4)	8
19.		ya:(3)	yi:(3)	yu:(5)	-	-	11
20.		ma:(1)	mi:(4)	mu:(1)	me:(2)	mo:(1)	9
21.		na:(7)	ni:(3)	nu:(2)	ne:(2)	no:(1)	15
Tot.		23	34	25	11	13	106

Residue:

1.	/p/	(none)	
2.	/py/	(none)	
6.	/kw/	kwi:(2),kwe:(2)	4
7.	/f/	fa:	1
8.	/h/	hi:	1
9.	/hy/	(none)	
11.	/b/	ba:(2)	2
12.	/by/	(none)	
15.	/g/	gu:(2)	2
16.	/gw/	(none)	
17	/w/	wa:(2),wi:(1) wo:(1),wu:(2)	6
18.	/r/	ri:(1),ru:(2)	3
22.	/ʔ/	ʔa:,ʔe:,ʔi:,ʔo:,ʔu:	5
23.	/ʔw/	ʔwa:,ʔwi:	2
24.	/ʔy/	ʔya:,ʔye:	2
30.	/ŋ/	(none)	

3.61 Phonemic Distribution in Table 1

Of the fifty elements of the matrix, forty-two are occupied, most of them multiply. The quotient of occupation is high and distribution skew.[1] Activity of phonemes ranks as follows:

Consonants		Vowels	
/f-h/	15	/i/	34
/s/	15	/u/	25
/n/	15	/a/	23
/y/	11	/o/	13
/t/	10	/e/	11
/c/	9		
/m/	9		
/k/	8		
/j/	8		
/d/	6		

Greater activity of the following classes of phonemes is noted:

a) hard consonants: /f-h, s, t, c, k/
b) nasals : /n, m/
c) palatals : /s, y, c, j, i/

The residue indicates the inactivity of /p/ and all labialized and palatalized consonants. The oblique vowels are noticeably less active than the prime vowels.

3.7 The Favorite Pattern

The CVCV pattern was seen as the favorite one in §3.44. As a structure it contrasts with CV: in three ways:

1) there is no slot for a long vowel,
2) there is a slot for an internal as well as an initial consonant
3) there is a slot for an internal as well as a final vowel.

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[1] A larger corpus would undoubtedly add forms to Table 1, to say nothing of Table 2 below.

Because of the much lower density of occupation in this matrix, and the greater number of elements that are shown, the following system of representation is used:

Symbol	Significance
tata	position of element 'tata' unoccupied
TAKA	element occupied by one form 'taka'
TAMA'	element occupied by two forms 'tama'
TACI"	element occupied by three forms 'taci'
CIRI4	element occupied by four forms 'ciri'

The following consonants are tabulated in the matrix:

Initial: t c k f-h s m n ?
Medial: t c k s j m n r y

TABLE 2

STRUCTURAL TYPE 2: CVCV

tata	taca	TAKA	tasa	taja	TAMA'	TANA	tara	taya	4
tati	TACI"	TAKI	tasi	taji	TAMI	TANI	tari	TAYI	7
tatu	tacu	TAKU'	tasu	taju	tamu	tanu	TARU	tayu	3
tita	tica	tika	tisa	tija	tima	tina	TIRA	tiya	1
titi	TICI'	tiki	tisi	tiji	timi	tini	tiri	tiyi	2
titu	ticu	tiku	tisu	tiju	timu	tinu	tiru	tiyu	0
tuta	tuca	tuka	tusa	tuja	tuma	tuna	tura	tuya	0
tuti	TUCI	tuki	TUSI	TUJI	tumi	tuni	turi	TUYI	4
tutu	tucu	TUKU"	tusu	tuju	TUMU	tunu	turu	tuyu	4
									25
cata	caca	caka	casa	caja	cama	cana	cara	caya	0
cati	caci	caki	casi	caji	cami	cani	cari	cayi	0
catu	cacu	CAKU	casu	caju	camu	canu	caru	cayu	1
CITA	cica	CIKA'	cisa	cija	cima	CINA	CIRA	ciya	5
citi	CICI'	ciki	cisi	CIJI"	CIMI'	CINI	CIRI4	ciyi	12
CITU	cicu	CIKU	cisu	ciju	CIMU'	CINU	CIRU'	CIYU	8
cuta	cuca	cuka	cusa	cuja	cuma	cuna	cura	cuya	0
cuti	cuci	cuki	cusi	cuji	cumi	cuni	curi	cuyi	0
cutu	cucu	cuku	cusu	cuju	cumu	cunu	curu	cuyu	0
									26

TABLE 2--Continued

KATA'	KACA	kaka	KASA'	KAJA	KAMA	KANA'	KARA	KAYA	11
kati	KACI	kaki	KASI'	KAJI5	KAMI	KANI	kari	kayi	10
kato	kacu	kaku	kasu	kaju	kamu	kanu	karu	kayu	0
kita	kica	kika	kisa	kija	kima	kina	kira	kiya	0
kiti	kici	kiki	kisi	KIJI	kimi	kini	kiri	kiyi	1
kitu	kicu	kiku	kisu	kiju	kimu	kinu	kiru	kiyu	0
kuta	KUCA	kuka	KUSA'	kuja	KUMA	kuna	KURA'	kuya	6
kuti	KUCI"	kuki	KUSI'	KUJI'	KUMI'	KUNI	KURI'	kuyi	12
KUTU	kucu	kuku	KUSU'	KUJU	KUMU	kunu	kuru	kuyu	5
									45
HATA"	haca	HAKA	hasa	haja	HAMA	HANA'	HARA	haya	8
hati	haci	HAKI	HASI	HAJI	HAMI	HANI	hari	hayi	5
hatu	hacu	HAKU	hasu	haju	hamu	hanu	HARU'	hayu	3
FITA	fica	fika	FISA	fija	fima	fina	FIRA'	fiya	4
fiti	fici	fiki	FISI	FIJI4	fimi	fini	FIRI	fiyi	6
fitu	ficu	fiku	fisu	fiju	fimu	finu	FIRU'	fiyu	2
FUTA	fuca	FUKA	fusa	fuja	fuma	funa	fura	FUYA'	4
futi	FUCI	fuki	FUSI"	FUJI	fumi	FUNI'	furi	fuyi	7
futu	fucu	FUKU	FUSU	fuju	fumu	funu	FURU	FUYU	4
									43
SATA	saca	SAKA	sasa	saja	sama	sana	SARA	saya	3
sati	SACI	SAKI'	sasi	saji	sami	SANI	SARI	sayi	5
satu	sacu	SAKU	sasu	saju	samu	sanu	saru	sayu	1
sita	SICA	SIKA	sisa	sija	SIMA"	SINA'	sira	siya	7
siti	SICI4	siki	SISI	SIJI'	SIMI'	SINI	siri	siyi	10
SITU	sicu	siku	sisu	siju	SIMU'	sinu	siru	siyu	3
suta	suca	suka	susa	suja	suma	suna	sura	suya	0
suti	suci	suki	susi	suji	sumi	suni	suri	suyi	0
SUTU	sucu	SUKU"	SUSU	suju	sumu	sunu	suru	suyu	5
									34
MATA'	maca	maka	masa	maja	mama	mana	mara	maya	2
mati	MACI	maki	MASI	MAJI	mami	mani	MARI	mayi	4
matu	macu	MAKU	masu	maju	mamu	manu	maru	MAYU	2
mita	mica	mika	misa	mija	mima	mina	mira	miya	0
miti	MICI'	miki	MISI	MIJI	MIMI	mini	miri	miyi	5
mitu	micu	miku	misu	miju	mimu	minu	miru	miyu	0
muta	muca	muka	musa	muja	muma	muna	MURA	muya	1
MUTI	MUCI'	muki	MUSI'	MUJI'	MUMI	muni	muri	MUYI'	10
MUTU	mucu	muku	musu	muju	MUMU'	munu	MURU	muyu	4
									28

TABLE 2--Continued

nata	naca	naka	nasa	naja	MAMA'	NANA	nara	naya	3
nati	NACI	naki	NASI	NAJI	NAMI	nani	nari	NAYI	5
natu	nacu	naku	nasu	naju	namu	nanu	naru	nayu	0
nita	nica	nika	nisa	nija	nima	nina	nira	niya	0
niti	NICI	niki	NISI	NIJI	nimi	nini	niri	niyi	3
nitu	nicu	niku	nisu	niju	nimu	ninu	niru	niyu	0
nuta	nuca	NUKA	nusa	nuja	numa	nuna	nura	naya	1
nuti	NUCI	nuki	nusi	nuji	NUMI'	nuni	nuri	NUYI'	5
nutu	nucu	nuku	nusu	nuju	numu	NUNU	nuru	nuyu	1
									18
?ata	?ACA	?AKA	?ASA'	?AJA	?ama	?ANA	?ARA	?AYA	8
?ATI	?ACI	?AKI	?ASI'	?AJI4	?AMI"	?ani	?ARI	?AYI	14
?ATU	?acu	?AKU	?asu	?aju	?amu	?anu	?aru	?AYU	3
?ITA	?ICA	?ika	?ISA	?ija	?ima	?ina	?ira	?iya	3
?iti	?ICI"	?iki	?ISI	?IJI	?IMI'	?ini	?IRI'	?iyi	9
?itu	?icu	?iku	?ISU	?iju	?imu	?inu	?IRU	?IYU	3
?UTA	?uca	?uka	?usa	?uja	?uma	?una	?URA	?UYA	3
?uti	?UCI	?UKI	?USI	?UJI'	?UMI	?UNI	?URI	?UYI	9
?UTU	?ucu	?uku	?usu	?uju	?umu	?unu	?URU	?uyu	2
									54

Residue (by initial phoneme)

			No. of Items
1.	/p/	páŋ, píŋ	2
2.	/py/	(none)	
3.	/t/	tábi, táŋ, táŋ, tíŋ	4
4.	/c/	cíbi, cíbu, ciŋ	3
5.	/k/	kába, kábi, kábi, kábu, kadu, kágu, kúba, kubi, kúbi,	9
6.	/kw/	kwaŋ	1
7.	/f/	fiŋ , fúda, fúdi, fúdu	4
8.	/h/	hába, hábu, hada, hági	4
9.	/hy/	(none)	
10.	/s/	saba, sába, sabi, sawa, saŋ, siba sigu, siwa, síwa, siŋ, suba, suba súdi, suŋ	14
11.	/b/	basu, básu, bira, biwa, biŋ, buci búsi, buŋ, buŋ	9
12.	/by/	(none)	
13.	/d/	dábi, dáki, daŋ , diki, dísi duku, duru, dúsi	8
14.	/j/	jiku, jimu, jíri, jiŋ , juri	5
15.	/g/	gáma, gáni, gási, gasu, gaya guci, guma, gumi, gunu	9

16.	/gw/	(none)	
17.	/w/	wábi, waci, waja, waki, waku wara, wasi, wata, wata, wáŋ, wáŋ wútu	12
18.	/r/	(none)	
19.	/y/	yaci, yadu, yaku, yama, yami, yani, yáyi, yaŋ , yúci, yúda yúka, yuku, yumi, yúmi, yuru yúta, yúyi	17
20.	/m/	madu, múŋ	2
21.	/n/	nada, nagi, niwi,	3
22.	/ʔ/	ʔáda, ʔádu, ʔági, ʔawa ʔibi, ʔiŋ , ʔúŋ	7
23.	/ʔw/	(none)	
24.	/ʔy/	(none)	
30.	/ŋ/	úji, úju, ŋna, ŋ́na, ŋ́ni, ŋnu	6
		ʔŋma, ʔŋmi, ʔŋmi, ʔŋmu, ʔŋna, ʔŋni	6
		Total No. in Residue	125

3.71 Immediate Environments

The above matrix shows the pattern of occupation graphically. The following table now gives the statistics of contiguous environment of the occupants of the CVCV matrix:

TABLE 3

IMMEDIATE ENVIRONMENTS IN ITEMS OCCUPYING TABLE 2

	Initial Consonant before:				Medial C before:			Vowel before Consonant			
	a	i	u	Tot.	a	i	u	a	i	u	Tot
/t/	14	3	8	25	13	2	7	10	5	7	22
/c/	1	25	-	26	5	31	-	10	16	10	36
/k/	21	1	23	45	9	6	15	16	4	10	30
/f-h/	16	12	15	43	-	-	-	-	-	-	-
/s/	9	20	5	34	8	21	5	11	8	15	34
/j/					2	33	1	14	13	9	36
/r/					12	13	11	10	16	10	36
/y/					5	9	5	7	2	10	19
/m/	8	5	15	28	10	20	8	13	14	11	38
/n/	8	3	7	18	10	10	2	11	6	5	22
/ʔ/	25	15	14	54	-	-	-	-	-	-	-
	102	84	87	273	74	145	54	102	84	87	273

Note: Referring to the environment of /t/ for example, it is observed that /t/ occurs initially before /a/ (ta-) 14 times, medially before /a/ (-ta) 13 times, and following /a/ (-at-) 10 times. The totals to the right apply equally to medial C or V distribution.

Quotients of occupation (QO) may be calculated simply, but care must be exercised in selecting the proper denominator. For instance, the QO of /-ta-/ is 14/27. This means that in the ta-block, where initial /ta/ can occur in the positions of 27 elements, it actually occurred 14 times. The QO of medials is calculated on a base of 24 however, since, taking medial /t/ before /a/ as an example, all elements which may contain /-ta/ are found in the vertical t-block (the first column on the left). In this block are found (3 x 8 =) 24 /-ta/ elements. Thus the medial occupation of /t/ before /a/ has a QO of 13/24.

3.72 Structural Articulation

Figures in Table 3 indicate much skewness of distribution. It appears that there is more fluctuation in the occurrence of CV than of VC sequences. And, given 36 VC sequences "ending" in /c/, and 54 final /u/ in Table 3, it can scarcely be chance that the syllable /cu/ fails to appear. This type of distribution suggests that the units in play here are CV units.[1]

3.73 Reluctance and Preference

The fact that certain syllables or phonemes are statistically infrequent is called reluctance, while very high frequency is called preference. In the above group of forms of Table 2 plus residue, the following is observed:

Preference		Reluctance[2]	
Initially	Finally	Initially	Finally
ci	ji	p	cu
ʔa	ci	r	ju
ka	si	cu	
ku	mi	ca	
si		ki	
		ti	
		ni	

Attention is drawn to the striking preference for palatals in the final syllable.

3.74 Complementary Lacunas in t- and k- Blocks in Comparison with the c-Block

In Table 2, complementary distribution of the c- and

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[1]This places CVs in the same structural category as the syllabics, thus further reinforcing the structural assumption of §3.3.

[2]The reluctance in general of palatalized and labialized consonants is noted. The non-appearance medially of /f-h/ and the glottal stop are better referred to as "structural limitation".

k-blocks is prevented by only two forms (/cáku, kiji/). A structural relationship of some kind suggests itself. The additional fact that these two phonemes show a considerable resemblance in work load in their respective active blocks is also noted.

To a lesser extent the same situation applies as between the t- and the c-blocks.[1]

3.75 Comparison of Activity of Phonemes in Tables 1 & 2

In comparing the activity of phonemes in the two structural patterns which have been shown in matrices, it is seen that some phonemes are similarly active in both patterns, while others show a change in behavior from one to the other pattern. The following comparison may be made:

	1. CV:		2. CVCV			
	Initial		Initial		Medial	
C:	f-h	15	ʔ	54	m	38
	s	15	k	45	c	36
	n	15	f-h	43	j	36
	y	11	s	34	r	36
	t	10	m	28	s	34
	c	9	c	26	k	30
	m	9	t	25	t	22
	k	8	n	18	n	22
	j	8			y	19
	d	6				
V:	i	34	Medial		Final	
	u	25	a	102	i	145
	a	23	u	87	a	74
	o	13	i	84	u	54
	e	11				

[1]These pattern relationships will be related to other phenomena later.

Consonants:

In general the groups of most active consonants for each of the three positions (CV:, CVCV, CVCV), include the same phonemic types: hard consonants, nasals, and palatals.

As for distinction between initial and medial distribution of consonants, /ʔ/ and /f-h/, both quite active initially, do not appear medially above. /r/ on the other hand, initially absent, becomes quite active medially.

Vowels:

The first vowel in Type 2 (CVCV) is not too unevenly balanced among the three, but the preponderance of /a/ is probably related to the /a/ preference which will be seen elsewhere.

In the final vowel position (CVCV) on the other hand, there is a marked preference for the palatal vowel--which was also found in first place in Type 1. These facts may be considered in relation to the observed palatal preference in consonants.

3.8 Distribution of Long Syllables

Structural Types 3 to 6 are not displayed in matrices for the following reasons:

1. The procedure becomes more cumbersome: complexer forms require complexer matrices.
2. Occupation of matrices becomes spottier, presenting a less clear picture.
3. Lighter occupation increases the factor of chance, making pattern statistics questionable.

4. Most of the significant distributional facts relative to simple forms have been gleaned from the two matrices studies.

Instead, in completing the study of distribution in Types 1 to 6, statistics on the shapes of syllables and their position in the respective types will be given. Long and short syllables will be presented in separate tables.

TABLE 4

LONG SYLLABLES IN TYPES 1, 3, 4, 5

		Initial			Final							
	Type:	1	3	5	4	5	a	i	u	e	o	
1. /p/	pa:	-	-	-	-	-						
	pi:	-	-	-	-	-						
	pu:	-	-	-	-	-						
	pe:	-	1	-	-	-				1		
	po:	-	-	-	-	-						1
2. /py/	pya:	-	-	-	-	-						
	pyi:	-	-	-	-	-						
	pyu:	-	-	-	-	-						
	pye:	-	-	-	-	-						
	pyo:	-	-	-	-	-						0
3. /t/	ta:	3	3	2	1	2	11					
	ti:	3	2	-	1	-		7				
	tu:	2	3	1	1	1			8			
	te:	-	2	3	-	-				5		
	to:	2	1	-	-	2					5	36
4. /c/	ca:	3	1	-	1	1	6					
	ci:	5	1	4	1	-		7				
	cu:	1	1	2	2	2			8			
	ce:	-	-	-	2	-				2		
	co:	-	2	1	-	1					4	27
5. /k/	ka:	2	5	3	2	1	13					
	ki:	2	-	-	1	-		1				
	ku:	3	4	4	-	-			11			
	ke:	1	1	1	3	1				7		
	ko:	-	4	2	3	-					9	41

TABLE 4--Continued

	Type:	Initial 1	Initial 3	Initial 5	Final 4	Final 5	a	i	u	e	o	
6. /kw/	kwa:	-	1	-	-	-	1					
	kwi:	2	-	-	-	-		1				
	kwu:	-	-	-	-	-						
	kwe:	2	-	-	-	-						
	kwo:	-	-	-	-	-						
												2
7. /f/	fa:	1	-	-	-	1	2					
	fi:	3	4	3	1	1		12				
	fu:	6	4	2	-	-			12			
	fe:	3	1	1	1	-				6		
	fo:	-	-	-	-	-						
												32
8. /h/	ha:	2	3	2	-	-	7					
	hi:	1	-	-	-	-		1				
	hu:	-	-	-	-	-						
	he:	-	-	-	-	-						
	ho:	1	3	1	-	-					5	
												13
9. /hy/	hya:	-	2	-	-	-	2					
	hyi:	-	-	-	-	-						
	hyu:	-	1	-	-	-			1			
	hye:	-	-	-	-	-						
	hyo:	-	1	-	-	-					1	
												4
10. /s/	sa:	-	5	2	1	1	9					
	si:	8	6	3	1	-		18				
	su:	3	4	1	-	-			8			
	se:	1	3	1	1	1				7		
	so:	3	3	6	1	-					13	
												55
11. /b/	ba:	2	1	-	-	4	7					
	bi:	-	1	1	-	-		2				
	bu:	-	-	-	2	-			2			
	be:	-	-	-	2	2				4		
	bo:	-	4	2	-	-					6	
												21
12. /by/	bya:	-	-	-	-	-						
	byi:	-	-	-	-	-						
	byu:	-	-	-	-	-						
	bye:	-	-	-	-	-						
	byo:	-	1	-	-	-					1	
												1

TABLE 4--Continued

	Type:	Initial 1	Initial 3	Initial 5	Final 4	Final 5	a	i	u	e	o	
13. /d/	da:	1	1	-	-	1	3					
	di:	1	1	-	2	2		6				
	du:	1	-	-	-	1			2			
	de:	2	1	1	-	2				6		
	do:	1	2	-	1	-					4	
												21
14. /j/	ja:	1	-	-	1	4	6					
	ji:	2	-	-	-	-		2				
	ju:	1	-	-	-	-			1			
	je:	-	-	-	1	-				1		
	jo:	4	-	-	2	2					8	
												18
15. /g/	ga:	-	-	1	-	3	4					
	gi:	-	-	-	3	1		4				
	gu:	2	1	1	-	2			6			
	ge:	-	1	-	4	1				6		
	go:	-	-	1	1	-					2	
												22
16. /gw/	gwa:	-	-	-	-	-						
	gwi:	-	-	-	-	-						
	gwu:	-	-	-	-	-						
	gwe:	-	-	-	-	-						
	gwo:	-	-	-	-	-						
												0
17. /w/	wa:	2	-	-	-	-	2					
	wi:	1	-	-	-	-		1				
	wu:	2	3	-	-	-			5			
	we:	-	-	-	1	1				2		
	wo:	1	-	-	-	-					1	
												11
18. /r/	ra:	-	-	-	1	2	3					
	ri:	1	-	-	4	4		9				
	ru:	2	-	-	3	4			9			
	re:	-	-	-	3	2				5		
	ro:	-	-	-	-	-						
												26
19. /y/	ya:	3	2	2	2	2	11					
	yi:	3	1	-	-	-		4				
	yu:	5	3	2	2	1			13			
	ye:	-	-	-	-	1				1		
	yo:	-	2	2	1	-					5	
												34

TABLE 4--Continued

	Type:	Initial 1	Initial 3	Initial 5	Final 4	Final 5	a	i	u	e	o	
20. /m/	ma:	1	4	-	1	1	7					
	mi:	4	1	1	1	2		9				
	mu:	1	1	-	-	-			2			
	me:	2	1	1	-	2				6		
	mo:	1	1	1	-	-					3	
												27
21. /n/	na:	7	6	-	1	5	19					
	ni:	3	-	1	-	1		5				
	nu:	2	4	1	1	-			8			
	ne:	2	2	2	1	-				7		
	no:	1	-	-	-	2					2	
												41
22. /ʔ/	ʔa:	1	1	1	-	-	3					
	ʔi:	1	-	2	-	-		3				
	ʔu:	1	4	-	-	-			5			
	ʔe:	1	2	-	-	-				1		
	ʔo:	1	2	2	-	-					5	
												17
23. /ʔw/	ʔwa:	1	1	-	-	-	2					
	ʔwi:	1	-	-	-	-		1				
	ʔwu:	-	-	-	-	-						
	ʔwe:	-	2	-	-	-				2		
	ʔwo:	-	-	-	-	-						
												5
24. /ʔy/	ʔya:	1	-	-	-	-	1					
	ʔyi:	-	-	-	-	-						
	ʔyu:	-	-	-	-	-						
	ʔye:	1	1	-	-	-					2	
	ʔyo:	-	-	-	-	-						
												3
			Totals		a:		119					
					i:			93				
					u:				101			
					e:					69		
					o:						76	
												458
30. /ŋ/	ŋ:	-	2	1	-	-						
	ʔŋ:	-	1	1	-	-						
31. /q/		-	-	-	-	-						

3.81 Comment on Distribution of Long Syllables

The active consonants of Types 3, 4, and 5 rank as follows:

Initial		Medial	
s	34	r	23
k	24	g	15
f-h	24	k	11
t	17	c	10
n	16	b	10
y	14	j	10
ʔ	14	y	9
c	12	d	9
m	11	t	8

The initial group shows as before activity in hard consonants, nasals and palatals. /s/ stands far above the second ranking initial consonant. Medially the great activity of /r/ and the use of the soft consonants is notable. This tendency was visible in Type 2, but is more prominent here.

As for the vowels (note that Type 1 are included in totals), in comparison with Type 1 statistics alone (§3.61), /a/ increases markedly in frequency, while /i/ decreases. The oblique vowels remain in lower frequency position.

3.9 Distribution of Short Syllables

Table 5 shows the distribution of short syllables in the items of the sample. Oblique vowels do not appear. All unoccupied blocks are omitted from this table.

TABLE 5

SHORT SYLLABLES IN TYPES 2, 3, 4, 6

		Initial			Mid	Final			a	i	u	
	Type:	2	4	6	6	2	3	6				
1. /p/	pa	1	-	1	-	-	-	-	2			
	pi	-	-	-	-	-	-	-				
	pu	-	-	-	-	-	-	-				
												2
3. /t/	ta	17	-	12	8	16	-	1	54			
	ti	4	-	2	-	2	-	3		11		
	tu	8	3	5	5	8	5	3			37	
												102
4. /c/	ca	1	-	2	3	5	2	2	15			
	ci	28	7	19	8	36	12	22		132		
	cu	-	-	-	3	1	1	-			5	
												152
5. /k/	ka	27	2	19	15	10	3	2	78			
	ki	1	-	1	3	9	5	5		24		
	ku	25	6	14	17	20	8	14			104	
												206
6. /kw/	kwa	1	-	-	-	1	-	1	3			
	kwi	-	-	-	-	-	-	-				
	kwu	-	-	-	-	-	-	-				
												3
7. /f/	fa	-	-	-	1	-	1	-	2			
	fi	13	1	9	1	-	-	-		24		
	fu	18	4	6	1	-	4	-			33	
												59
8. /h/	ha	20	2	9	-	-	-	-	31			
	hi	-	-	-	-	-	-	-				
	hu	-	-	-	-	-	-	-				
												31
10. /s/	sa	14	3	8	8	8	2	2	45			
	si	25	4	15	12	26	15	21		118		
	su	9	2	4	6	8	2	3			34	
												197

TABLE 5--Continued

	Type:	Initial 2	Initial 4	Initial 6	Mid 6	Final 2	Final 3	Final 6	a	i	u	
11. /b/	ba	2	2	3	9	8	1	1	26			
	bi	3	-	1	2	10	6	8		30		
	bu	4	1	5	12	3	4	3			32	
												88
13. /d/	da	3	-	-	4	5	3	4	19			
	di	2	-	2	-	2	-	-		6		
	du	3	-	-	4	5	1	1			14	
												- 39
14. /j/	ja	-	-	2	7	3	1	2	15			
	ji	4	2	3	13	34	16	14		86		
	ju	1	-	-	3	2	2	1			9	
												110
15. /g/	ga	5	-	3	8	-	1	2	19			
	gi	-	-	-	1	3	2	2		8		
	gu	4	1	4	2	2	4	6			23	
												50
16./gw/	gwa	-	-	1	-	-	-	-	1			
	gwi	-	-	-	-	-	-	-				
	gwu	-	-	-	-	-	-	-				
												1
17. /w/	wa	11	1	2	3	5	-	1	23			
	wi	-	1	2	-	1	-	-		4		
	wu	1	-	1	-	-	-	-			2	
												29
18. /r/	ra	-	-	2	12	14	5	8	41			
	ri	-	-	1	3	15	4	9		32		
	ru	-	-	-	10	13	8	9			40	
												113
19. /y/	ya	8	4	4	-	6	1	1	24			
	yi	-	-	1	-	11	5	33		50		
	yu	9	-	3	2	5	-	-			19	
												93
20. /m/	ma	9	3	9	6	14	-	6	47			
	mi	5	-	7	4	26	2	10		54		
	mu	16	3	4	5	11	1	-			40	
												141
21. /n/	na	10	2	6	9	13	3	3	46			
	ni	4	1	1	2	14	-	4		26		
	nu	7	-	3	2	3	-	-			15	
												87

TABLE 5--Continued

	Type:	Initial 2	Initial 4	Initial 6	Mid 6	Final 2	Final 3	Final 6	a	i	u	
22. /ʔ/	ʔa	29	5	17	-	-	-	-	51			
	ʔi	17	3	11	-	-	-	-		31		
	ʔu	15	1	13	-	-	-	-			29	
												111
30. /ŋ/		6	-	3	26	22	3	35				
/ʔŋ/		6	1	4	-	-	-	-				

3.91 Comment on Distribution of Short Syllables

Consonant patterning in general resembles that of Type 2. The syllabic nasal attains a rather high frequency, mostly by virtue of its medial and final occurrence in Type 6. This adds the nasal syllabic to the nasal consonants which fall in the group of more active phonemes.

CHAPTER IV

THE TONEME

Segmental patterns of phonemes which have been treated in the previous chapter include, as explained, both those lacking the toneme and those having it. The way in which the presence of the toneme places such patterns in contrast may now be described.

4.1 Actualization of the Toneme

The toneme is actualized as a relatively sudden descent from raised to low pitch. This is in contrast to the relatively level mid pitch of an item without the toneme.[1] The sequence of syllables governed by the presence or absence of the toneme is here called a tone span. In shorter spans uncomplicated by effects of stress or syntactic boundaries, the drop of pitch occurs near the center of the tone span.

The minimal tone span has, like the minimal independent form, a length of two morae. The following types of tone spans are frequent:

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[1] In longer tone spans there are other pitch phenomena which are not dealt with in this paper.

TABLE 6

MINIMAL TONE SPANS WITHOUT AND WITH TONEME

Type	Formula	Without Toneme	With Toneme	Glosses	
1	CV:	fee	fe\e[1]	'south'	'fly'
2	CVCV	kaji	ka\ji	'rudder'	'wind'
3	CV:CV	kaara	kaa\ra	'tile'	'river'
4	CVCV:	mayaa	haca\a	'cat'	'bee'
5	CV:CV:	niisee	fee\ree	'youth'	'robber'
6	CVCVCV	warabi	ʔaka\gu	'child'	'baby'
7	CV:CVCV	miimuŋ	mii\muŋ	'female'	'new thing'
9	CVCVCV:	kamajii	kama\jee	'bag'	'cricket'
14	CVCVCVCV	kamisimu	kami\simu	'suit'	'classes & masses'

4.2 Pitch-drop Position

The lines in the items with the toneme indicate diagrammatically the pitch characteristics of the toneme in the respective patterns. The position of the pitch drop in Types 2, 3, 5, 6, 7, 9, and 14 is largely effected in transiting from the syllable of the central or pre-central mora to the following syllable. In Types 1 and 4, the drop occurs in the course of the long syllable.

The presence of the toneme is indicated graphemically by an acute accent over the vowel (or moreme written as a vowel) just before the drop: /fée, káji, kaára, hacáa/ etc.

[1]Henceforth the moreme is indicated by repeating the lengthened vowel or nasal syllabic, as a writing convention.

4.3 Actualization of Toneme and Unvoiced Vowels

In an otherwise strong unvoicing environment (§1.224) an unvoiced vowel sometimes is heard before pitch-drop:

sici 'season' s̥i\ci 'threshold'

The question of what happens in the actualization of the toneme in similar situations is not completely answerable on the basis of present data. However, the above pair are distinguished, despite the lack of voice. Part of the explanation of their difference lies in the mid pitch final of 'season' contrasting with a low pitch final of 'threshold'. But this is not all. Both the subjective impression of the informant and the auditory impression of this writer agree that there is something in the voiceless segment before pitch-drop which identifies it as "high". Possibly stress and tension are the components which produce the auditory effect.

4.4 The Toneme with Pattern Variants

The nasal syllabic does not appear to affect the actualization of the toneme to any considerable extent. The mute syllabic does so, but what happens is not always clear. Here again the informant "feels" the maintainance of high pitch, this time on the mute syllabic:

ʔu̍-q-pi 'that little'

In deliberate pronunciation, the "high" on /q/ is clear to this writer. Here again, the acoustic distinction must be produced by the heightened tension and stress which accompany tonemic high pitch.

On the other hand it has been observed and verified that when either of the two words of /qCV/ pattern are pronounced in isolation (which means with stress), pitch-drop is realized on the final vowel:

q-cu̇ 'person'

This represents a displacement of pitch-drop as compared with a normal CVCV item with toneme:

ka-ji 'wind'

4.5 Variability in Actualization of the Toneme

The position of pitch-drop is not syllabically located in a morpheme. That is, the fact that /káji/ in isolation has a syllabic pitch sequence of (roughly) high-low does not mean that whenever the morpheme for 'wind' appears, /ka/ will have high pitch and /ji/ low. They may both be high, both low, mid-high, or otherwise, depending on the circumstances. The factors which influence actualization of the toneme include: (1) structure of the tone span (which may be a polymorphemic or a syntactic construct), (2) the syntactic position of the tone span, (3) type and position of stress occurring at some point on or directly adjacent to the tone span, and (4) juncture.

The purpose here as been to isolate so far as possible the phonetic characteristics of the toneme as a phoneme--uninvolved with higher level effects.

CHAPTER V

INTER-SEGMENTAL RELATIONSHIPS

5.1 Joining of Elements

Analysis of the form /mayaa/ yields constituent phonemes which when properly assembled result in a form meaning 'cat'. The form also yields syllables /ma/ and /yaa/, but neither of these has in itself any association with the meaning 'cat'.

On the other hand, the form /mayaagwaa/ yields not only a series of phonemes and a series of syllables, but also a specific partial /mayaa/, which has a meaning related to that of the whole form, which is 'kitten'.

This shape /mayaa/ may be found embedded in various expressions. Consider the following list:

	Expression	Content
X.	kamayaa	'Let's eat !'
1.	mayaa	'(a) cat, cats'
2.	mayaagwaa	'kitten'
3.	mayaanu	'the cat, of the cat'
4.	ʔaŋpoonumayaa	'Ampo's cat'
5.	mayaakadaŋ	'He ate the cat.'
6.	mayaanukwatáŋ	'The cat ate.'
7.	mayaayakwatáŋ	'The cat ate.'
8.	ʔwaayaniŋtasiga mayaayakwatáŋ	'The pig slept but the cat ate.'

In each expression except the first two, an identifiable part /mayaa/ occurs and is relatable to that part of the content called 'cat'. In Expression X, no such relationship appears. In Expression 1, /mayaa/ stands alone, corresponding with the meaning of 'cat'.

The above transcription does not indicate a difference in the way in which parts within an utterance are joined. Such a difference exists, and is one of the salient phonetic features within utterances.

5.2 Gaps within Utterances: Juncture

Given the following utterance:

/ʔyaámayaaya ʔaŋ́poonu ʔiyúkwatáŋ/ 'Your cat ate Ampo's fish.'

This is a common utterance type, and could be heard as transcribed--without internal pause. Ordinarily however a definite pause will occur after /ʔyaamayaaya/, creating an utterance gap. The above is now retranscribed as utterance A, and the point at which the gap (#) occurs is designated as spot (a):

A. /ʔyaámayaaya#ʔaŋ́poonu ʔiyúkwatáŋ/
(a)

When such an utterance occurs at a slower rate of delivery, the pause at (a) tends to become longer, and if slow enough, another gap emerges after /ʔíyu/, designated as spot (b) in utterance B:

B. /ʔyaámayaaya##ʔaŋ́poonu ʔiyú#kwatáŋ/
(a) (b)

Still further slowing produces a third gap:

C. /ʔyaámayaaya### ʔaŋpoonu# ʔiyú##kwatáŋ/
(a) (c) (b)

Utterances A, B, and C all have the same meaning as the original one without internal gap. Thus far, gap may be accounted for as a non-distinctive feature related to speed of utterance. However there are pairs like:

D. /ʔaŋpoo nu ### ʔiyúkadaŋ/ 'Ampo ate the fish.'

E. /ʔaŋpoonuʔiyú ## kadaŋ/ 'He ate Ampo's fish.'

In pair D:E, it is the position of the gap alone that appears significant. The following modification of D and E without change of meaning demonstrates that more than position of gap is involved:

D' /ʔaŋpoonu ### ʔiyú # kadaŋ/

E' /ʔaŋpoo nu # ʔiyú ### kadaŋ/

Thus it is not the contrasting position of gap that is significant, but the relative length of <u>contrasting</u> gaps (one of which may have zero length, as in D and E). Such contrasts in structural joining characteristics are called contrasts in <u>juncture</u>.

It is desirable to consider the junctural characteristics of all internal structural spots which may be defined. Since the overt feature of juncture is phonational gap or lack of it, it is necessary to treat all gaps and absence of gap within utterances as data. At the same time it is necessary to distinguish a type of interruption of phonation within utterances which differs from structural gap.

5.21 Breaks

The following type of situation occurs in the corpus:

/ ma- .... mayaayakwatáŋ/ 'The cat ate it.'

Comparison with other data, or a repetition by the speaker, indicate that the above segment is not a valid sample of the structure of the language. The portion /ma- .../ is not found repeated, nor is there a class of structures of this type. Such an absence of phonation after a segment which fails to structure with what follows is called a break.

Breaks occur at all types of spots in the structure, without observable pattern or limitation. In general they are relatively infrequent, and variation in frequency depends on non-linguistic factors. Gaps on the other hand occur in definite structural spots, and in patterns of relative length (as A,B,C,D,E, above).

5.3 Techniques for Juncture Study

Two criteria for study of juncture have already been seen: 1) order of opening as speech-rate slows, and 2) relative length of contrasting gaps.

Two additional available criteria are probability and length, discussed below.

5.31 Gap Occurrence Probability Factor

Among numerous structural spots like that within /mayaa/ (definable as lying between adjacent syllables of a simple item), a number of breaks were noted, but no gaps. Thus, the probability factor of a gap in that spot in the

corpus as presently viewed is zero. When an increment to the corpus contains such a gap (which could presumably happen at any time), the probability factor would be expressable as one divided by the number of spots of that type where no gap had occurred. For that particular spot, then, the factor must remain infinitesimally small. In the spot after /ʔyaamayaaya/, however, since a gap usually occurs, the probability factor is over 50%.

Such probability factors are definite amounts for respective structural spots in any corpus. In lack of the necessary statistics and measurements, this criterion must, except for the extreme cases, be used impressionistically. The present point, in any case, is not to determine numerical values of junctural spots, but to reveal their contrast with each other.

5.32 Mean Gap Length

The mean gap length of all spots like that in the interior of /mayaa/ is zero. The mean length of all spots like that after /ʔyaamayaaya/ is a small number of centiseconds. Here again there is in any corpus a definite measurable quantity of a structurally definable feature which may make a difference in meaning.

5.4 Orders of Junction

The structural function of juncture is called junction. Junction of different structural spots is contrastive, as shown in D:E, and exists in orders, as shown in D':E'.

A combination of techniques is now used in extracting a number of orders of junction.

The following criteria are used complementarily:

1. gap occurrence probability factor
2. mean gap length
3. relative gap length
4. order of gap emergence

5.41 First Order Junction (J-1)

/mayaa/ 'cat', is a simple form, consisting of two syllables. Criteria 1 and 2 amount to zero. Relative length is less than any other order. If gap occurs, the meaning is destroyed.

5.42 Second Order Junction (J-2)

/mayaagwaa/ = /mayaa # gwaa/ 'kitten'

Since examples of gaps in this structural spot exist in the corpus, both criteria 1 and 2 are positive values. Both are minute, since examples of gaps in this position are extremely rare.

As for order of gap emergence, when an expression of the exampled type is experimentally slowed (elicited at increasingly slower rates), a gap emerges at J-2, not J-1.

5.43 Third Order Junction (J-3)

/mayaaya/ = /mayaa # ya/[1] 'as for the cat'

/mayaanu/ = /mayaa # nu/ 'the cat, of the cat'

/mayaatu/ = /mayaa # tu/ 'with the cat'

Gaps occur in the indicated spot rarely, but more

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[1]Examples will continue to illustrate the position of that juncture which either opens first, or is longer.

frequently than at J-2. Probability and mean length are greater than for J-2.

When in a structure like /mayaagwaa#nu/, J-3 is open, J-2 and J-1 are found closed. Slowing of /mayaagwaanu/ yields /mayaagwaa # nu/.

5.44 Fourth Order Junction (J-4)

/kunumayaa/ = /kunu # mayaa/ 'this cat'

/waŋmayaa/ = /waŋ # mayaa/ 'my cat'

/ʔaŋ́poonumayaa/ = /ʔaŋ́poonu # mayaa/ 'Ampo's cat'

Gaps occur here not infrequently, resulting in greater probability factor and mean length. Lower orders are closed. Slowing results as shown in examples.

5.45 Fifth Order Junction (J-5)

/mayaakadaŋ/ = /mayaa # kadaŋ/ 'He ate the cat.'

/yoóŋnaakadaŋ/ = /yoóŋnaa # kadaŋ/ 'He ate slowly.'

/naafakayiʔŋjáŋ/ = /naafakayi # ʔŋjáŋ/ 'He went to Naha.'

/mayaanuʔiyú-kadaŋ/ = /mayaanuʔiyú # kadaŋ/ 'He ate the cat's fish.'

Gaps occur here more frequently than at J-4, and with a greater mean length. In an utterance containing both J-4 and J-5, the latter, if open, is longer:

/mayaa^{3}nu-^{4}# ʔiyú ^{5}## kada^{3}ŋ/

5.46 Sixth Order Junction (J-6)

/mayaanukwatáŋ/ = /mayaanu # kwatáŋ/ 'The cat ate.'

Gaps occur here often, though not as frequently as in the following order. Mean gap length is greater. In an

utterance containing both J-5 and J-6, the latter, if open, is longer:

/mayaa^{3}nu $\overset{6}{\#\#\#}$ ʔiyú $\overset{5}{\#}$ kwatá^{3}ŋ/ 'The cat ate the fish.'

5.47 Seventh Order Junction (J-7)

/mayaayakwatáŋ/ = /mayaaya # kwatáŋ/ 'The cat ate.'

This is spot (a) of §5.2, usually found open. It has a greater mean gap length than J-6. In an utterance containing both J-6 and J-7, the latter is usually open and the former closed:

/ʔyaá^{3}ya $\overset{7}{\#\#\#}$ siija^{3}nu^{6}wú^{3}mi/ 'Do you have any elder siblings?'

5.48 Eighth Order Junction (J-8)

/ʔwaayaniŋtasigamayaayakwatáŋ/ 'The pig slept but the cat ate.'

/ʔwaa^{3}ya^{7}niŋta^{3}siga $\overset{8}{\#\#\#}$ mayaa^{3}ya^{7}kwatá^{3}ŋ/

A gap at J-8 is hardly avoidable, and the mean gap length is greater than for J-7. When J-7 and J-8 are both present, the latter is longer.

5.49 Further Orders

The determination of further orders of junction, except for "sentence junction", lies beyond the scope of this work. A sentence is always preceded and followed by a gap, to which the order of J-9 is arbitrarily assigned.

5.5 Junction and Definition of the Word

The word as a structural unit in Okinawan will henceforth mean: a sequence of syllables bounded by junctions greater than J-2, and containing no junction greater

than J-2.

This definition will include not only the independent forms seen in Chapters II and III, but dependent forms (particles and others) which do not stand between gaps. The minimal type for a dependent word is CV.

CHAPTER VI

PREDICATIVES: THE VERB

There is in Okinawan a broad category of inflected forms called predicatives. This category divides into two groups as follows: 1) verbs, and 2) limited predicatives. The properties and inflection of the verb are discussed in this chapter. The remainder of the predicatives, called limited predicatives, are taken up in the next chapter.

The term verb will be used initially to refer to the members of an inflectional class, rather than to the members of a form class. Any form capable of reflecting the paradigmatic changes of this inflectional class is a verb.

6.1 Stem Structure and Conjugations

6.11 Verb Stem and Root: Thematic Consonants

That part of a verb which may be supposed to be joined with an inflectional apparatus is called the stem. If the verb stem is simple, it is a verb root-stem.

Inflective suffixes follow the stem. However the final element of the stem and the initial element of any stem-joining suffix are combined in one phoneme--a consonant. This is called a thematic consonant(TC). The phonemic identity of the TC is controlled by two factors: 1) conjugation class of the verb, and 2) TC factor of the first suffix.

It follows that the final feature of a stem is not a phonemic shape, but a TC potentiality function, while the initial element of a suffix joining a stem is not a phonemic shape, but a TC selector function.

6.12 Basic Aspectual Categories

The inflectional system is based on three categories of aspect, each of which has its TC within a conjugational class. The most widely distributed set of TCs is /Y T R/, associated with aspects as follows:

TC	Aspect	Referring to
Y	Actual	action in progress
T	Completive	action completed
R	Unreal	action not existing[1]

6.13 Stem-final Symbol

Since the final element of the stem cannot be expressed as a phoneme, it is symbolized otherwise. The conjugation whose TC-set is /Y T R/ is assigned a root-final symbol of X. The respective TCs are substituted for X in analytical forms called the Y-theme, the T-theme, and the R-theme respectively. Root-stem /tuX-/ 'take' produces the following themes:

TC	Aspect	Themes	Gloss[2]
Y	Actual	tuY-	'taking'
T	Completive	tuT-	'having taken'
R	Unreal	tuR-	'(if) taking'

[1]Used in negative, imperative, conditional, and hypothetical forms.

[2]Aspectual categories cannot be equated strictly to time categories.

6.14 Conjugations

Verbs fall into twelve conjugations according to TC-set. In some conjugations the completive TC occurs as /qC/. Since this entity functions precisely as do simple TCs, it is included with them. In other conjugations, two of the three TCs coincide in form, without alteration of function. The twelve conjugations are divided into three groups: I, 1-6; II, 7-10; III, 11-12.

6.15 Stem and Root Formula

/tuY-/ 'take' is the Actual theme (or Y-theme) of a verb of the First Conjugation (Cj.1), whose stem formula is /tuX-/. Since /tuX-/ is not susceptible to further analysis, it is also a root formula.

For Conjugations 2 to 6, the number itself is used as stem-final symbol in stem formulas. In conjugational groups II(7-10) and III(11-12), the Y-theme is used as stem formula (see Table 7).

6.16 Principal Parts: the Participles

Three forms exist for any verb, consisting of the respective aspectual themes (§6.13) followed by /i/. Functions of these forms, called aspectual participles, will be seen below.[1] The three participles of a verb are useful as a set from which any other form of the verb may be constructed. They thus serve as principal parts of the verb.

---

[1]Especially in §16.1, §22.41-2, §22.46.

Aspectual participles of verb /tuX-/ are:

TC	Form	Form Name	Gloss
Y	tuYi[1]	Actual Participle (P)	'taking'
T	tuTi	Completive Partic. (P')	'having taken'
R	tuRi	Unreal Participle (P")	'(if)taking'

6.17 Table of Participles

Below are presented sets of participles of sample verbs of each of the conjugations. Glosses refer only to the Actual Participle (P).

TABLE 7

PRINCIPAL PARTS OF VERBS BY CONJUGATION

	Cj.	TCs	Root	Participles P	P'	P"	Glosses(P)
I.	1	Y T R	tuX-	tuYi[1]	tuTi	tuRi	taking
	2	J T D	niŋ2-	niŋJi	niŋTi	niŋDi	sleeping
	3	Y C R	cí3-	cíYi	cíCi	cíRi	wearing
	4	J C D	ŋŋ4-	ŋŋJi	ŋŋCi	ŋŋDi	seeing
	5	YqC R	ci5-	ciYi	ciqCi	ciRi	cutting
	6	CqC T	ká6-	káCi	káqCi	káTi	winning
II.	7	S C S	fuS-	fuSi	fuCi	fuSi	drying
	8	N J N	síN-	síNi	síJi	síNi	dying
	9	B D B	túB-	túBi	túDi	túBi	flying
	10	M D M	kaM-	kaMi[2]	kaDi	kaMi	eating
III.							
	11	C C K	kaC-	kaCi	kaCi	kaKi	writing
	12	J J G	tuJ-	tuJi	tuJi	tuGi	sharpening

[1]TCs are capitalized wherever verb structure is being presented. This not only helps to make the structure clear, but indicates symbolically that the occupant of the TC spot is not merely a phoneme, but a function.

[2]In Y-stem, occasionally /m → n/ before non-front vowels.

6.18 Interrelationships within Conjugational Groups

In addition to the general basis for three conjugational groups (I, TCs contrastive in three aspects, II, Y and R stems identical, III, Y and T stems identical), the following phonological relationships within groups may be pointed out:

1 : 2 "firming" of point of articulation after
3 : 4 /ŋ/ (not affecting T-stem)

4 : 6 increment of voicelessness (hardening) (actualized by mute syllabic in T-stem)

7 : 8 voicing[1]

9 : 10 nasalization (not affecting T-stem)

10 : 8 retraction of point of articulation

11 : 12 voicing

6.19 Schematic Diagrams of TC Shift

Comparison of TC shifts (see TC column of Table 7) with the consonantal portion of the phonemic inventory on page 2 reveals that definite articulatory patterns are involved. This can be more clearly shown by abstracting the relevant part of the consonant inventory. Palatalized and labialized consonants, and glottals are not involved. And, in the labial line, only /b/ and /m/ function as TCs. There remain twelve consonants, which may be slightly rearranged as follows:

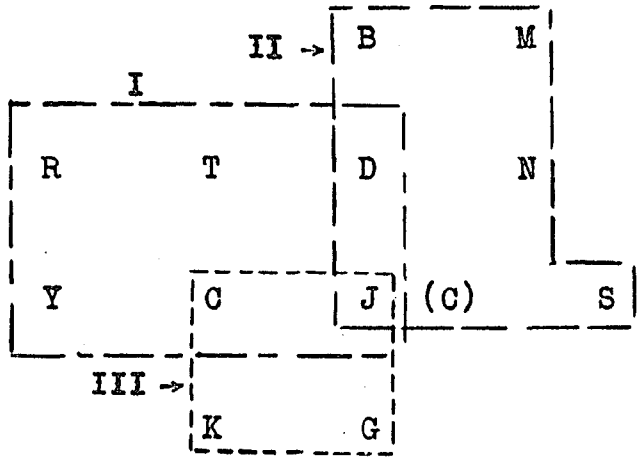
---

[1] /ŋ/ is nearest to a voiced correspondent of /s/ in the inventory of phonemes.

b m
r t d n
y c j (c) s
k g

For convenience of the present purpose, the non-nasal liquids are on the left side. Also, /c/ has an additional "ghost" position to the right of /j/, for the purpose of making way for /s/ in the diagram.

TCs of the three conjugational groups may be indicated as blocks of the above portion of the consonant inventory:



In the diagrams below, the three conjugational groups are presented separately. Arrows show the location of T and R consonants with reference to the Y consonant.[1]

In Group I, the complex TC (/qC/) must occur in the diagram. Since /qc/ is not a phoneme, it has no position in the plane of phonemes. Thus it is considered as occupying

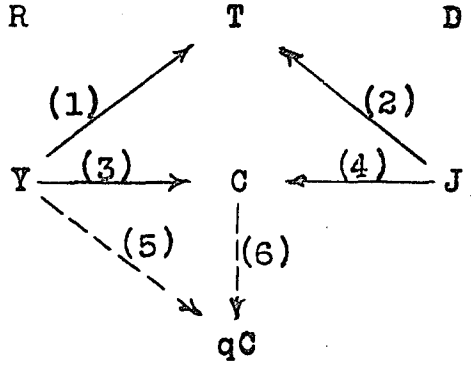
---

[1]Y, T, and R represent the respective TCs of all conjugations. Y is taken as origin for convenience only.

a third-dimensional position. (The dotted arrows of the diagram indicate this relationship.) This and other geometrical references are of course to the diagrams in the form that they are presented. Significance of the diagrams is the articulatory rules which they represent.

To find the TCs of any conjugation in the diagrams, first locate the conjugation number, then go to the base of the arrow to find the Y-consonant. From there, the black arrow (or underline) indicates the T-consonant, while the red arrow (or underline) indicates the R-consonant.

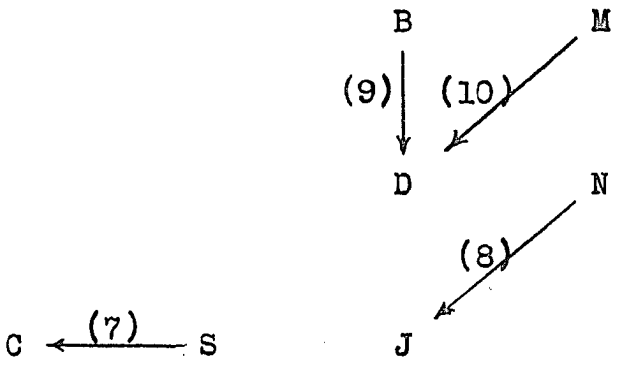
6.191 Group I (Conjugations 1-6)



TC-Shift Characteristics of Group I:

1. Y-consonants fall in row YCJ
2. R-consonants fall in row RTD
3. T-consonants fall in plane C-T-qC
4. Y → R is in 90° direction (in red)
5. R → Y is palatalization

6.192 Group II (Conjugations 7-10)



TC Characteristics of Group II

Y and R (underlined in red) fall together.

There are three kinds of Y → T shift involved in Group II, as indicated by the three directions of the arrows. (The same general trend is however noteworthy.) The arrow pointing left (7) shows closure. The arrow pointing down (9) shows retraction of point of articulation. The down slanting arrows show retraction plus denasalazation.

6.193 Group III (Conjugations 11,12)

(11)	(12)
G	J
K	G

TC Characteristics of Group III

Y and T (underlined) fall together.

Y → R is retraction of point of articulation.

6.2 Suffixation to Verb Stem

6.21 System

Verb suffixes fall into three orders according to their privilege of occurrence after the stem:

I. First order suffixes must follow the stem directly.

II. Second order suffixes follow stem or I.

III. Third order suffixes follow stem, I, or II.

Within each of these three slots, suffixes are assigned identification numbers. Those numbered below 5 are never phrase final; those numbered above 5 may be so, and in addition are terminal so far as suffixation is concerned.

The system of suffixes is presented in Table 8.

6.22 Mechanics of Suffixation

Initial functions of suffixes are of the set /Y T R/. Realization of this function depends on whether the suffix joins directly with the stem or not.

TABLE 8

THE THREE ORDERS OF INFLECTIVE SUFFIXES

No.	Category	Suffix	Examples Cj.1	Cj.6	Glosses
I.					
1.	Actual	-Yu	tuYu	kaCu	takes, wins
2.	Resultive	-Tee	tuTee	kaqCee	has taken/won
3.	Durative	-Too	tuToo	kaqCoo	is taking/winning
4.	Negative	-Raŋ	tuRaŋ	kaTaŋ	not take/win
II.					
1.	Completive	-Ta	tuTa	kaqCa	took, won
2.	Certitive	-Tee	--	--	--[1]
7.	Completive Participial	-Ti	tuTi	kaqCi	having taken/w.
(d)	(structural)	(-da-)[2]	--	--	
III.					
7	Actual Participial	-Yi	tuYi	kaCi	taking, winning
8.	Presumptive	-Ra	tuRa	kaTa	may take/win
9.	Unreal Participial	-Ri	tuRi	kaTi	(if)taking/w.[3]

[1]Distinction of these homophonous suffixes /-Tee/ is not apparent when no other suffix is present(i.e. that which is a result is certain). In combination with other suffixes, their separate functions are clear.

[2]/-da-/ is a contentless structural element which can occur between I.4 (ending in the nasal syllabic) and III.8/9. Synonymous forms without the /-da-/ element also exist, in which case III.8/9 /ra,ri/ → /da,di/.

[3]The exampled form is used for the Imperative as well.

6.22 Mechanics of Suffixation

Initial functions of suffixes are of the set /Y T R/. Realization of this function depends on whether the suffix joins directly with the stem or not.

6.221 Stem-Joining Suffixes

When a suffix of any order joins directly with the verb stem, the Y-, T-, or R-theme of the verb occurs in aspectual accord with the initial TC of the suffix. The latter then has no further effect or occurrence.

Examples:

Ci.

	Themes	Root	Sfx.	Resultant Forms	Glosses
6	Y káC-	ká6-	Yu	káCu[1]	'he wins'[2]
	T kaq́C-	"	Ta	kaq́Ca	'he won'
	R káT-	"	Ra	káTa	'Let's win!'
10	Y kaM-	kaM-	Yu	kaMu	'he eats'
	T kaD-	"	Ta	kaDa	'he ate'
	R kaM-	"	Ra	kaMa	'Let's eat!'
11	Y kaC-	kaC-	Yu	kaCu	'he writes'
	T kaC-	"	Ta	kaCa	'he wrote'
	R kaK-	"	Ra	kaKa	'Let's write!'

6.222 Clear Suffixes

In the above examples, whether first (Yu), second (Ta), or third (Ra) order suffixes are joined to the stem, the TC is "selected" by suffix. However, when a suffix occurs

[1]Such forms are never phrase final and thus do not exist as isolates.

[2]Okinawan verbs in themselves imply neither subject nor object. Translations often require interpolation.

in any other position than joined with a verb stem, it is realized with the phoneme of the corresponding lower-case symbol, and is a clear suffix.

Examples:

Cj.	1 1 8	Gloss
6.	kaCu-ta-ra	may have been winning/ eating/writing/ (repeatedly)
10.	kaMu-ta-ra	
11.	kaCu-ta-ra	

6.223 Clear Conjugations

In the odd-numbered conjugations of Group I (1,3,5), the TC selected by the Y- and R-suffixes coincides with the TC of that suffix. In Conjugation 1, the T-suffix also coincides, and all suffixes are of clear form.

Cj.	Themes	Root	Sfx.	Forms	Glosses
1.	tuY-	tuX-	Yu	tuYu	'he takes'
	tuT-	"	Ta	tuTa	'he took'
	tuR-	"	Ra	tuRa	'Let's take!'
3.	cíY-	cí3-	Yu	cíYu	'he wears'
	cíC-	"	Ta	cíCa	'he wore'
	cíR-	"	Ra	cíRa	'Let's wear!'
5.	ciY-	ci5-	Yu	ciYu	'he cuts'
	ciqC-	"	Ta	ciCa	'he cut'
	ciR-	"	Ra	ciRa	'Let's cut it!'

This group of conjugations has certain other features in common, and is called the clear conjugations.

6.23 Designator

A series of three hyphens may represent the inflectional frame with its three orders: ---. When the numbers of each suffix of a form are entered in the frame, a designator of the inflectional status of that form is provided.[1] The designator of the forms above in §6.222 is)118(. Any form whose final designator digit is less than 5 is a dependent form; those whose final digit is greater than 5 are independent forms.

6.24 Compound Categories

The combination of two or three inflectional suffixes in forms produces compound inflectional categories, some of which are conveniently referred to by descriptive names. The following are cited:

Desig.	Form	Gloss	Category
11-	kaCu-ta	'he won(habitually)'	Habitual
12-	kaCu-tee	'he won(certainly)'	Certitive
1-8	kaCu-ra	'will he win?'	Speculative
-17	kaqCa-yi	'winning and'	Alternative

In glosses the following abbreviations are used:

Habitual	hab
Certitive	cer
Speculative	spec
Alternative	alt
Durative	dur

6.3 Combination of Suffixes in Inflection

Table 9 shows most of those combinations of suffixes with stems which have been attested.

[1]The inflectional digits of the designator are enclosed in arcs. Other designator symbols are added outside.

TABLE 9

INFLECTION OF VERBS

	1/tuX-/ 'take'	7/fuS-/ 'dry'	11/kaC-/ 'write'	Gloss (of latter)
1--	tuYu	fuSu	kaCu	'writes'
2--	tuTee	fuCee	kaCee	'has written'
3--	tuToo	fuCoo	kaCoo	'is writing(dur)'
4--	tuRaŋ	fuSaŋ	kaKaŋ	'doesnt write'
-1-	tuTa	fuCa	kaCa	'wrote'
-2-	tuTee	fuCee	kaCee	'wrote(cer)'
-7-	tuTi	fuCi	kaCi	'having written(P')'
--7	tuYi	fuSi	kaCi	'writing(P)'
--8	tuRa	fuSa	kaKa	'Let's write!'
--9	tuRi	fuSi	kaKi	'Write!'
11-	tuYuta	fuSuta	kaCuta	'wrote(hab)'
12-	tuYutee	fuSutee	kaCutee	'wrote(hab-cer)'
17-	tuYuti	fuSuti	kaCuti	'writing(hab)'
21-	tuTeeta	fuCeeta	kaCeeta	'had written'
22-	tuTeetee	fuCeetee	kaCeetee	'had written(cer)'
27-	tuTeeti	fuCeeti	kaCeeti	'having written(cer)'
31-	tuToota	fuCoota	kaCoota	'was writing(dur)'
32-	tuTootee	fuCootee	kaCootee	'was writing(cer)'
37-	tuTooti	fuCooti	kaCooti	'having been written'
41-	tuRaŋta	fuSaŋta	kaKaŋta	'didnt write'
42-	tuRaŋtee	fuSaŋtee	kaKaŋtee	'didnt write(cer)'
47-	tuRaŋti	fuSaŋti	kaKaŋti	'not writing'
1-8	tuYura	fuSura	kaCura	'if he writes'
3-7	tuTooyi	fuCooyi	kaCooyi	'writing(dur)'
3-8	tuToora	fuCoora	kaCoora	'may be writing'
-17	tuTayi	fuCayi	kaCayi	'writing(alt)'
-18	tuTara	fuCara	kaCara	'may have written'
417	tuRaŋtayi	fuSaŋtayi	kaKaŋtayi	'not having wr.(alt)'
418	tuRaŋtara	fuSaŋtara	kaKaŋtara	'may not have wr.'
4d8	tuRaŋdara	fuSaŋdara	kaKaŋdara	'may not write'

6.4 Irregular Verbs

In Okinawan as in many other predicate-inflecting languages, stem irregularities occur in verbs of the commonest use. The total number of irregular stems is however quite small. In the following list of irregular stems,[1] irregular themes are indicated by a starred TC. Two themes are given for each irregular TC. If the first theme has a preceding star, it is a theoretical regular them which does not occur. If not starred, it is a regular theme which is used alternately with the irregular one. A particular line of the following chart may be read:

"The irregular verb of Conjugation __ whose Actual Participle is ___ and whose root formula (for citation) is ___ has an irregular __-theme, the (theoretical) regular theme being (*)_____, in place of which the theme _____ is found."

Cj.	P	R.F.		Themes		Gloss
3.	ʔYí	ʔY-*	Y*	ʔíY-	ʔÝ-	'say'
			R*	ʔíR-	ʔÝ-	
3.	miseeYi	miseeY-*	Y*	*misooY-	misee(y)	'x'[2]
7.	Sí	S-*	Y*	Ś-	Ś-:[3]	'do'
			T*	*Ć-	Ś-	
			R*	Ś-	Ś-:[3]	
11.	ʔíCi	ʔiC-*	T*	*ʔíC-	ʔǰj-	'go'
11.	Ci	C-*	Y*	(see Table 10)		'come'
			R*			

[1]This list does not include themes which are irregular through the operation of regular morphophonemic rules (Ch. XVIII). Also not listed is /wuX-/'there is, exists' (for animates), irregular in one form only: /wu/*)1--(.

[2]A polite auxiliar verb (§19.4,5). The polite verb /meǰseeY-*/ 'be, come, go' inflects identically.

[3]The moreme is added in certain syntactic constructions.

In the following brief inflection table, irregular forms are starred:

TABLE 10

INFLECTION OF IRREGULAR VERBS

	--	'say'	'do'	'come'	Gloss
1--	misee(yi)	ʔYú	Sú	cuu	comes
2--	misooCee	ʔiCée	sée	Cee	has come
3--	misooCoo	ʔiCóo	sóo	Coo	is coming
4--	misooRaŋ	ʔYáŋ	Sáŋ	kuuŋ	doesnt come
-1-	misooCa	ʔiCá	sá	Ca	came
-7-	misooCi	ʔíCi	(q)sí	Ci	having come
--7	misee(yi)	ʔYí	Si,sii	Ci	coming
--8	misooRa	ʔYá	Sa	kuu	may come
--9	misooRi	ʔYi	Si	kuu	Come !
11-	miseeta	ʔYúta	Sutá	cuuta	came(hab)
31-	misooCoota	ʔiCóota	sóota	Coota	was coming
41-	misooRaŋta	ʔYaŋ́ta	Saŋ́ta	kuuŋta	didnt come
1-8	miseera	ʔYúra	Súra	cuura	if he comes
-18	misooCara	ʔiCára	Sára	Cara	may have c.

6.5 The Palatalization Rule

Some processes which affect the regularity of inflection in general will be discussed later.[1] One which needs mention now is the palatalization rule, which is as follows:

> When /u/ or /a/(short) occurs after the Actual TC in a clear conjugation, the vowel tends to become /i/.

This rule applies for instance to all clear conjugation forms bearing the I.1 suffix. The more colloquial

[1] §18.4, §18.51, §18.7.

the style, the more likely is the change.

In strong palatal environments the change is mandatory. For example, the /u/ of I.1 never appears in any form of /miseeYi/ (see forms)1--(and)11-(in Table 10).

6.6 Derivative Verbs

Three derivational suffixes ending in TCs combine with verb stems forming extended stems. These derivational suffixes are assigned designator letters in order of their privilege of occurrence, as follows:

Designator	Function
A	Causative
B	Passive/Potential
C	Polite

Formation of derivative verbs is shown below:

TABLE 11

FORMATION OF DERIVATIVE VERBS

Desig.	Stem	Sfx.	Cj.	Examples	Glosses
A	R	-aS-	7	tuR-aSi	'causing to take'
				tuR-aCi	'having caused to take'
				tuR-aSi	'(if)causing to take'
B	R	-ariY-[1]	1	tuR-ariYi	'being taken[2]'
				tuR-aqTi	'having been taken'
				tuR-aRi	'(if)being taken'
C	Y	-abiY-[3]	1	tuY-abiYi	'taking(polite)'
				tuY-abiTi	'having taken'
				tuY-abiRi	'(if) taking'

[1]Re irregularity in T- and R-stems, see §18.51/2 and §18.7/2.

[2]May also translate into 'being able to take, having been able to take, (if) being able to take'.

[3]Palatalization of suffix I.1 is mandatory in C forms. Also /ya/→/yi/ is usual: C)1--(/tuyabiyu/→/tuyibiyi/.

The three derivational suffixes may combine in single forms:

ABC)1--(tuR-aS-ariY-abiYi[1] /turasariyabiyi/

'being caused to take' or
'being able to cause one to take'

6.7 Root Relation in Certain Pairs of Transitive and Intransitive Verbs

In Okinawan the transitive-intransitive distinction in verbs exists. At this point only the formal characteristics of roots as between these two types of verbs is under consideration. Following is a pair of transitive and intransitive verb stems:

Transitive:	tumiY-	'stop'
Intransitive:	tumaY-	'stop'

This pair belongs to a class of which it might be said that a root /tum-/ adds a transitive-forming /i/ or an intransitive-forming /a/ before the inflectional endings. There are however six other classes of transitive-intransitive pairs, each with a different root relationship. Also the total number of these pairs as weighed against the inventory of verbs is too small to be a structurally determining factor. /tum-/ cannot be accepted as a root.

Examples of these seven classes of transitive-intransitive pairs are listed below with root processes. Where TCs are in parentheses, items of that class belong to more

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[1]Capitalization and hyphenization are to clarify the structure. For purposes of inflection, everything before the TC of the final derivational suffix is inert. /i/ underlined means that palatalization has taken place.

than one conjugation. A TC not in parentheses determines the conjugation of all members of that class.

TABLE 12

TRANSITIVE-INTRANSITIVE VERB PAIRS

	Additives		Examples		Glosses	
	Tran.	Intran.	Tran.	Intran.	Tran.	Intran.
A.	-iY-	-aY-	tumíY-	tumáY-	'stop'	'stop'
B.	-(Y)-	-(R)aY-	tuJ-	tuGaY-	'sharpen	'be sh.'
C.	-(Y)-	-(R)iY-	yaŋJ-	yaŋDiY-	'break'	'be br.'
D.	-(R)iY-	-(Y)-	maŋKiY-	maŋC-	'mix'	'be m.'
E.	-S-	-Y-	caáS-	caáY-	'put out	'die out'
F.	-aS-	-iY-	ndáS-	ndíY-	'wet'	'be wet'
G.	-S-	-(R)iY-	kooS-	kooRiY-	'break'	'be br.'

There are morphophonemic processes in the language which suggest some explanation for these formal relationships, with varying degrees of plausibility. The types of statements which may be made are found in §18.E.

CHAPTER VII

LIMITED PREDICATIVES

Predicatives other than verbs are called limited because their inflectional system includes only second and third order suffixes. All but a few limited predicatives fall in a word-class called statives. A few forms which differ formally and functionally from statives are called essives.

7.1 Stative Root and Stem

The simple stative is based on a bound stative root, which ends in a prime vowel, the moreme, or (rarely) a syllabic. A formative suffix /-sa/ produces the basic form, which serves also as a stem for the second and third order suffixation. Statives represent states or properties as in the following examples:

Root	Stem	Gloss of Stem
magi-	magi-sa	'is big'
fii-	fii-sa	'is cold'
ʔumuq-	ʔumuq-sa	'is pleasurable'

Stative inflection is shown in Table 13. The symbol "@" (for stative) occupies the first order slot in the designator.

TABLE 13

INFLECTION OF STATIVES

	'big'	'cold'	Gloss
@--	magi-sa	fii-sa	'is cold'
@1-	magi-sa-ta	fii-sa-ta	'was cold'
@2-	magi-sa-tee	fii-sa-tee	'is cold(cer)'
@7-	magi-sa-ti	fii-sa-ti	'having been cold'
@-7	magi-sa-yi	fii-sa-yi	'is cold and'
@-8	magi-sa-ra	fii-sa-ra	'if it is cold'
@-9	magi-sa-ri	fii-sa-ri	'if it is cold'
@17	magi-sa-ta-yi	fii-sa-ta-yi	'was cold and'
@18	magi-sa-ta-ra	fii-sa-ta-ra	'if it was cold'
@19	magi-sa-ta-ri	fii-sa-ta-ri	'if it was cold'

Note: The stative does not take a negative suffix. For the syntactical negative, see §22.51.

7.2 Essives (designator symbol "¢") comprise two pairs of affirmative and negative forms:

ya	'is'	(copula)
ʔaraŋ	'is not'	
ʔa	'there is/exists'	(existential)[1]
neeraŋ[2]	'there is not'	

TABLE 14

INFLECTION OF ESSIVES

¢--	ya	ʔa	ʔaraŋ	neeraŋ	'is[3]'
¢1-	ya-ta	ʔa-ta	ʔaraŋ-ta	neeraŋ-ta	'was'
¢7-	ya-ti	ʔa-ti	ʔaraŋ-ti	neeraŋ-ti	'having b.'
¢-7	ya-yi	ʔa-yi	--	--	'being'
¢-8	ya-ra	ʔa-ra	ʔaraŋ-da[4]	neeraŋ-da[4]	'if it is'
¢-9	ya-ri	ʔa-ri	ʔaraŋ-di	neeraŋ-di	'if it is'
¢17	ya-ta-yi	ʔa-ta-yi	ʔaraŋ-ta-yi	" -ta-yi	'is and'
¢18	ya-ta-ra	ʔa-ta-ra	ʔaraŋ-ta-ra	" -ta-ra	'if it was'
¢19	ya-ta-ri	ʔa-ta-ri	ʔaraŋ-ta-ri	" -ta-ri	'if it was'

[1]This "existential" is for inanimates only.

[2]There is a reduced form with /ra/ dropped throughout.

[3]Glosses of /ya/ etc. [4]/ra,ri/→ /da,di/. P.68,nt.2.

7.3 A residue of limited predicative inflection includes two forms and two inflected suffixes:

maŋdoo	'there is a lot'
gutoo	' ___ is like'
-Yagii	Iterative suffix
-yibii	Polite suffix

Since /-Yagii/ joins with the verb stem, it begins with a TC.

Polite suffix /-yibii/ joins first order suffixes ending in the moreme, and all limited predicative stems except for the negative essive(§7.4). Its force is the same as that of derivational suffix C (§6.6).

TABLE 15

RESIDUE OF LIMITED PREDICATIVE INFLECTION

o--	maŋdoo	gutoo	'is like'
o1-	maŋdoo-ta	gutoo-ta	'was like'
o-7	maŋdoo-yi	gutoo-yi	'is like and'
o-8	maŋdoo-ra	gutoo-ra	'if it is like'
	naC- 'cry'(weep)		
g--	naCagii		'cries and cries'
g1-	naCagii-ta		'cried and cried'
c)@--	fii-sa-yibii		'is cold'
c)@1-	fii-sa-yibii-ta		'was cold'
c)¢--	ya-yibii		'is'
c)¢1-	ya-yibii-ta		'was'
c)o--	maŋdoo-yibii		'is a lot'
ċ)o--	gutoo-yibii		'is like'
c)31-	tutoo-yibii-ta		'was taking'
c)318	kadoo-yibii-ta-ra		'if he should eat'

7.4 Polite Inflection of Negative Essive

Negative essives have endings which phonemically resemble the I.4 suffix /-Rəŋ/:

/ʔaraŋ/ 'is not' /tuRaŋ/ 'not take'

/neéraŋ/ 'there is not'

There are no forms /ʔaYu/, /neéYu/, etc. to indicate that verbal stem and suffix is involved. However, just for the polite inflection, the negative essives act as if such hypothetical forms existed. The asterisk before the designators below bespeaks the nature of the stems, and the psuedo-TC is underlined:

Desig.	'is not'	'there is not'	Gloss of Latter
*4--	ʔayabiRaŋ	neeyabiRaŋ[1]	'there is not'
*41-	ʔayabiRaŋ-ta	neeyabiRaŋ-ta	'there was not'
*47-	ʔayabiRaŋ-ti	neeyabiRaŋ-ti	'th.not being'
*418	ʔayabiRaŋ-ta-ra	neeyabiRaŋ-ta-ra	'if th.was not'

[1]Palatalization of internal /ya/ (§6.5) occurs except in theatrical or formal speech. A further reduced form without the syllable in question is the usual colloquial form.

CHAPTER VIII

PREDICATIVE DERIVATIVES

Most derivatives differ in form-class from their underlying forms. Many of the derivatives discussed in this chapter belong to the nominal category, which is taken up in Chapter XI.

Predicative derivatives are of several kinds. Some are called 1) inflectional derivatives because of their marginal nature. Aside from these there are 2) verb derivatives, 3) stative derivatives, and 4) dependent predicative derivatives.

8.1 Inflectional Derivatives

8.11 Conditional (from Presumptive)

When the /-a/ ending of a form whose designator ends in III.8 is replaced by /-aa/, the form is a Conditional:

Root	--8	--8'	Gloss of Latter
fuX-	fura	furaa	'if (rain) falls'
ʔisuJ-	ʔisuga	ʔisugaa	'if in a hurry'

Examples:

ʔami mu furaa, ʔikaŋ sa	'If it rains, I wont go.' (if rain falls,...)
ʔisugaa, maári	'If in a hurry, go around.'
kamaŋteeraa, namá kwiyu sa)428('	'If you didnt eat, I'll give you something now.'
tuteeteeraa, nugaararaŋ)228('	'If he had taken it, he would not get away with it.'

8.12 Provisional (from Unreal Participle)

When the /-i/ ending of a form whose designator ends in III.9 is replaced by /-ee/, the form is a Provisional:

Root	--9	--9'	Gloss of Latter
naX-	nari	naree	'if it is possible'
yuM-	yumi	yumee	'if he reads'
ma6-	mati	matee	'if he waits'

Examples:

kamee, maasa sa	'If you eat it, it will taste good.'
naree, feeku kuu wa	'If you can, come early.'
yumee, yumariyi ŋ	'If you think you can read it, you can.'
matee, yáa	'If they would only wait!'
cicasaree, yáa)@-9('	'If only it is near!'
tuteeteeree simu sa)229('	'If he had taken it, it's all right.'

8.13 Negative Imperative (from Imperative)

When the final /i/ of an imperative form (P") is replaced by the derivational suffix /-una/, the Negative Imperative results:

Cj.	Imper.	Neg. Imper.	Gloss of Latter
2	niŋ́di	niŋ́duna	'Dont sleep!'
4	ŋŋdi	ŋŋduna	'Dont see!'
6	mati	matuna	'Dont wait!'
7	hanasi	hanasuna	'Dont speak!'
11	cíki	cikúna	'Dont listen!'

8.131 Irregularity of Clear Conjugations

Similarly derived forms of clear conjugations(§6.223), /turuna, cirúna/ are rarely heard outside of formal and

theatrical speech. In the colloquial, /-runa/ is replaced by /-ŋna/:

/tuŋna, ciŋ́na, ciŋna/ 'Dont take/wear/cut.'

8.2 Verb Derivatives

8.21 Truncate(T) (from Clear Conjugation P)

The Actual Participle (P) of the clear conjugations ends in /-yi/. This syllable is absent in a form which is the clear conjugation substitute for P in several connections.[1]

8.22. Noun Appurtenant (from P)

A limited number of verbs have noun homophones[2] to the Actual Participle whose distinctive feature, besides distribution, is that they refer to something that is characterized by the action of the verb stem. This form is called the Appurtenant:

P	Gloss of P	Gloss of Appur.
ficáyi	'shining'	'light'
hakáyi	'measuring'	'scales'
kajáyi	'ornamenting'	'ornament'
ʔakágayi	'illuminating'	'lamp'
hanasi	'speaking'	'speech'
naraasi	'teaching'	'instruction'
ʔasíbi	'playing'	'game'
ʔooji	'fanning'	'fan'

8.23 Short Appurtenant (from T)

Appurtenants are formed from a limited list of

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[1] §8.23, §8.43, §19.4 (p. 160).

[2] For variants of Cj. 10, see §18.52/5.

Truncates of the First Conjugation by adding zero:

P	Short Appurtenant	P	S.A.
baqpeeyi	baqpee	'erring'	'error'
cimuyi	cimu	'intending'	'intention'
citumiyi	citumi	'employing'	'employment'
hajímiyi	hajími	'beginning'	'beginning '
kaŋgeeyi	kaŋgee	'thinking'	'thought'
nagariyi	nagari	'flowing'	'stream'
sakéeyi	sakée	'prospering'	'prosperity'
ʔatíyi	ʔáti	'hitting mark'	'effect'

8.24 Long Appurtenant (from P)

When the /-i/ ending of the Actual Participle is replaced by /-aa/, the resultant form is used as an appurtenant for many verbs in forms which translate as agentives:

Cj.	P	Long Appur.	Gloss of Latter
1	cibáyi	cibáyaa	'one who perseveres'
2	niŋ́ji	niŋ́jaa	'one who sleeps'
3	hayi	hayaa	'runner'
4	ŋŋji	ŋŋjaa	'one who sees'
7	hanasi	hanasaa	'speaker'
11	határaci	határacaa	'worker'
12	ʔwiiji	ʔwiijaa	'swimmer'

8.3 Stative Derivatives

The stative root falls into three classes with respect to derivative forms. These classes are usually related to the structure of the root:

Root Class	Pattern	Example	Gloss	Remarks on Pattern
1	CV:	fii-	'cold'	moreme-final
2	CVCV	magi-	'big'	favorite pattern
3	CVCVCV	ʔicuna-	'busy'	longer stem

8.31 Stative-Root Derivatives

The three general stative derivative forms include an appurtenant which is parallel in function but not in formation to the verbal appurtenant:

	Suffix	Form Name	Example	Gloss
(a)	-:	Appurtenant	magii	'big thing/person'
(b)	-sa	Stative Noun	magisa	'bigness'
(c)	-ku	Adverb	magiku	'with bigness'

To these three is added a bound combining form of the stative. Difference in behavior of the three root classes is shown below. The stem-increment /-si-/ of Class 3 is to be noted:

	Combining Form	Appurtenant (a)	Stative Noun(b)	Adverbial (c)
Class				
1	fii-	--[1]	fii-sa	fii-ku
2	magi-	magii	magi-sa	magi-ku
3	ʔicunasi-	ʔicunasii	ʔicuna-sa	ʔicuna-si-ku

A number of irregularities and pattern gaps occur among the stative derivatives. Also a short list of CVCV roots falls in Class 3. Example: /yuta-/ 'good', /yutasi-, yutasii, yuta-sa, yuta-si-ku/.

8.311 The Gratitive

There is one further stative derivative which is found with a limited number of roots.[2] This form refers to the agreeableness of the state of the root idea, and is

[1]Moreme does not follow moreme (§2.1/1)

[2]The proportion appears to be less than one-tenth of all stative roots.

called the Gratitive. Its usual formation is stative root plus /-qteeŋ/.

Examples of Gratitive (starred forms are irregular[1]):

Root	Gratitive	Gloss of Latter
fisi-	fisi-qtéeŋ	'nice and thin(slice)'
garú-	gaq́-teeŋ*	'nice and light(weight)'
fijuru-	fijuq-teeŋ*	'nice and cool(breeze)'
yafára-	yafaq́-teeŋ*	'nice and soft'
ʔamá-	ʔama-q́teeŋ	'nice and sweet'
ʔoó-	ʔoo-q́teeŋ	'nice and green'

ʔumi nu ʔooq́teeŋ soo ŋ 'The sea is nice and green.'

8.4 Dependent Predicative Derivatives

Two derivative suffixes can join any dependent predicative form.[2] They are:

-ru	attributive suffix
-si	gerundal suffix

8.41 The Attributive Form

The attributive form is an exocentric construction which typically is in endocentric construction with following nouns, as exemplified in the following:

Desig.	Form	Noun	Gloss
1--	yumu-ru	qcu	'person who reads'
3--	yudoo-ru	qcu	'person who is reading'
-1-	yuda-ru	qcu	'p. who has read'
41-	yumaŋta-ru	qcu	'p. who has not read'
@--	magisa-ru	qcu	'big person'

[1]For expanation of irregularity, see §18.B/5.

[2]This is an assumption based on the large variety of forms with which these suffixes are found.

8.42 The Gerund

The Gerund is an exocentric construction, constituting a noun referring to root action as a thing. It is formed by adding /-si/ to any dependent form, as follows:

Root	Gerund	Gloss of Latter
tuX-	tuyu-si	'the (act of) taking'
naX-	nayu-si	'the becoming'
kaM-	kamu-si	'the (act of) eating'
"	kamaŋ-si	'the not eating'
ʔY-	ʔí-si	'what one says/said'
hariX-	hariyi-si	'the clearing up'(weather)
taG-	tacu-si	'the passing/elapsing'
nuM-	nuda-si	'the having drunk'

Examples:

harusaa ni nayu-si yakaa	'rather than becoming a farmer'
waa ga kamu-si ŋŋja ŋ	'He saw me eating.'
kamaŋ-si ga du waqsa-ru	'Not eating is worse.'
ʔyaá ga ʔí-si cicí-baqpeeta ŋ	'I misheard what you said.'
ʔami nu hariyi-si macikaŋtii yá ŋ	'For the clearing up of the rain, waiting is hard.'
tuci nu tacu-si ŋ wakaraŋ	'He is not even aware of the passing or time.'
nuda-si wasita ŋ	'I forgot that I had drunk.'

8.43 The Situational (from P, T, and Negative)

A derivational suffix /-yi/ added to the Truncate of clear conjugations, to the Actual Participle of other conjugations, or to the limited predicative stem, forms the Situational.

Verbs:

Cj.	P	T	Situa.	Gloss of Latter
1	tuyi	tu-	tu-yi	'taking, getting'
2	niŋ́ji	--	niŋ́ji-yi	'sleeping'
3	cíyi	cí-	cí-yi	'wearing'
4	ŋŋji	--	ŋŋji-yi	'seeing'

Lim. Predicatives

	Stem		Situa.	
@	tuúsa	--	tuúsa-yi	'being far'
¢	yá	--	yá-yi	'being'
¢	ʔa	--	ʔa-yi	'existing'

Examples:

tu-yi ga ʔicú ŋ 'I'm going (in order) to get it.'

ŋŋji-yi ga ʔicú ŋ 'I'm going to see.'

ʔyaá ga naci-yi du ŋ see, 'If you should cry, '

tuúsa-yi nee, ʔikáŋ sa 'If it's far, I'm not going.'

The situational suffix /-yi/ forms derivatives with negative forms ending in /-Raŋ/ with loss of the nasal syllabic: (/numaŋ/, /furaŋ/, /neeŋ/ 'not drink/fall/exist'):

numa-yi nee, nooraŋ doo 'If you dont drink it, you wont get well.'

ʔami nu fura-yi nee, ʔiká yaa 'If it doent rain, let's go!'

tuúkoo nee-yi nee, 'If it's not far,'

CHAPTER IX

PREDICATE PARTICLES AND PREDICATES

A dependent predicative (§6.23) does not occur unaccompanied. It is followed by one of a set of particles, thereby constituting a form-class called the predicate. A predicate particle may be minor (occurring typically before non-terminal juncture), or major (being typically terminal). Predicate particles are classed accordingly, the major type being further broken down into assertive and question particles. Predicate particle symbols as indicated are used in designators.

9.1

PREDICATE PARTICLES

		Signal
	Major	
1.	Assertive)(.	
	ŋ	Fact asserted
	sa	Fact vouched for
	qsaa	Appearance or report
2.	Question)(?	
	mi	Polar question[1]
	ga	Supplement question
	Minor)(,	
	kutu	Reason or condition
	siga	Adversative
	ŋtéeŋ ~ ŋteémaŋ	Despite condition
	nu	Conjunctive

[1] A question normally answerable by 'yes' or 'no'.

9.2 Use of Particles: Predicates

9.21 Major Predicates

A dependent verb in construction with a major particle constitutes a major predicate.

Examples:

)1--(.	ʔicú ŋ	'He is going.'
	ʔicú sa	" (I vouch for it)
	ʔicú qsaa	" (apparently)
	ʔicú qsaa	" (I heard)
)1--(?	ʔicú mi	'Are you going?'
)1--(?	ʔíci ʔícu ga[1]	'When are you going?'
)4--(.	kamaŋ(ŋ)[2]	'He doesnt eat.'
)4--(.	kamaŋ sa	'He doesnt eat.'(I vouch)
)41-(.	kamaŋta qsaa	'He didnt eat.'(apparently)

9.211 When /mi/ follows a verb ending in II.1, the following replacement occurs:

)-1-(?	*kada mi → kadi yi	'Did he eat?'
)-1-(?	*ʔŋjá mi → ʔŋjí yi	'Did he go?'
)41-(?	*kamaŋta mi → kamaŋti yi	'Didnt he eat?'

9.22 Minor Predicates

A dependent verb in construction with a minor particle constitutes a minor predicate. Such predicates typically

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[1] /ga/ occurs only in conjunction with a question word.

[2] The particle /ŋ/ is never heard after a preceding /ŋ/. See §18.B/1.

occur in subordinate clauses. Examples:

1. /kutu/ 'because, since'

)1--(, waŋ ʔicú kutu, mati 'Since I'm going, wait.'

)1--(, wutáyu kutu, yukutoo ŋ 'Since he is tired, he's resting.'

)411(, kamaŋ kutu, ʔiká 'Since I'm not eating, let's go.'

)-1-(, kada kutu, yaakoo neeŋ 'Since I've eaten, I'm not hungry.'

)@--(, yaasa kutu, kamu ŋ 'Since he's hungry, he's eating.'

)¢--(, yaŋmee yá kutu, 'Since he's sick, he's not going.'

2. /siga/ 'but'

)1--(, A ya ʔicú siga, B ya ʔikáŋ 'A is going, but B isnt.'

)-1-(, ʔwaa ya niɲta siga mayaa ya kwatá ŋ 'The pig slept but the cat ate.'

)@--(, fiisa siga, ʔicú sa 'It's cold but I'm going.'

)¢--(, jiŋ nu ʔa siga, ʔŋjasaŋ 'He has money but he doesnt spend it.'

3. /ŋtéeŋ/ 'even though'

)-1-(, yuda ŋtéeŋ, ʔimee wakaraŋ 'Even though I have read it, I dont understand the meaning.'

)4--(, numaŋ (ŋ)teeŋ,[1] caá ŋ naraŋ 'Even if you dont drink, it wont help.'

4. /ŋteémaŋ/ (same as (3))

)-1-(, kusamica ŋteémaŋ 'Even if you get angry,'

)4--(, ʔikaŋ́ (n)teémaŋ,[1] jiŋ harayu sa 'Even if you dont go, you have to pay.'

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[1]See §18.B/2 for morphophonemic change.

5. /nu/ 'and, and so, since'

)@--(, ŋŋcaa yutasa nu taa ya dikitoo ŋ — 'The soil is good and the field is producing.'

)@--(, kusuyee ŋjasa nu numaraŋ — 'The medicine is bitter and so I cant drink it.'

)@--(, tuúsa nu ʔikáŋ — 'Since it's far I'm not going.'

9.3 Absolute Predicates

9.31 Absolute Major Predicates

Two forms of the verb constitute major predicates in themselves:

)--8(ʔíka — 'Let's go!'

)--9(ʔíki — 'Go!'

9.32 Absolute Minor Predicates

9.321 The Completive Participle (P') may in itself constitute a minor predicate. Examples:

taa ya kweeti, ŋŋcaa yutasa ŋ — 'The field is fertile and the soil is good.'

cinuu sakí nudi, ciburu nu yamu ŋ — 'Having drunk rice wine yesterday, my head aches.'

ʔami nu futi, ʔikáraŋ — 'It having rained, we cant go.'

9.322 The Conditional (§8.11) is a minor predicate:

ʔami nu furaa, ʔikáŋ sa — 'If it rains, I wont go.'

9.323 The Provisional (§8.12) is a minor predicate:

kamee, maasa sa — 'If you eat it, it will taste good.'

9.324 When the designator of a form ending in III.8 is further occupied, the form is a minor predicate:

nuú ga yumura)1-8(wakaraŋ — 'I dont know what he may be/reading.'

fiisa ga ʔara)¢-8(wakaraŋ — 'I dont know whether it's cold.'

9.4 Attributive as Absolute Major Predicate

Under certain syntactically defined circumstances, the Attributive (§8.41) form is found as an absolute major predicate (§10.32, note 1).[1]

9.5 Summary of Examples of Predicate Particles

Desig.		Pred.	Pol.	Gloss
)1--(.		kamu	ŋ	'He eats/is eating.'
"		kamu	sa	" "
"		kamu	qsaa	" "
)1--(?		kamu	mi	'Is he eating?'
	nuú	kamu	ga	'What is he eating?'
"	nuúŋci	kamu	ga	'Why is he eating?'
)@--(,		yaasa	kutu	'Since he is hungry,'
"		yaasa	siga	'He is hungry but,'
"		yaasa	ŋtéeŋ	'Despite being hungry,'
"		yaasa	nu	'Since he is hungry,'
)¢--(?	nuú	yá	ga	'What is it?'
)¢--(.	yaa	yá	ŋ	'It is a house.'
)¢--(?		ʔa	mi	'Is there any?'
)¢--(.		ʔa	sa	'There is.'

[1] A structural interpretation will be presented later (§25.73).

CHAPTER X

NOMINAL PARTICLES

There is in Okinawan a broad category of word-classes called the nominal category, which takes its name from the central and outstanding member, the noun. In this chapter, the classes of particles which follow nominals in construction with them is surveyed. Nominal particles are of three types (word-classes): subordinating, relational, and aspectual.

10.1 Subordinating Particles: /nu/ ~ /ga/ ~ /ø/ ~ /na/

Members of the above set of morpheme alternants of the subordinating particle stand in exocentric attributive constructions with preceding nominals. The attributive constructions in turn stand in endocentric constructions with following nominals:

Nom.	nu	Nom.	Gloss
warabi	nu	ciŋ	'child's clothes'
suyi	nu	qcú	'a Shurian'
nuú	nu	waki	'what reason?'
taáci	nu	funi	'two boats'
gaŋcoo	nu	tama	'spectacle lens'
ʔarí	ga	mayaa	'his cat'
wikiga	(nu)	naa	'a man's name'
waŋ	ø	kutuba	'my speech'
kaŋnuu	na	múŋ	'important thing'

The subordinating particle places the preceding nominal in a subordinate or attributive relationship with the following one. The specific nature of this relationship may be

spelled out in a variety of ways, depending on the particular set of nominals involved.

/nu/ is the general form; /ga/, /na/, and /Ø/ are found with specific lists of preceding items. There is also a very limited amount of alternation between certain pairs.

10.11 Deictic Attributives

The attributive form, which is a predicative derivative, has been introduced in §8.41; the attributive construction of the nominal has just been seen. A third kind of attributive is a small but powerful word-class called deictic attributives, with its three basic members:

/kúnu/	'this' (Span. este)
/ʔúnu/	'that' (Span. ese)
/ʔánu/	'that yonder' (Span. aquel)

The formal relationship of this class to the above attributive construction with the particle /nu/ is evident.[1]

10.2 Relational Particles

Relational particles, or relationals, follow nominals in exocentric constructions called adverbials.[2] The following list includes one example of each relational. Some of these items have a wide semantic range which is not suggested by the single example.

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[1]Especially in view of §20.2.

[2]Dealt with in Ch. XIII.

RELATIONALS

Nominal	Relational	Gloss
dúsi	ciriti	'accompanying his friend'
naafa	kara	'from Naha'
suyi	kayi[1]	'to Shuri'
juu-ni-ji	madi	'until 12 o'clock'
suyi	nakayi	'in Shuri'
tusuyi	ni	'by old folks'
ʔŋ́ma	núti	'by (riding) a horse'
ʔucinaaguci	saáni[2]	'in Okinawa'
kii	saáyi	'(made) of wood'
kii	qsi	" " "
túji	soóti	'with (taking along) his/wife'
tú́ji	tu	'with his wife'
ʔucinaa	wúti	'in Okinawa'
funi	wutóoti	'(being) in the boat'
ʔikusa	ʔatu	'after the war'
máa	ŋkáyi	'where to/at?'
naafa	ŋ́ji[3]	'in Naha'
mí́ci	ŋ́ti	'in the street'

[1]A reduced form of /ŋkáyi/, but not substitutable for it in all situations.

[2]/saáni, saáyi, qsi/ are considered synonyms by native speakers for most purposes.

[3]This and the following form appear to be variants of /wúti/.

10.3 Aspectual Particles

The Aspectuals comprise a group of particles which follow nominals in construction. These particles fall into four orders within their positional slot, as follows:

Order	Form	Signal
1.	ga	Supplement question
	yi	Polar question
2.	nu (ga)	Subject
3.	ya	Referential
	du[1]	Contrastive
4.	ŋ	Additive

The referential is of special importance and is discussed below.

10.31 The Referential /ya/

The particle /ya/ is of wide use and syntactic distribution. It often occur s after an item which becomes the subject in translation:

a) ʔyaá ya, siija nu wú mi 'Have you an elder sibling?'

Compare however:

b) yaa ŋkáyi, siija nu wú mi 'Is our elder sibling in the house?'

The subject of the second sentence is siija, and there is nothing to indicate that its structural relationship with the predicate differs from that of /siija/ in (a).

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[1]The colloquial form of /du/ is /ru/. Use of the more formal alternate in the description avoids possible confusion with attributive suffix /-ru/. Force of this particle is 'this, rather than that'.

In sentence (a), /ʔyaá ya/ is a topic with reference to which the assertion following it is made. Thus it is said that /ʔyáa/ stands in the referential (aspect). A more nearly literal translation of sentence (a) is:

'As for you, does an elder sibling exist?'

Further examples:

ʔyaá tucii ya, naŋji yá ga	'What time is it by your watch?'
cuu ya, yií tiŋci yá ŋ	'Today the weather is fine.'
kurée, yaá ya ʔaraŋ	'As for this, it's not an arrow.'

10.311 Referential before Negative

The referential has a component of emphasis. This is seen in the rule (with occasional exceptions) that a nominal expression standing before a negative predicate is in the referential:

habú kamu ŋ	'I eat snake.'
habú ya kamaŋ	'I dont eat snake.'
harusaa yá ŋ	'He's a farmer.'
harusaa ya ʔaraŋ[1]	'He's not a farmer.'

10.312 Morphophonemic Change in Referential

If the phoneme preceding the particle /ya/ is a prime vowel or /ŋ/, morphophonemic change almost invariably takes place in the colloquial, as follows:

	Nom.	Ref.	Gloss(as to ___)
-i + ya → -ee	kúri	kurée	'this thing'
-u + ya → -oo	hábu	haboó	'snake'
-a + ya → -aa	fuya	fuyaa	'shoe'
-ŋ + ya → -noo	ciŋ	cinoo	'clothing'

[1] A discussion of essive /yá/ in relation to referential /ya/ is found in §25.3.

After the moreme, no change takes place:

mayaa ya 'as for the cat'

10.32 The following examples show the use of aspectuals:

Nom.	1	2	3	4	Pred.		Desig.	Gloss
nuú	ga							'What is it?'
ʔyaá	yi							'Is it you?'
taá	ga				nayura	-	1-8	'Who can do it?'
taá	ga	ga			nayura	-	1-8	'Can someone do it?'
taá	ga			ŋ	turariyi	ŋ	Bl--	'Anyone can take it.'
waa		ga			nayu	sa	1--	'I can do it.'
mayaa		nu			kwáyu	sa	1--	'The cat is eating.'
cira		nu			curasa	ŋ	@--	'The face is beautiful.'
ciburu		nu			yada	ŋ	-1-	'His head ached.'
ʔweŋcu		nu			wú	ŋ	1--	'There is a rat.'
ʔweŋcu		nu			ʔa	ŋ	¢--	'There is a rat.(dead)'
jiŋ		nu			maŋdooree	-	o-9'	'If there is much money,'
waa		ga	du[1]		macigatoo-ru		3--	'I am mistaken.'
waa		ga	ya[2]		sáŋ	-	4--	'I wont do it.'
waa		ga	ya		sú	sa	1--	'I'll do it.'
mayaa		nu	du		kwatá-ru	-	-1-	'It was the cat that ate.'
mayaa			ya		kwatá	ŋ	-1-	'As for the cat, it ate.'
mayaa			du		kwayú-ru	-	1--	'The cat is eating.'
kurí			du	ŋ	numee	-	--9'	'If you just drink this,'
habú		nu		ŋ	kwayú	ŋ	1--	'Even snakes eat.'
habú				ŋ	kamu	ŋ	1--	'I even eat snake.'
numiyi			du	ŋ	see		--9'	'If you only drink,'

[1]Aspectual /du/ requires the attributive form in a major predicate slot.

[2]In the colloquial, /ga ya/ → /gaa/ (§10.312).

CHAPTER XI

THE NOMINAL CATEGORY; GENERAL NOMINALS

11.1 Nominal Category

The nominal category is a group of word-classes, associated by their sharing of a system of environments--those of the noun class. In the following list are twelve different structural slots whose occupants are in construction with nouns generally--ten slots following nouns, and two preceding.

Noun as Initial Component with:

a) supplement question particle
b) subject particle
c) referential (before affirmative)
d) contrastive
e) additive
f) subordinating particle
g) relational
h) copula
j) transitive verb
k) quantitive (Ch. XII)

Noun as Final Component with:

m) attributive
n) deictic attributive

Examples of the above-indicated constructions:

a) yaa ga ʔara wakaraŋ 'I dont know if there is a house.'
b) yaa nu meétoo ŋ 'The house is burning.'
c) yaa ya magisa ŋ 'The house is large.'
d) yaa du meéca-ru 'He burned even the house.'
e) yaa ŋ yutasa ŋ 'The h. is all right too.'
f) yaa nu nuusi ya ŋ 'He's the owner of the house.'
g) yaa kayi keera 'Let's go home.'
h) yaa yá ŋ 'It's a house.'
j) yaa meéca ŋ 'He burned the house.'
k) yaa taáci ʔa ŋ 'There are two houses.'

m) magisa-ru yaa yá ŋ 'It's a big house.'
n) ʔánu yaa yá ŋ 'It's that house.'

11.2 General Nominals

The following word-classes share most of the above noun environments, including especially (b), (c), and (j). They are called general nominals:

General Nominals	Specimen	Gloss
A. Noun	mayaa	'cat'
B. Pronoun	ʔyáa	'you'
C. Name	ʔaŋ́poo	'Ampo'
D. Interrogative General Nom.	núu	'what?'

Nouns are distinguished by their complete range of occurrence in noun environments. Other general nominals lack ordinarily the noun pre-environment.

11.3 Interrogatives and the Nominal Category

Interrogatives constitute a grammatical class of words (not a distributional class), appearing in supplement questions and linked structurally with predicate particle /ga/. The basic interrogative words are as follows:

Word	Sentence	Gloss
núu	nuú yá ga	'What is it?'
táa	taá yá ga	'Who is it?'
máa	maá yá ga	'Where is it?'
ʔíci	ʔicí yá ga	'When is it?'
cáa	caá yá ga	'How is it?'
nuuŋ́ci	nuuŋ́ci ya ga	'Why is it?'

Of the above interrogatives, only /núu/ and /táa/ have general nominal distribution, and are included in word-class D above. /máa/ occurs in a limited part of

the distribution, and is a limited nominal. /ʔíci, oáa, nuúŋci/ have other distributions and are seen later.

11.4 Two-dimensional Division of General Nominals

The general nominals are interrelated in two separate dimensions, the primary division being into the word-classes listed above (§11.2). The basis of the second dimensional classification lies in distribution with respect to:

1) Interrogatives
2) Existentials /ʔa, wú/ 'there is'

Take for example the following set of sentences:

	Nominal	¢	?/.	Gloss
D.	núu	yá	ga	'What is it?'
A.	funi	yá	sa	'It's a ship.'
B.	ʔári	yá	sa	'It's that(one).'
C.	yaŋbaraa	yá	sa	'It's the Yambaraa.'

The contents of the Nominal column constitute a secondary class of general nominals. In Table 16 this process is carried out so that the main secondary divisions and sub-divisions are shown. Note (observing the Noun column) that Class 1 divides further into Classes 2 and 3, while Class 3 divides into Classes 4 and 5.

Class 6 is a subdivision of Class 2, constituted by relationship with /máa/ 'where?'. Further subdivisions could be set up in accord with distributional categories, but the above suffice for the purpose of displaying the two-dimensional patterning of general nominals.

TABLE 16

GENERAL NOMINAL WORD-CLASSES
WITH SECONDARY DIVISIONS

Interrog.	(A)Noun	(B)Pron.	(C)Name	Gloss of Noun
1. núu(yá)	múŋ	ʔári	--	'thing'[1]
2. núu(ʔa)	funi	"	yaŋbaraa	'ship'
3. núu(wú)	ʔicimuŋ	"	--	'animate'
4. núu(wú)	mayaa	"	míki	'cat'
5. táa	suu	ʔári[2]	ʔaŋpoo	'father'
6. máa	sima	"	ʔucinaa	'island'
	kúni	"	yamatu	'country'
	sí	"	suyi	'city'
	tukuma	kúma[3]	suyi	'place'

[1]Also glosses as 'person, clothing, animate'

[2]Set of Personal Pronouns below (§11.52).

[3]Set of Locative Deictics below (§11.52).

11.5 Contents of Elements of Table 16

11.51 The Noun Class

A-1 All nouns
A-2 Inanimate nouns[1]
A-3 Animate nouns
A-4 Sub-human animate nouns
A-5 Human animate nouns[2]
A-6 Locative nouns

[1]Any living thing that has power of locomotion is "animate". This includes supernatural beings. Any other thing, including dead animates, is "inanimate".

[2]In this division fall also peers and superiors of humans.

11.52 The Pronoun Class

A-1 includes all nouns, and B-1 contains a set of general deictics which are used to indicate any noun:

kúri	'this(thing)'	(Span. éste)
ʔúri	'that(thing)'	(Span. ése)
ʔári	'that(thing)'	(Span. aquél)

While the general deictic set is used to refer to A-5 nouns in the third person, there is a complete B-5 set with first and second person as well, with two number categories (singular and plural), and two categories of politeness for second and third person, as follows:

TABLE 17

PERSONAL PRONOUN SET

Person	Sing.	Plural	Glosses	
1	waa[1]	waqtaa	'I'	'we'
2	ʔyáa	ʔiqtaa	'tu'	'vosotros'
2	ʔuŋju	ʔuŋjunaa	'Ud.'	'Uds.'
3	kúri ʔúri ʔári	kuqtaa ʔuqtaa ʔaqtaa	'he/she'[2]	'they'
3	kuŋ́cu ʔuŋ́cu ʔaŋ́cu	kuŋcutaa ʔuŋcutaa ʔaŋcutaa	'he/she'[3]	'they'

[1]Alternants /waŋ/, /waŋni/(before aspectuals /ya/, /ŋ/, and relational /ŋkáyi/).

[2]For the third person, the degree of spatial or psychological remoteness must be specified.

[3]These forms are politer than the above third person forms.

B-6 is occupied by a set of locative deictics:

kúma	'here'
ʔŋ́ma	'there'
ʔáma	'yonder'

11.53 The Name Class

Names cluster in certain subdivisions, mainly in C-5 (personal) and C-6 (locative). C-5 is broken down into family and given names, and the latter divide further into masculine and feminine. Titles fall here also. C-6 contains lists of names of villages, islands, and other political divisions, topographic, geographic, and astronomic entities, and so on.

11.6 Typical Distribution of Secondary Division Classes

11.61 Class 2 Distribution

Inanimate nominals (A or B with few exceptions) occur typically as:

a) referential or subject of intransitive verb
b) referential or subject of limited predicative
c) object of transitive verb
d) axis with relational particle

Examples:

a)	ʔánu yaa ya meétoo ŋ	'That house is burning.'
	yaa nu meétoo ŋ	'The house is burning.'
b)	funee magisa ŋ	'The boat is big.'
	funi nu ʔa ŋ	'There is a boat.'
	funi yá ŋ	'It's a boat.'
c)	funi kuuja ŋ	'He rowed the boat.'
d)	funi kayi ʔŋjá ŋ	'He went to the boat.'

11.62 Class 3 Distribution

Animate nominals occur typically in the environments of Class 2, and in addition as referential or subject of a transitive verb:

mayaa ya ʔiyú kwatá ŋ	'The cat ate the fish.'
ʔarí ga sumuci yuda ŋ	'He read a book.'
ʔaɲ́poo nu funi kuuja ŋ	'Ampo rowed the boat.'

11.63 Class 6 Distribution

Locative nominals (usually A or C) occur typically in the environments of Class 2, and with especial frequency before relationals:

naafa kara ca ŋ	'He came from Naha.'
kumá kayi kuu wa	'Come here!'

11.7 Copular Nominals

Nominals are used rather frequently as predicates, incorporating the function of the copula /yá/ and major predicate particle. These are called copular nominals. Examples:

ʔarée, yamatu-buni	'That's a Japanese ship.'
kurée, mií-muŋ	'This is a novelty.'
ʔanú ʔasijaa kuruu	'Those clogs are black(ones).
wikiga nu sasu-see, kamisasi	'What a man wears is a 'k';
winagu nu sasu-see, jiifaa[1]	'What a woman wears is a 'jiifaa'.'

[1]These are ornamental hairpins worn by men and women respectively. The verb used for 'wear' in the case of a hairpin is /saS-/ 'pierce'.

CHAPTER XII

QUANTITIVES

Quantitives share much of the nominal distribution, and would be classed as general nominals but for the fact that they normally do not take subject or referential particles (environments (b) and (c)). Because of their peculiar distribution, they are called special nominals.

12.1 Counters

Quantitives are either (a) definite, or (b) indefinite:

a) kii nu yaáci ʔa ŋ 'There are eight trees.'

b) kii nu ʔufóoku ʔa ŋ 'There are many trees.'

Definite quantitives are formally counters. A counter is a compound of two parts: 1) numeral morph(s), plus 2) enumerator.

The typical distributional slot of the quantitive is after the item counted with an intervening particle /nu/. The latter is however often lacking in the colloquial style:

kii yaáci ʔa ŋ 'There are eight trees.'

kumi ʔufóoku ʔa ŋ 'There is much rice.'

12.2 Numeral Morphemes: Basic and Combining Sets

Two distinct sets of numeral morphemes are used:[1]

1) a basic numeral set of one to ten, of which one to nine are bound forms.

2) a combining numeral set of one to ten, bound; and free morphemes for higher powers of ten. Only this set combines decimally.

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[1]Selection is morphological.

12.3 Basic Numerals

The following "absolute" forms of the basic numeral set exist:

1	tii	4	yúu	7	nana	10	túu[1]
2	táa	5	ʔici	8	yáa		
3	míi	6	múu	9	kukunu		

The above forms are not syntactically free(excepting /túu/), but are sometimes used in counting out:

/tii, táa, míi, yúu, ... / '1, 2, 3, 4, .. '

12.4 Basic Enumerators and Counter Sets

The enumerator /-ci/ forms cardinals from 1 to 9. /túu/ is itself cardinal. The following numeral counters respond to /ʔikuci/ 'how many?' from one to ten:

tiici	yuúci	nanaci	túu
taáci	ʔicici	yaáci	
miíci	muúci	kukunuci	

The numeral morphs combine with various enumerator morphs, indicating either things being counted (units of measure--as people, trees, days, handfulls), or the class of things being counted (flat things, rod-shaped things, winged creatures). Most of the basic enumerators[2] may be considered as bound forms of free alternants:

-cici	'months'	cíci	'month'
-fani	'fowls'	háni	'wing'
-kuu	(round objects)	--	

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[1] /hata-/'20', /mumu-/'100', /ci-/'1000' are vestigial.

[2] A full list of basic enumerators is given in Ch. XX.

Following are counter sets for the above three enumerators:

TABLE 18

BASIC-NUMERAL COUNTER SETS

	Num.Morph	Months	Fowl	(eggs, etc.)
?	ʔiku-	ʔiku-cici	ʔiku-fani	ʔiku-kuu
1.	cu-	cu-cici	cu-fani	cu-kuu
2.	tá-	ta-cíci	ta-fáni	ta-kúu[1]
3.	mí-	mi-cíci	mi-fáni	mi-kúu
4.	yú-	yu-cíci	yu-fáni	yu-kúu
5.	ʔici-	ʔici-cici	ʔici-fani	ʔici-kuu
6.	mú-	mu-cíci	mu-fáni	mu-kúu
7.	nana-	nana-cici	nana-fani	nana-kuu
8.	yá-	ya-cíci	ya-fáni	ya-kúu
9.	kukunu-	kukunu-cici	kukunu-fani	kukunu-kuu
10.	tú-	tu-cíci	tu-fáni	tu-kúu

[1]Tonality of a basic counter is governed by the tonality of its numeral component. (Compare these sets with the numerals.) Also, the tonality of the basic numeral morph is determined by its syllabic structure, except in the case of /tii- cu-/'one': Monosyllables have, and polysyllables lack the toneme.

12.41 Syntax of Counters

Counters fall in general in the quantitive word-class:

túyi mi-fáni koóta ŋ 'He bought three chickens.'

tamagu tu-kúu kwiree 'Give me ten eggs.'

Counters are sometimes used as substitutes for counted-counter constructions, in which case they stand as nominals:

mi-fáni koóta ŋ 'He bought three fowl.'

tu-kúu kwiree 'Give me ten(eggs, etc.)'

Some counter sets are adverbs, rather than quantitives:

ta-fíru határaca ŋ 'He worked two days.'

mi-kéeŋ ʔŋjá sa 'He has gone three times.'

12.5 Combining-Numeral Set and Counter Sets

The usual morphs of the combining-numeral set are:

1	ʔici-	4	yú(ŋ)-	7	sici-	10	juu-	10,000
2	ni-	5	gú-	8	haci-	100	hyaku-	maŋ-
3	saŋ-	6	ruku-	9	kú-	1000	síŋ-	

These morphs, or their alternants, combine with enumerators to form counter sets in the same manner as do items in basic sets, with the following provisions:

a) combining-numerals are not limited at ten

b) combining enumerators comprise a special set[1]

Examples:

gu-yíŋ	'5 yen'(monetary units)
juu-gu-yiŋ	'15 yen'
hyaku-yiŋ	'100 yen'
ni-kuku	'2 koku'(dry measure units)
siŋ-kuku	'1000 koku'
maŋ-kuku	'10,000 koku'

12.51 The Decimal System

The combining-numerals are used in the decimal formation of numbers above ten. The highest power of ten in any number word functions as enumerator. What precedes it within the word (including lack of morpheme, indicating '1') is the multiplier; what follows is an additive numeral. In the following examples, each enumerator is underlined:

ni-juu	2	x	10			=	20
juu-ni	10	+	2			=	12
ku-júu-ku	9	x	10,	+	9	=	99
hyaku-juu	100	+	10			=	110
hyaaku ni-júu(2 words)							120
síŋ ku-hyáku ruku-juu-saŋ							1963

[1] See §20.4.

The last numerical construction (1963) consists of a series of three counters, the final one having an additive numeral. In the case of 110, /-juu/ is an additive numeral. Numerical counter-words follow the descending order which signals addition:

1000 + 900 + 60 (+ 3)

12.52 Alternation is signaled by a series of two-unit morphs, the second being one greater than the first:[1]

ni-saŋ-jikaŋ	'2 or 3 hours'
si-gu-niŋ	'4 or 5 persons'
gu-ruku-bee	'5 or 6 times'(multiplication)
juu-ni-saŋ madi	'up to 12 or 13'

12.6 Indefinite Quantitives

There are two indefinite quantitive interrogatives, /caqsa/ 'how much' and /caqpi/ 'how little', each of which has a responding set of quantitive deictics:

Quantitive Interrogatives and Deictics

caqsa	caqpi	'how much/little'
kuq́sa	kuq́pi	'this much/little'
ʔuq́sa	ʔuq́pi	'that much/little'
ʔaq́sa	ʔaq́pi	'that much/little'

These sets are used in reference to price as well as quantity. In some constructions the distinction is clear--in others not.

kumi nu caqsa ʔa ga	'How much rice is there?'
(kumi nu) ni-siŋ-kuku ʔa ŋ	'There is 2000 koku(of rice).'
(kumi nu) ʔufóoku ʔa ŋ	'There is a lot(of rice).'

[1]The basic set forms alternatives with separate words: /ʔwaa miíci yuúci muqcoo ŋ/ 'He has 3 or 4 pigs.'

kumee, caqsa yá ga	'How much is the rice?'(price)
(kumee) ?ici-kuku ni-hyaku-yiŋ yá ŋ	'(The rice)/it is 200 yen per koku.'
muru qsi caqsa yá ga	'How much is it in all?'
muru qsi ni-siŋ-kuku yáŋ	'It is 2000 koku in all.'
muru qsi ni-siŋ-yiŋ yá ŋ	'In all it is 2000 yen.'
caqsa ?a ga	'How much is there?'
kuqpi du ?a-ru	'There's just this much.'

As seen from the examples, indefinite quantitive interrogatives may call for numerical responses. They may also be answered with quantitive deictics, as well as indefinite quantitives.

12.7 Attribution with Quantitives

Quantitives may occur in the nominal attributive slot:

miíci nu ?iyú nu ?a ŋ	'There are three fish.'
?ufóoku nu ?iyú nu ?a ŋ	'There are many fish.'

The normal construction of quantitive with nominal however is as shown above in §12.1. Further examples:

yáa nu ?icutaa ?a ŋ	'There are a few arrows.'
yáa nu ?irukaji ?a ŋ	'There are several arrows.'
mijí nu yiŋsa ?a ŋ	'There is the same amount of water.'
mijí nu kuuteeŋ ?a ŋ	'There is a little water.'
mijí nu dateeŋ ?a ŋ	'There is a lot of water.'

12.8 The Plural Morpheme

In Okinawan, what may be called a plural construction is found only in the case of personal nominals. The free alternant /caa/ of the plural morpheme follows nominal

expressions like a quantitive:

dusi nu caa	'friends'
ʔuya nu caa	'parents'
ʔweeka nu caa	'kinfolks'

The entire construction however distributes as a general nominal. Examples:

waŋ dusi nu caa nu coo ŋ 'My friends have come.'

/caa/ occurs also as a bound form:

cuŋcaa	'people'
warabiŋcaa	'children'

Alternant /taa/ occurs when the /nu ~ ŋ/ element is lacking--which is in all cases following the moreme and the mute syllabic:

niisee-taa	'young men'
ŊŊjaa-taa	'spectators'
harusaa-taa	'farmers'
warabaa-taa	'kids'
fiicaasaa-taa	'firemen'(fire extinguishers)
kuqtaa	'they'(§11.52)

CHAPTER XIII

ADVERBS AND ADVERBIALS

Interrogatives /ʔíci/ and /cáa/(§11.3) can appear before intransitive verbs in endocentric constructions:

/<u>ʔíci</u> haca ga/	'When did he leave?'
/<u>cáa</u> haca ga/	'How did he leave?'

The same interrogatives may appear before object plus transitive verb constructions:

/<u>ʔíci</u> ʔiyú koóta ga/	'When did he buy the fish?'
/<u>caá</u> ʔiyu kada ga/	'How did he eat the fish?'

This structural spot before the verb is the domain of the adverb. Adverbs responding to /ʔíci/ are temporal; those responding to /cáa/ are modal. The most important types of adverbs, including these, will be seen.

13.1 Temporal Adverbs

The following are examples of temporal adverbs:

<u>cáa</u> kamu ŋ	'He is <u>always</u> eating.'
<u>yuú</u> kamu ŋ	'He eats <u>often</u>.'
<u>feeku</u> kamu ŋ	'He eats <u>early</u>.'
<u>kiqsa</u> kada ŋ	'He <u>has just</u> eaten.'
<u>niqka</u> kamu ŋ	'He eats <u>late</u>.'
<u>fiqcii</u> kamu ŋ	'He eats <u>all day</u>.'

A system of temporal deictics for days, months, and

years exists:

'day' /fíi/	'month' /cici/	'year' /tusi/	Gloss of Latter
wuqtii	--	ŋ̊cu	'year before last'
cinuu	kutácici	kuju	'last year'
cuu	kuŋ̊cici	kuŋdu	'this year'
ʔaca	tacici	yaaŋ	'next year'
ʔasáti	--	naaŋcu	'year after next'

The above deictics are temporal adverbs, as shown in the following examples:

cuu ʔicú sa	'I'm going today.'
kutácici sisi kamaŋ	'I didnt eat meat last month.'
kuju ʔŋjá ŋ	'He went last year.'

All temporal deictics can be used in the referential, with certain relationals, and with the subordinating particle:

ŋŋcoo fiisata ŋ	'It was cold year before last.'
yaaŋ kara sú sa	'I'll do it from next year on.'
cuu nu tiŋ̊cee waqsa ŋ	'The weather is bad today.'

Other temporal adverbs vary in their ability to share these additional spots.

13.2 Modal Adverbs

Temporal adverbs are often directly elicited by a question. A modal adverb is much more often volunteered. However, the latter may be defined as a word which is acceptable in the following spot:

cáa)-1-(ʔ	'How did he ____ ?'
____)-1-(.	'he ____-ed (modal).'

Examples of modal adverbs:

yuú hanaca ŋ	'He spoke well.'
yooŋ́naa hanaca ŋ	'He spoke slowly.'
feeku hanaca ŋ	'He spoke fast.'
haqkiri hanaca ŋ	'He spoke clearly.'
kuwasiku hanaca ŋ	'He spoke in detail.'
sikaq́tu hanaca ŋ	'He spoke accurately.'
suruq́tu haca ŋ	'He left stealthily.'

13.3 Locative Adverbs

The form-class of locative adverbs is a frequently occupied one--but by constructions rather than words. Such constructions are seen below.

13.4 Quantitive Adverbs

Certain quantitives are used as adverbs of quantity:

yuú határaca ŋ	'He worked much.'
ʔufóoku határaca ŋ	'He worked a lot.'
ʔuq́sa cigáyu ŋ	'It differs that much.'
ʔifee niŋ́ta ŋ	'He slept a little.'
mi-kéeŋ ʔŋjá ŋ	'He went three times.'

13.5 Further Classes of Adverbs

It is possible by framing the proper questions to elicit classes of adverbs of condition, extent, probability, and so on:

Condition:

majúuŋ haca ŋ	'They left together.'

Extant:

teegee ʔuwáta ŋ	'He finished it for the most part.'

Probability:

kaŋ́naji ʔicú ŋ	'He's going without fail.'

Other adverbs, which do not respond to a question expression, are unclassified:

naa ʔicú ŋ	'I'll be going now.'
máta ʔicú ŋ	'I'm going again.'
naada ʔikáŋ	'I havent gone yet.'

13.6 Adverbials

Any syntactic construction which occupies the adverb slot is an adverbial. Perhaps the most common type of adverbial is a head plus relational construction. This and other types are shown below.

13.61 Temporal Adverbials

Relationals /ni/ 'in, at', /kara/ 'from, since', /madi/ 'till, up to', and less frequently a few other relationals may stand in construction with heads of the following kinds in temporal adverbials:

1. temporal nouns
2. temporal deictics
3. temporal names
4. temporal counters
5. P'

Examples:

1.	nací madi	'until summer'
	mee ni	'previously'
2.	namá kara	'henceforth'
	naaŋcu madi	'till year after next'
3.	siwaasi kara	'from December'
4.	juu-ji madi	'till ten o'clock'
5.	ʔŋmáriti kara	'since he was born'

Temporal adverbials may be constituted by deictic attributive plus temporal noun:

kunu guru[1]	'nowadays'
kunu mee	'formerly'
kunu tusi	'this year'
kunu ʔatu	'later'
kunu ʔuci	'during this time'

13.62 Modal Adverbials

Modal adverbials are often of nominal plus relational or deictic attributive plus nominal construction:

jiŋjuu ni	'with rigor'
ʔaʔta ni	'suddenly'
kunu gutusi	'in this way'
kunu mama	'in this same way'

13.63 Locative Adverbials

Interrogative /máa/ 'where' constructs with certain relationals to form locative adverbials. Replacives of such constructions are likewise locative adverbials:

maá kayi ʔicú ga	'Where (to) are you going?'
suyi kayi ʔicú ŋ	'I'm going to Shuri.'
maá kara coota ga	'Where did it come from?'
yamatu kara coo ŋ	'It has come from Japan.'
suu ya yaa ŋkáyi wúŋ	'Father is in the house.'

13.64 Further Classes of Adverbials

Adverbials of condition, extent, probability, and of other definable classes may be set up by interrogatives:

nuú qsi cukutee ga	'What is it made out of?'
kaa qsi cukutee ŋ	'It's made out of leather.'

---

[1] /ʔúnu, ʔánu/ are also used. The toneme is usually dropped.

CHAPTER XIV

MINIMAL RESPONSES AND EXCLAMATIONS

Certain word-classes are typically non-syntactic. That is, they occur either as absolute utterances, or occupy a major clause slot. In the latter case, they are followed by attitudinals (Chapter XV) or by another major clause structure in parataxis. Such non-syntactic word-classes are minimal responses and exclamations.

14.1 Minimal Responses

Five types of minimal responses are found:

1) to calls
2) to polar questions
3) to orders or requests
4) to assertions
5) to "attention" signals within sentences[1]

Degrees of politeness are observed.

14.11 Call Responses

When a person is called (hailed), the response may be translated as 'yes(what is it)?'

fúu	'Yes?'	(respectful)
hóo	'Yes?'	(semi-respectful)
hí́i	'Yes?'	(familiar)

---

[1]An "attention" signal /yáa/(§15.33) means (in capsule form) 'are you listening?', 'do you follow me?', 'do you know?' or the like.

14.12 Polar Question Responses

ʔúu	'Yes.'	(respectful)
háa	'Yes.'	(semi-respectful)
ʔíi	'Yes.'	(familiar)
ʔŋ́ŋ	'Yes.'	(familiar)
wuuwúu	'No.'	(respectful)
yiiyíi	'No.'	(familiar)
ŋŋúŋ	'No.'	(familiar)

14.13 Request Responses

ŋ́ba	'No.'	(familiar)
bée	'No.'	(rude)

14.14 Assertion Responses

cée	'Is that so?'
masaka	'You dont say!'
ŋ́ca	'Really?'
ʔahéa	'Oh, I see!'

14.15 Attention-calling Responses

ŋŋ	'Yes. (I'm listening)'

14.2 Exclamations

14.21 Calls

ʔáyi	'Say!'
ʔyée	'Hey!, Say!'

14.22 Crys

ʔáa	'Ah!'
ʔóo	'Oh!'
háa	'Oh!' (surprise, and many other feelings)

14.23 Oaths(to oneself)[1]

haq́sami	'Oh my god!' (startlement, man speaker)
haq́saŋ	(same as above)
ʔagijabi	(same as above, but stronger)
ʔakísami	'Oh my goodness!' (woman speaker)
ʔaq́sami	(same as above)
ʔaq́kaa	'Ouch!'

14.24 Hortatives

díi	'Come on!'
diqkaa	'Come on!'
sári	'Excuse me!' (before an utterance)

Examples:

díi díi mudura	'Hey come on! Let's go back!'
diqkaa ʔíka	'Come on, let's go!'
sári, matee	'Excuse me! Wait!'

14.25 Expletives

dáa	'Well!, Hey!' (anger)
naa	'well', 'you know' (within sentence)
tóo	'Well!'
ʔyée	'Well,' 'You see,'
ʔŋji	'Tell me!'

Examples:

dáa! ʔarée neeŋ natoo sa	'Hey! It's lost!'
ʔurée, naa, yamatuguci yaŋ	'That, well, is Japanese.'
tóo! yudi maa	'Well, try and read!'
ʔyée! ʔaŋ́ ya mi	'Well, is that so!'
ʔŋji! caá ʔumuyu ga	'Say, what do you think?'

14.26 Ritual

kusukwee	'Bless you!' (for a sneeze)

---

[1]Okinawan oaths are quite mild. No analysis of any of the above sequences is forthcoming. In Shuri (it is reported) the particle /yoo/ (§15.21) invariably follows an oath.

CHAPTER XV

ATTITUDINALS

15.0 Clauses and Attitudinals

Consider sentences with the following three terminal characteristics:

a) independent predicative
b) dependent predicative with particle
c) copular nominal (§11.7)

Examples:

a) waqtaa ya kama 'Let's eat.'
b) ʔarí ga kamu ŋ 'He is eating.'
c) ʔarée yuú kamaa 'He's quite an eater.'

The above units, ending in major predicates, are called major clauses. Such clauses may be followed by particles which show the attitude of the speaker. These particles are called attitudinals, and they fall into four distributional orders as follows:

ATTITUDINALS

Orders:	(a)	(b)	(c)	(d)
	dee	yoo	náa	sayi
	doo		ya	tayi
	tee		yáa	
	ki			
	na			

Distribution of (d) order attitudinals and /yáa/ of (c) order is wider than for the others, as shown below.

In the column to the left of the examples, the pre-environment of items is indicated. 'N' indicates a nominal, 'ŋ' the predicate particle, and other indications are designators or the forms of particles themselves.

USE OF ATTITUDINALS

15.1 First Order Attitudinals (a)

15.11 /dee/

Force : Slight emphasis.
Follows : /ŋ/
Precedes: /yáa/

Examples:

ŋ	yuuji-saŋ nu coo ŋ dee	'Mr. Yuuji has come.'
(4--)	wakaraŋ dee[1]	'I dont understand.'
(¢--)	mayaa ya ʔaraŋ dee	'It's not a cat.'
N	warabi dee	'He's a child.'

15.12 /doo/

Force : As /dee/, but stronger.
Follows : /ŋ/, N
Precedes: /yáa/

Examples:

ŋ	náma cuu ŋ doo	'Now he's coming!'
ŋ	cee ŋ doo	'He has come!'
(4--)	yurusaŋ doo	'I wont permit it!'
N	kúnu fuyaa guu doo[2]	'These shoes are a pair.'
ŋ	ʔukaasa ŋ doo	'It's dangerous!'

15.13 /tee/

Force : 'I think'
Follows : /ŋ, N/
Precedes: ____

Examples:

ŋ	cee ŋ tee	'He has come I think.'
ŋ	turaqtee ŋ tee	'It has been taken I think.'

---

[1] Predicate particle /ŋ/ is "structurally" present(§18.B).
[2] /doo/ often replaces /yá ŋ/ in the colloquial.

15.14 /ki/

Force : Suasive.
Follows : Negative, or Negative Imperative.
Precedes: /yoo, ya/

Examples:

4--	kamaŋ ki	'Dont eat it !'(advice)
--9'	kamuna ki	'Please dont eat it !' (entreaty)

15.15 /na/

Force : Mild hortative.
Follows :)--8(
Precedes: /yáa/

Examples:

--8	ʔaŋ sa na	'Let's do like that.'
--8	ʔifee yukura na	'Let's rest a little.'

15.2 Second Order Attitudinals (b)

15.21 /yoo/

Force : Exclamatory emphasis.
Follows : ŋ, N, Imp., Neg. Imp., /ki/, Oaths
Precedes: /yáa/

Examples:

ŋ	ʔicú ŋ yoo	'I'm going.'(determination)
N	ʔarée yinu máŋ yoo	'That's the same thing!'
--9	soó ʔirí yoo	'Pay attention!'
--9'	suná yoo	'Dont do it!'
ki	suná ki yoo	'Please dont do it!'
ki	numaŋ ki yoo	'Dont drink!' (warning)
	ʔagijabi yoo	'Damnation!'

15.3 Third Order Attitudinals (c)

15.31 /naa/

Force : Question.
Follows : ŋ, N
Precedes: ____

Examples:

ŋ	numu ŋ naa	'Does he drink?'
ŋ	numuraŋ naa	'Cant you drink it?'
N	wiqcu naa	'Is he a drunkard?'

15.32 /ya/

Force : A degree of politeness.
Follows : Imperative, Gerund, /ki/.
Precedes: ___

Examples:

--9	turee[1]	'Take it!'
Ger.	yuku na kwaqcii yasée	'That is all the more good/ food.'
ki	ʔibaraŋ kee	'Dont be proud!' (counsel)
ki	ʔarée ʔiná kee	'Dont say that!' (entreaty)

15.33 /yáa/

Force : Requests response.
Follows : Any Junction greater than 5(§5.46-8).
Precedes: (d) /sayi, tayi/

Examples:

ŋ	kamu ŋ yáa	'He's eating, isnt he?'[2]
ŋ	yaasa ŋ yáa	'He's hungry, isnt he?'
ŋ	nee nu yuta ŋ yáa	'There was an earthquake, wasnt there?'
sa	ʔicú sa yáa	'He's going, isnt he?'
kutu	wutayu kutu yáa	'It's because you're tired, isnt it?'
siga	ʔicu siga yáa	'(But) I'm going, you know?'
ga	ʔicú ga yáa	'I wonder if he'll go?'
ga	nuu nu cimu yá ga yáa	'I wonder what the idea is?'
nu	ʔukaasa nu yáa	'It's dangerous, isnt it?'
N	yuubiŋ yáa	'It's the mail, isnt it?'
Nga	taámuŋ ga yáa	'I wonder whose it is?'
--7	kusuyi caá mumi yáa	'Always taking medicine, arent you?'
-7-	caá kusuyi nudi yáa	'You take medicine so often, dont you?'

---

[1]This /ya/, classified with the Attitudinals, undergoes the same morphophonemic change as Referential /ya/(§10.312).

[2]This is the "isnt he" with falling pitch.

--8	yirá yáa	'Let's sit down, okay?'
4-8	ʔikaŋtara yáa	'I wonder if he didnt go?'
-18	muru kadara yáa	'I wonder if he has eaten it all?'
1-8	taruu ga ga ʔicúra yáa	'I wonder if it is Taruu who is going?'
2-8	niŋtoora yáa	'I wonder if he is sleeping?'
--9'	matee yáa	'If only he would wait !'
-19'	yudaree yáa	'If only I had read it!'
(a)		
dee	ʔarée haca ŋ dee yáa	'Say, he left, didnt he?'
na	ŋŋda na yáa	'Let's look, shall we?'
(b)		
yoo	ʔuduruci ŋ suná yoo yáa	'Dont be frightened, there!'

15.4 Fourth Order Attitudinals (d)

/sayi/ (male speaker)
/tayi/ (female speaker)

Force: Very polite, and indicates sex of speaker.
Follows : Vocatives[1]
Exclam: /díi, tóo, ʔyée/
Pred. Pcls: /ŋ, sa, mi, ga/
Attitud. (c) /ya, yaa/

Examples:

N	taarii sayi	'Father !' (son calling)
N	taarii tayi	" (daughter calling)
	dií sayi	'Come on !'
	toó sayi	'Well !'
	ʔyeé sayi	'Haloo !' , 'Hey !'
ŋ	niʔka niŋta ŋ sayi	'You slept late.'
sa	yuú seé sa sayi	'You did well !'
mi	ʔaŋ yayíbii mi tayi	'Is that so?'
ga	caá yayíbii ga tayi	'How are you?'
--8	guburii sábira sayi	'Excuse me !'
ya	yi-míseebiree tayi	'Please be seated.'
yaa	ʔaŋ yá sa yáa sayi	'That's so, isnt it.'

[1]Any nominal used as a call is a vocative.

CHAPTER XVI

LIMITED NOMINALS

The nominal category was introduced in Chapter XI, with the important word-classes and sub-classes of general nominals discussed. In this chapter are considered two types of word-classes: Those whose distribution is nominal in one direction and verbal in the other, and word-classes which occupy a very limited number of noun slots (§11.1) without having any other distribution. These classes are indiscriminately called limited nominals and include:

1. Participles
2. Attributive heads
3. Adverbial heads
4. Predicative nuclei
5. Attributive adjuncts

16.1 Participles

The verb as a word-class includes the "dependent verbs" (with final designator digit less than 5) only. Participles, whose designator ends in a digit 7 or 9, do not fall into the distributional class of the verb except insofar as their pre-environment is concerned. Post-environment of Actual and Completive Participles is like that of the nominal to a certain extent as seen below. (Letters of the examples follow noun distribution of §11.1.)

P as Initial Component with:

a)	káci ga súra	'I wonder if he will win?'
b)	--	
c)	kacée sú ŋ	'As for winning, I'll win.'
d)	kací du su-ru	'He is winning(definitely).'
e)	káci ŋ saŋ́ muŋ	'He's not winning at all!'

P' as Initial Component with:

a)	kaq́ci ga wúra	'I wonder if he is winning?'
b)	--	
c)	--	
d)	kaq́ci du wú-ru muŋ	'He is winning indeed.'
e)	kaq́ci ŋ naraŋ	'It is impossible to win.'
f)	kaq́ci ga ʔwií ŋkáyi	'Besides having won, '
g)	kaq́ci kara,	'After having won, '
j)	kaq́ci kwiri	'Please win!'

In consideration of their nominal post-environment, P and P' are considered as classes of limited nominals.

The case of the Unreal Participle is not decisive. It functions as Imperative (a predicate), and as such can take the attitudinal /ya/. The only other distributional item for P" is that it can stand in a nominal construction of a type (§22.46). It is convenient to consider P" as a further type of limited nominal, grouped with the other two participles.

16.2 Attributive Heads

It was seen in §10.1 how nominals form attributive phrases with particles. There are lists of forms which occur in attributive phrases with /nu/ and /na/ respectively which show little or no activity elsewhere. They

are called attributive heads:

Attributive Heads with /nu/

camísika nu yaŋmee	'so slight a sickness'
jimama nu warabi	'a selfish child'
kaáma nu sima	'a distant island'
ʔweeki nu qcu	'rich person'
taŋ́kaa nu yaa	'the house opposite'

Attributive Heads with /na/[1]

deeji na kutu	'a terrible thing'
kají́ na muŋ	'a tough person'
kaŋ́nuu na muŋ	'an important thing'
ʔifúu na nigee	'a strange request'

16.3 Adverbial Heads

Many modal and other adverbials are constructs of general nominals with relationals /ni/ or /tu/. In some cases the head is not a general nominal, but falls in the class of attributive heads above. If however the item falls into no other class, it is an adverbial head:

sipúu tu ŋdítoo ŋ[2] 'He is drenched to the skin.'

16.4 Predicative Nuclei

16.41 Facitive Nuclei

Constructions of general nominal plus /S-*/ 'do' are frequent:[3]

fudii	'lightning'
fudii sóo ŋ	'It is lightening.'

---

[1]Many items of this class construct with the copula:
/deeji yá sa/ 'That's terrible!'

[2]/ŋdíX-/ 'get wet', /tu/ '-ly', /sipúu/ 'drenched'

[3]See Facitives in §22.62.

Such expressions occur also with a nuclear form not found elsewhere:

maá sóo ŋ	'He is dying.'
fin sú ŋ	'He is intractable.'
guuni sú ŋ	'He limps.'
ʔnjáni sú ŋ	'He stammers.'
ʔooɋteeŋ sóo ŋ	'It is nice and green.'[1]

Words with the limited distribution of /maa/, /fin/, etc. are limited nominals of the facitive nuclei class.

16.42 Copular Nuclei

Certain forms appear in construction with the copula (and its equivalents), but not otherwise:

ʔicú-see masí yá ŋ	'It is better to go.'
ʔicú-see masí doo[2]	" " " " "
ʼicú-see másí[3]	" " " " "

Such forms are limited nominals of the pre-copular class.

16.5 Attributive Adjuncts

Constructions of attributive plus nominal have been seen in §8.41 and §10.1. Similar constructions occur where the head following the attributive has no other distribution:

cuu-ru háji[4]	'He will probably come.'
numutee-ru háji	'He probably drank.'
yaaku natoo-ru háji	'They are probably becoming hungry.'
kamu-ru nee soo ŋ	'He feels like eating.'

---

[1] Gratitives (§8.311) are all in this class.

[2] See p. 124, nt. 2.

[3] See §11.7.

[4] /háji/ 'probability'.

CHAPTER XVII

RESIDUE OF WORD-CLASSES

A number of word-classes of small membership have not yet been identified. These residual classes are now taken up.

17.1 Absolute Attributives

There are forms which appear in attributive construction before nominals, and in no other position:

finsuu muŋ	'poor person'
niwáka ʔami	'sudden shower'
yaná naraasi	'bad instruction'
yinu muŋ	'the same thing'
yií qcu	'good person'

All items as defined constitute a word-class of absolute attributives.

17.2 Pre-Statives

There is a list of items which precede words based on stative roots--and also absolute attributives--in endocentric constructions. Examples:

ʔarée duku furuu	'That's too old.'
duqtu fiisa ŋ	'It's extremely cold.
joovi tuúsa ŋ	'It's much farther.'
nanju yií náa ʔaraŋ	'It's not such a good name.'
ʔaga feesa ŋ	'So early!'
ʔaŋsi gumasa-ru	'So small!'
ʔaŋsuka gumasa-ru funi	'Such a small boat!'
ʔiqpee gumasa ŋ	'It's very small.'

The above items belong to a class of pre-statives.

17.3 Pre-Quantitives

There is a small class whose slot precedes the quantitive in endocentric construction:

naa	'more, again, in addition'
teegee	'approximately'
wajika	'scarcely, hardly, barely'
yaku	'about'

Examples:

naa cukee ʔyée	'Say it once more.'
teegee ni-ri natoo ŋ	'It's about two ri.'
wajika mi-kúu ʔa ŋ	'There are only 3(eggs).'
yaku ni-siŋ-yiŋ nayu ŋ	'It amounts to about 2000 yen.'

17.4 Post-Nominals

There is a small class whose slot follows the nominal:

bikee	'only, about, in the amount of'
cooŋ	'even'
nagii	'more or less'
naa	'to each one'
ŋdee	'and such, etcetera'

Examples:

winagu bikee du wu-rú yi	'Are there only women?'
tamagu tu-kúu bikee kwiree	'Give me about ten eggs.'
cu-tu tá-tu cooŋ matariyi ya sáni	'Cant you wait even a year or two?'
ʔasáti nagii madee keeraŋ	'I wont leave until the day after tomorrow, more or less.'
jiŋ ʔifi naa kwiree	'Give each a little money.'
ʔarée sumuci ŋdee ʔuyú ŋ	'He sells books and such.'

17.5 Nominal Particle Residue

17.51 Comparative Particle

Endocentric constructions of nominal plus the comparative particle /yaka/ form a minor clause. The referential may be used for emphasis:

suyi yaka naafaa firusa ŋ 'Naha is larger than Shuri.'

koofii numu-si yakaa, ʔuca numu-see masí yá ŋ 'It is better to drink tea than coffee.'

17.52 Conjunctive Particles and Constructions

1. Additive Particles

Zero, /tu/ and /ya/ function as additive conjunctives between nominals. Zero is used for certain pairs of items, as for example /taa hataki/ 'paddies and fields', /tii fisa/ 'arms and legs', /kusa hana/ 'grass and flowers':

kuŋdoo, taa hataki nu mujukuyee ʔikirasa ŋ 'This year the crop yield of paddies and fields is scanty.'

/tu/ is used in an exclusive listing, /ya/ in a non-exclusive listing:

kurée ʔucinaa tu yamatu ŋkáyi cukurariyi ŋ
kurée ʔucinaa ya yamatu ŋkáyi cukurariyi ŋ
'This is made in Okinawa and Japan.'

Use of /tu/ infers that the list cannot be extended; use of /ya/ does not so infer.

/tu/ is used also in a tandem syntactic construction:

saaru tu mayaa tu ʔoota ŋ[1] 'The monkey and the cat fought.'

kúri tu ʔári too, cigátoo ŋ 'This and that are different.'

---

[1]Distinguished from relational use of /tu/:
/saaroo mayaa tu ʔoota ŋ/ 'The m. fought with the c.'

2. Alternative Particle

The alternative particle /yatiŋ/ is always used in tandem construction:

koofii yatiŋ, caa yatiŋ numu mi	'Do you drink coffee or tea?'[1]

17.6 The Quotative Particle

There is a particle /ŋdi/[2] which may follow in construction with any utterance structure. Since an utterance is anything a person may choose to say, or may inadvertently say, there is no theoretical limit to what may stand in construction with /ŋdi/.[3] In the ordinary course of speech, however, the structures which are found as heads with the quotative particle, called quotes, are sentence structures of various types. Quote plus the particle is the objective quotative construction. Examples (with quotes underlined):

waŋnee, figa ŋdi ʔyú ŋ	'My name is Figa.'
kurée, wuuki ŋdi ʔyú ŋ	'This is called 'wuuki'.
neeraŋ di ʔumutoo ŋ	'I dont think there is any.' (There isnt any--I think.) too.'
waŋni ŋ ʔaŋ di ʔumutoota ŋ	'That's what I was thinking/
muru tuti kwiree ŋdi ʔicáŋ	'Please take it all--he said.'
mijí nu siwáa neeŋti ŋ simu ŋ di ʔiraqtoo ŋ	'There is no need of worrying about water--it is said.'
ʔaŋsuka gumasa ŋ dee ʔumuraŋta ŋ	'I didnt think it was so small.'

---

[1]Final intonation of the English gloss is rising. If pitch falls on 'tea', Okinawan is:
/koofii numu mi; caa numu mi/

[2]Following /ŋ/, the alternant /di/ appears.

[3]Any speech fragment, imitation of animal crys, etc.

The quotative particle with its preceding quote occur in constructions with non-final forms of /ʔí3-/ ~ /ʔY-*/,[1] often involving contraction. The following are frequent:

Form	Construction	Contraction
1. Attributive	ŋdi ʔiyú-ru	ŋdiru
	ŋdi ʔicóo-ru	--
2. Gerund:	ŋdi ʔiyú-si	ŋdisi
3. P' :	ŋdi ʔíci	ŋdici, ŋci
4. Long Appurt:	ŋdi ʔyaáni	--
5. Situational:	ŋdi ʔíyi nee	ŋdii nee

Examples:[2]

1. Quote in Attributive Construction

waŋnee /yuuji ŋdiru/ qoú yáŋ 'I am a person called Y.'

/kamaraŋ di ʔicóo-ru/ fuúji yá ŋ — 'It seems they are saying they cant eat it.'

/sinu ŋ diru/ kutoo cimu naraŋ kutu yá ŋ — 'The thing of dying is hard to face.'

2. Quote in Gerund Construction

ʔyaá ya /busí ŋdisi/ du yá-ru yi — 'Do you call yourself a samurai?'

/A ŋdisee/, B nu kutu — 'An A is a B.'

/A ŋdisee/ wakaraŋ saa — 'I dont understand A.'

3. Quote in P' Construction

/ʔisa nayu ga ŋci/, yamatu kayi ʔŋjá ŋ — 'He went to Japan for the purpose of becoming a doctor.'

/biŋ dici/ yumu ŋ — 'It is read 'bin'.'

[1]Irregular conjugation of /ʔí3-/ (/ʔY-*/) 'say' is found on p. 74.

[2]Quotes are underlined, constructions in slants.

4. Quote in Long Appurtenant Construction

/niŋ́dee ŋdi ʔyaáni/ haca ŋ 'Saying "Goodnight!" he left.'

5. Quote in Situational Construction

/ʔurasii-gusiku ŋdii nee/ nadákee tukuma ya ŋ	'Urashii Castle is a famous place.'
/nuúŋci ga ŋdii nee/[1] miči nu tuŕsa kutu	'The reason is because the way is far.'
/waa ga yamatu-guci wakaraŋ dii nee/	'As for my not understanding Japanese,'
/yama ŋdii nee/ kii mu ʔufóoku ʔaq-tukuru	''Yama' is a place with lots of trees.'

17.7 Introductory Conjunctions

Certain forms appear sentence initially, before complete clause structures, usually before a pause, and indicating a relationship between the following sentence structure and something preceding. Examples:

jicée	'as a matter of fact'
máta	'moreover', 'also'
músi	'if'
naree[2]	'if possible'
taturee	'for example'
tutiŋ	'indeed'
yasíga[3]	'however'
yaqpari	'really'
ʔatayimee	'naturally', 'of course'

Examples:

jicée, mee ya yuú ʔicúta ŋ	'As a matter of fact I used to go often.'
músi, waa ga ʔyáa yarée,	'If I were you,'

---

[1] 'If you say "Why?"'

[2] From /naX-/ 'be possible'

[3] Copula with predicate particle /siga/: 'it is but'

TABLE 19

WORD CLASSES

Gp.	No.	Class Name	Page	Example	Gloss
I.	1.	Verbs	128	tuyu	'take'
	2.	Statives	128	fiisa	'is cold'
	3.	Essives	128	yá	'is'
	4	Predicates	90	tura	'Let's take.'
II.	5.	Nouns	101	yaa	'house'
	6.	Pronouns	102	kúri	'this(thing)'
	7.	Names	102	ʔaŋ́poo	'Ampo'
	8.	Interrogatives	102	núu	'what?'
	9.	Quantitives	108	taáci	'two'
	10.	Participles	128	tuyi	'taking'
	11.	Attributive Heads	129	kaáma	'distance'
	12.	Adverbial Heads	130	sipúu	'drenched'
	13.	Predicative Nuclei	130	guuni	'lameness'
	14.	Attributive Adjuncts	131	háji	'probability'
III.	15.	Deictic Attrib.	96	kúnu	'this'
	16.	Pred. Attributives	87	fiisa-ru	'cold'
	17.	Absolute "	132	fiŋsuu	'poor'
IV.	18.	Predicate Particles	90	sa	(assertion)
	19.	Subordinating "	95	nu	'of'
	20.	Relational "	96	ŋkáyi	'at', 'to'
	21.	Aspectual "	98	ya	'as to'
	22.	Attitudinal "	123	yáa	'isnt it so?'
	23.	Comparative "	134	yaka	'than'
	24.	Conjunctive "	134	tu	'and'
	25.	Quotative Particle	135	ŋdi	("__")
V.	26.	Minimal Responses	120	ʔúu	'yes'
	27.	Exclamations	121	tóo	'well!'
VI.	28.	Adverbs	115	caa	'always'
	29.	Pre-Statives	132	ʔiq́pee	'very'
	30.	Pre-Quantitives	133	naa	'more'
	31.	Post-Nominals	133	naa	'to each'
	32.	Introductory Conj.	137	yasíga	'however'

Note: The above table contains all word-classes which have been isolated. Reference is given to the page on which distribution of the particular class was dealt with. Word-classes are placed in six groups as follows:

I. Predicative Category
II. Nominal Category
III. Attributive Category
IV. Particle Category
V. Utterance Word Category
VI. Miscellaneous Word Classes

CHAPTER XVIII

MORPHOPHONEMICS

The presentation has been so far as possible in terms of items and distribution up to this point. In this chapter the descriptive device of process is used in dealing with morphophonemic changes. The following twelve types of such changes are dealt with. All except 6, 9, 10 and 12 are assimilative.

1. Softening
2. Shortening
3. Palatalization
4. Smoothing
5. Syllabication
6. Desyllabication
7. Haplology
8. Crasis
9. Lengthening
10. Vocalic Opening
11. Cancellation
12. Metamorphosis

18.1 Softening

Softening (§1.31) refers to the phenomenon of alternation between morphs whose initial consonant is hard or soft, depending on whether it falls word-initially or word-medially. When such soft morphemic alternants exist, they appear after second order junction(§5.42). Rules of selection of such "soft alternants" are not rigid, as shown by the exceptions included in the list of examples.

18.11 Examples of Softening

/f-h	b/:[1]	fáa	'leaf'	waka-baa	'young leaf'
		fíi	'day'	yukuyi-bii	'rest day.'
		funi	'ship'	yamatu-buni	'Japanese s.'
		haa	'tooth'	mee-baa	'front tooth'
		háku	'box'	kará-baku	'empty box'
	(but:			ʔoo-faa	'greens')
/hy	by/:	hyaaku	'100'	saŋ-byaku	'300'
	(but:			yuŋ-hyaku	'400')
/t	d/:	tama	'jewel'	marú-dama	'jewel circle'
		taara	'sack'	saataa-daara	'sugar-sack'
		tii	'trough'	ʔama-dii	'rain trough'
		tuci	'time'	tuci-duci	'sometimes'
	(but:			magá-tama	(a bead))
/c	j/:	caa	'tea'	katá-jaa	'strong tea'
		cíi	'hook'	ʔiyú-jii	'fish-hook'
/s	j/:	sáki	'wine'	kumi-jaki	'rice wine'
		saataa	'sugar'	naaku-jaataa	'Miyako s.'
		sisi	'meat'	ʔaŋda-jisi	'fat meat'
		seeku	'carpentar'	mucí-jeeku	'mason'
	(but:			ha-sisi	'gums')
/k	g/:	káni	'metal'	ku-gáni	'gold'
		kaa	'skin'	mii-gaa	'eyelid'
		kaára	'river'	tiŋ-gaara	'Milky Way'
		kii	'tree'	ʔadani-gii	'adan tree'
		kúci	'mouth'	ʔucinaa-guci	'Okinawan'
/kw	gw/:	kwee	'compost'	miji-gwee	'night soil'
		kwée	'adze'	tuŋ-gwee	'adze'

[1]Note that hard labials /p/, /py/ never occur in the basic morpheme, but only as replacements of /f-h/, /hy/ after a syllabic: /hána/ : /ŋpana/ 'nose'
/ruq-pyaku/ '600'

18.2 Shortening

When certain pairs of free and bound alternants of morphemes are compared, the bound alternants are found to be shorter, by either a moreme or a short syllable. This phenomenon is confined to some of the more basic items of the noun class in general.

18.21 Moreme dropping takes place after a prime vowel, as in the following examples:

Form	Bound Fms.		Gloss	Example	Gloss
caa	ca-	-ca	'tea'	ca-dee	'tea stand'
				ʔu-ca	'tea'(polite)
cii	ci-	-ci	'spirit'	ci-buŋ	'feeling'
				kuku-ci	'disposition'
fii	fi-		'fire'	fi-baci	'brazier'
haa	ha-	-ba[1]	'teeth'	ha-sisi	'gums'
				ʔirí-ba	'false teeth'
suu	su-	-su	'father'	su-nu-mee	'father'(polite)
				ʔu-su	" "
haaci	haci-	-baci	'bowl'	haci-ʔwii	'potted plant'
				fi-baci	'brazier'
naaka	-naka-		'middle'	naka-ba	'middle'
				yu-naka	'midnight'
tiida	-tida-		'sun'	ʔu-tida	'sun'(polite)
taaree	-daree		'basin'	kana-daree	'metal basin'

[1]Here and elsewhere, the non-initial morpheme alternant exhibits softening.

18.22 Syllable dropping is found in a short list of nouns of frequent use:

Form	Bound Fms.	Gloss	Example	Gloss
cici	ci- -ci	'soil'	ci-kata	'nature of soil'
			ʔakí-ci	'open area'
kutu	ku-	'thing'	ku-duci	'account'
kukuru	kuku-	'heart'	kuku-ci	'feeling'
saku	-sa	'amount'	caq-sa	'how much?'
tusi	-tu	'year'	cu-tu	'one year'
ʔísi	si-	'stone'	si-jiri	'ink stone'
ʔcu	cu- -cu	'person'	cu-ŋcaa	'people'
			ʔaŋ́-cu	'he', 'she'

18.23 The Truncate (from P of clear conjugations)(§8.21), may be considered a case of syllable dropping. It occurs:

a) as base for Appurtenant (§8.23)
b) as base for Situational (§8.43)
c) as predicate construction nucleus with respectful auxiliary verb

Only in the case of (a) is the Truncate a free form. For use (c), see §19.4, page 160.

18.24 As an exceptional case, the irregular Y-theme of the verb /ʔi3-/'say' is explicable as moreme drop in a short syllable:

/ʔiyú ŋ/ : /ʔyú ŋ/ 'he says'

18.3 Palatalization

Phenomena of palatalization of several kinds have been noted in the course of the description.[1] These are different

[1] §3.74, §6.5.

manifestations of a general pattern of palatalization in the language. Of these, the morphophonemic processes may be itemized as follows:

1. Verb inflectional suffix I.1 of clear conjugations: /yu/ → /yi/
2. In verb derivational suffix O: /ya/ → /yi/
3. /k/ → /c/: /kii ~ -ci/ 'tree, wood'
   /kábi ~ -cabi/ 'paper'
4. /g/ → /j/: /-gii ~ -ji/ 'tree, wood'
   /-gii ~ -ji/ 'fur, hair'
5. /t/ → /c/: /caa ~ -taa/ (plural morph)
   /cu- ~ tii/ 'one'

18.4 Smoothing

Smoothing is defined as the loss of a liquid (/y/ or /r/) or of a glottal stop between two short vowels, with modification of the quality of the first vowel if it differs from the second, and with replacement of the second vowel by the moreme. Occurrence is defined in terms of morphological or syntactic environment:

18.41 /iyi/ → /i:/

The sequence /-iyi/, usually brought about by palatalization, is often reduced to /i:/ in the colloquial:

Cj. 3: ciyí ŋ → cí ŋ 'he wears'
Cj. 5: ciyi ŋ → cii ŋ 'he cuts'
C)1--(tuyibiyi ŋ → tuyibii ŋ 'he takes'

18.42 /ara/ → /a:/

/kwáX-/ 'eat'

)4—(kwaRáŋ → kwáaŋ 'not eat'

A)--7(*kwaRáSi → kwaáSi 'causing to eat'

/cikáX-/ 'use'

B)--7(*cikaRáriYi → cikaáriYi 'being used'

/waráX-/ 'laugh'

B)--7(*waraRáriYi → waraáriYi 'being laughed at'

18.43 /aʔa/ → /a:/

/tida-/'sun' /ʔami/ 'rain'

→ /tidaami/ 'sun shower'

18.44 Smoothing with Vowel Change

Smoothing with vowel change occurs in various situations, with the following results:

a + i, i + a → e:
u + i → i:
u + a → a: , o:

It is noted that the first three morphophonemic changes in the referential (§10.312) are smoothing. The change involving the nasal syllabic is dealt with below. (§18.6/3)

Further examples of smoothing with vowel change:

1. In Noun Appurtenants

P	Appurt.	Gloss
warayi	waree[1]	'laugh'
nigayi	nigee	'request'
kwáyi	kwée	'feeder'

[1]This usually occurs when P has /-ayi/ final.

2. In Copula (Polite form)

yayibii ŋ → yeebii ŋ 'it is'

3. In certain Passives

ʔumuX- 'think, opine'

B)--7(*ʔumuRariYi

→ ʔumaariYi 'being thought'

18.45 Glottal Stop plus Nasal Syllabic Smoothing

In cases where smoothing involves a /ʔŋ/ syllable, the only effect is loss of the glottal stop:

yama + ʔŋmu → yamaŋmu 'yam'(mountan potato)

ʔufu + ʔŋŋmee → ʔufuŋmee 'great grandmother'

18.5 Syllabication

Syllabication is defined as the replacement of a normal syllable by a syllabic--either mute(q), or nasal (ŋ).

18.51 Mute Syllabication

In certain morphologically definable circumstances, a short syllable preceding a hard consonant changes to /q/. The initial C of the affected syllable is either hard or liquid, and the vowel is high. Examples:

1. Of the Attributive Suffix (§8.41)

ʔicú-ru + tukuru → ʔicu-q́-tukuru 'the place where he goes'

ʔicoó-ru + tukuru → ʔicoó-q-tukuru 'the place where he is going'

2. In T-Themes

There are two Cj. 1 verbs, /firíX-/ 'pick up' and /ʔiríX-/ 'insert', whose T-themes always undergo

syllabication. The Passive T-theme does likewise:

)-l-(*firíTa → fiqTa 'picked up'

B)-l-(*turariTa → turaqTa 'was taken'

3. In Stative Roots

waru-	waq-sa ŋ	'it is bad'
gáru-	gaq́-sa ŋ	'it is light' (weight)
fisi-	fiq-sa ŋ	'it is thin'

4. In Verb Root (one example only)

/S-*/: waa ga sú sa ~ waa ga-q́-sa 'I'll do it.'

5. In Personal Deictic Plurals[1]

kuri + taa, *kuritaa → kuqtaa 'they'

18.52 Nasal Syllabication

In certain morphologically definable situations, a syllable /nu/ preceding any consonant except a glottal stop is replaced by the nasal syllabic. Further, a syllable /ru/ preceding a nasal or soft consonant may change similarly.

Examples of nasal syllabication:

1. Of Subordinating Particle /nu/

yamatu nu qcú ~	yamatuŋcu[2]	'a Japanese'
*qcú nu caa →	cuŋcaa	'people'
*winagu nu qkwá →	winaguŋgwa	'girl child'
*ʔacinee nu qcú →	ʔacineeŋcu	'businessman'

2. Of Subject Particle /nu/

ʔyaá ya siija ŋ wú mi 'Are you the eldest?'

---

[1] See Table 17, p. 105.

[2] In this and following examples, shortening may be considered to have taken place first.

3. In Negative Imperative Suffix

In the clear conjugations, the negative imperative undergoes nasal syllabication (§8.131):

Cj.	Y-Th.	Negative Imperative		Gloss
		Formal	Normal	
1	tuY-	turuna	tuŋna	'Dont take!'
3	ciY-	cirúna	ciŋ́na	'Dont wear!'
5	ciY-	ciruna	ciŋna	'Dont cut!'

4. Of /-ru/ before Soft Consonant

kaŋ du ya-ru — 'It's that way.'
kaŋ du yaŋ dee — " " " (with Attitudinal /dee/)

5. Of /-mi/ Final

The final syllable in a few Appurtenants of Cj. 10 undergoes syllabication:

P	Appurt.	P	Appurt.
yami	yaŋ	'hurting'	'ache'
tatami	tataŋ	'folding'	'mat'
hasami	hasaŋ	'pinching'	'scissors'

18.6 Desyllabication

In the course of syntactic processes, nasal syllabics become adjacent:

ciŋ + ŋ — 'clothes too'

On the phonemic level, the above cannot exist as a phrase (§2.1/1). In such cases as the above, the first of the two syllabics becomes /nu/. This is called desyllabication.

Examples of Desyllabication:

1. Of Nominal-final /ŋ/ before /ŋ/ Particle

ciŋ + ŋ → cinu ŋ 'clothes too'

2. Of Nominal-final /ŋ/ before Relationals

yiiŋ + ŋkáyi → yiinu ŋkáyi 'to the stoop'
ʔicumaŋ + ŋji → ʔicumanu ŋji 'in Itoman'
hyaku-niŋ + ŋkáyi → hyaku-ninu ŋkayi 'to 100 people'

3. In Connection with Smoothing

When a form ending in /ŋ/ takes the referential aspect, the following results:

kagaŋ + ya → kaganoo 'as for the mirror'
ciŋ + ya → cinoo 'as for the clothes'

In accordance with the preceding, it is assumed that the process here, analytically speaking, is:

ciŋ + ya ~ cinu + ya → cinoo

18.7. Haplology

In certain cases, internal liquid syllables (ra,ri,ya,yi) are dropped; this is called haplology.

Examples of Haplology:

1. Of /ra/ in Negative Essive[1]

Both full and reduced forms of the following essive are used, the latter being the more colloquial:

/neeraŋ/ (etc.) /neeŋ/ (etc.) 'there is not'

2. Of /ri/ in Passive Negative

turariyi → *turariraŋ → turaraŋ 'is not taken'
kamariyi → *kamariraŋ → kamaraŋ 'is not eaten'

[1]Table 14, nt. 2, p. 79.

3. Of /ya ~ yi/ in Polite Form of /neeraŋ/

neeyabiraŋ → neeyibiraŋ → neebiraŋ[1]
'there is not'

4. Of / yi/ in Polite Auxiliary /miseeYi/

miseeyi[2]ŋ	→	misee ŋ
miseeyita ŋ	→	miseeta ŋ
miseeyibiyi ŋ	→	miseebii ŋ

18.8 Crasis

In certain compounds, a VC sequence is lost: This is called crasis:

siru- 'white' ʔayi 'ant' sirayi 'termite'

sóo 'mind' ʔiríX- 'put in' Appurt: ʔiríyaa
'a "put-inner"'

*soo-ʔiríyaa → soó-ʔiraa
'one who puts his mind in'
(a clever person)

ʔiibi 'fingers'

*ʔiibi-ʔiriyaa

Shortening:	*ʔibi-ʔiríyaa	
Smoothing:	*ʔibiiríyaa	
Crasis:	*ʔibiiraa	
Shortening:	ʔibiraa	'a miser'

18.9 Lengthening

In certain compounds, a moreme is added to a short syllable. This change, which is morphologically determined, is called lengthening. It occurs more often finally than medially.

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[1]Page 81, note 1.

[2]See inflection of /miseeYi/ in Table 10, p. 74. The /yi/ is a I.1 suffix after palatalization.

Examples of Lengthening:

1. Final Lengthening

ʔáka-	+	maami	→	ʔaka-maamii	'kidney beans'
cura-	+	kaagi	→	cura-kaagii	'a beauty'
ʔísi	+	seeku	→	ʔisi-jeekuu	'stone mason'
ʔaŋda	+	ŋŋsu	→	ʔaŋda-ŋsuu	'oil bean-paste'
táa	+	-cu	→	taacuu	'twins'
caa	+	ʔiru	→	caa-ʔiruu	'tan'(color)

(/ʔiru/'color', with initial syllable-dropping)

ʔoó-	+	-ru	→	ʔoo-ruu	'blue-green'
fée	+	-ru	→	fee-ruu	'grey'(ash-colored)

2. Medial Lengthening

/kúci/ 'mouth', /fuCi/ 'blowing' /fucaa/ 'blower'

→ kuci-buucaa 'boaster'

/yaa/ 'house', /ʔuciYi/ 'moving'

→ yaa-ʔuuciyi 'moving'(ones abode)

/maasu/ 'salt', /kwée/ 'eater'

→ maasuu-kwee 'sea urchin' (lit. "salt-eater")

3. Double Lengthening[1]

/fuCi/ 'blowing', /fuucii/ 'bellows'

/yáCi/ 'burn', /yaacuu/ 'acapuncture'

18.A Vocalic Opening

A small number of nouns[2] ending in a high vowel have bound alternants which end in /a/ before second order junction:

funi	funa-	'boat'
kani	kana-	'metal'
sáki	saká-	'rice wine'
ʔami	ʔama-	'rain'

---

[1]Examples of double lengthening are few.

[2]Small as this list is, these nouns appear to be quite basic. A few other cases of this phenomenon could be cited.

18.B Cancellation

In §18.6, /ŋ/ was seen to desyllabicate under the structural pressure of clustering, thus maintaining the syllable of structure. Usually however when two syllabics are brought together by the syntax, the second one drops. This is called cancellation, and occurs in the following instances:

1. Predicate Particle /ŋ/ following I.4 or Negative Essive

1—.	tuyu ŋ	4—.	turaŋ ∅	'does not take'
1—.	kamu ŋ	4—.	kamaŋ ∅	'does not eat'
¢—.	yá ŋ	¢—.	ʔaraŋ ∅	'is not'

2. Of Initial /ŋ/ in Certain Items following Nominals[1]

ŋdee	→	dee	'and the like'
ŋdi	→	di	(quotative particle)

Examples:

cinu ŋdee ʔuyú ŋ	'He sells horns and the like.'
ciŋ dee ʔuyú ŋ	'He sells clothing and the like.'
ʔiká ŋdi ʔicá ŋ	'Let's go!' he said.
ʔikaŋ́ di ʔicá ŋ	'I'm not going,' he said.
ʔikaŋ́ sa ŋdi ʔicá ŋ	" " " " "

3. Of Syllabic in Predicate Particle /qsaa/

1—.	tuyu qsaa	4—.	turaŋ saa	'does not take'
1—.	kamu qsaa	4—.	kamaŋ saa	'does not eat'
¢—.	yá qsaa	¢—.	ʔaraŋ saa	'is not'

4. Of Mute Syllabic Initial of Nouns

kunú qou	:	kuŋ́cu	'this person', 'he/she'
kumá nu qoú	:	kumáŋcu	'this person here'
cuyi nu qkwá	:	cuyiŋgwa	'child alone', 'only child'

[1]Cancellation of aspectual particle /ŋ/ does not occur.

5. Of /q/ after /q/

Several irregular forms appear in the list of Gratitives (§8.311). Their irregularity is explained by cancellation:

gáru- + -qteeŋ, *garu-q́teeŋ

Syllabication: *gaq-q́teeŋ

Cancellation: gaq́-teeŋ 'nice and light'

Similarly with /fijuq́teeŋ/ and /yafaq́teeŋ/.

6. Of Moreme Cluster (See §18.C)

18.C Metamorphosis

In the example of §18.24, a type of syllable splitting may be assumed to have occurred preceding shortening:

*[?íyu → ?y + : + yu, - : = ?yyu → ?yú]

When such a split takes place accompanied by metathesis of the moreme[1], it is called metamorphosis. For example:

?u → ?w + :, + V = ?wV:

Most of the examples of this change result from the occurrence of a polite prefix morpheme /?u-/ before a form with initial /?V/. Smoothing occurs, then metamorphosis:

?u + ?iwe: → *?uiwe: → ?wi:we: 'celebration'

?u + ?acine: →*?uacine: → ?wa:cine: 'business'

If the process results in a moreme cluster, cancellation takes place:

?u + ?e:saci → *?ue:saci

→ *?we::saci → ?we:saci 'greeting'

---

[1]Whether or not it is necessary to assume an actual metathesis depends on the assumptions as to the nature of the moreme. An alternative is pointed out in §18.D.

In some passive verb forms, metamorphosis occurs in combination with other processes:

Y-theme: /ʔuúY-/ 'bite'

Passive: *ʔuuRáriY-

Smoothing: → *ʔuaárìY- = *ʔuaˀriY-

Metamorphosis: *ʔwa:ˀriY-

Cancellation: → ʔwaˀriY- 'be bitten'

18.D Morphophonemics and the Nature of the Moreme

In §2.6, two possible interpretations of the moreme were referred to: as supra-segmental, and as structural CV spot. Certain morphophonemic processes favor the first concept, others the second.

In metamorphosis, if the moreme is considered as a supra-segmental feature, there is no metathesis, but simply a re-analysis of the syllable from /ʔu/ to /ʔw:/. The following vowel is then simply long, by virtue of the presence of the moreme at that spot.

Also, in shortening and lengthening, the supra-segmental concept is simplest. Here, a given syllable is being contracted, or expanded:

caa - : = -ca 'tea'

maami + : = -maamii 'beans'

In smoothing on the other hand, the moreme replaces CV:

físa + ya → fisá: 'leg'

It is in view of such structural facts as the above that both interpretations of the moreme are retained.

18.E Considerations of Formal Relationships in Transitive-Intransitive Verb Pairs

Note: The following represents a manipulation of synchronic data. Nothing is directly implied about diachronic processes.

The classes of Transitive-Intransitive verb pairs (§6.7) fall into two groups: those with Y in the transitive and those with S. The two groups are discussed separately:

18.E1 Transitive-Intransitive Pairs, I

	Tran.	Intran.	Tran.	Intran.	Tran.	Intran.
A	-iY-	-aY-	tumíY-	tumáY-	'stop'	'stop'
B	-(Y)-	-(R)aY-	tuJ-	tuGaY-	'sharpen'	'be sh.'
C	-(Y)	-(R)iY-	yaŋJ-	yaŋDiY-	'break'	'be br.'
D	-(R)iY-	-(Y)-	maŋKiY-	maŋC-	'mix'	'be mixed'

Intransitives of Classes B and C are reminiscent of Passives, both in form and meaning. Theoretical Passive derivatives of the above transitives are compared with the intransitives:

	Themes	*Passives	Intransitives
B:	Y	*tuGariY-	tuGaY-
	T	*tuGaqT-	tuGaT-
	R	*tuGaR-	tuGaR-
C:	Y	*yaŋDariY-	yaŋDiY-
	T	*yaŋDaqT-	yaŋDiT-
	R	*yaŋDaR-	yaŋDiR-

In Class B, a back-formation from the R-theme of the theoretical form would be identical with the intransitive form. As for C, an /ar/ crasis in the Y-theme of the theoretical form would produce the intransitive. However /ar/ crasis is not among the types attested in the language.

Class D, which is the reverse of C, would seem to be inexplicable on formal grounds. Class A would require both /ir/ crasis and back-formation for a formal explication.

18.E2 Transitive-Intransitive Pairs, II

	Tran.	Intran.	Tran.	Intran.	Tran.	Intran.
E	-S-	-Y-	caáS-	caáY-	'put out'	'die out(fire)'
F	-aS-	-Y-	ŋdáS-	ŋdíY-	'wet'	'be wet'
G	-S-	-(R)iY-	kooS-	kooRiY-	'break'	'be broken'

These classes with the /S/ in the transitive bear comparison with the Causative of their paired intransitives:

	Transitives	Intransitive Causatives[*]
E:	caáS-	*caaRáS-
F:	ŋdáS-	*ŋdiRáS-
G:	kooS-	*kooRiraSu-

In the E form, haplology of the Causative produces a form identical with the transitive.

The F form would require an explication similar to that of the C form above: crasis of /ir/. The G form would require a double haplology, of which no examples in the language are known.

18.E3 Conclusion re Transitive-Intransitive Pairs

The situation is complicated and for the most part no structural solution can be offered. However, a partial involvement or marginal relationship of the Passive with Group I, and of the Causative with Group II is clearly indicated, it is thought.

CHAPTER XIX

POLITE FORMS; THEIR USE

There are two types of polite forms in Okinawan: 1) those which may be used for all three grammatical persons and 2) those which are limited to use in connection with the second or third person. The former will be called general polite forms, the latter respectful forms.

Mechanisms of indicating polite forms are grouped for discussion as follows: 1) affixes, 2) polite nouns, 3) respectful verb stems, and 4) predicative derivation.

19.1 Affixes of Respect

Three prefixes and one suffix of respect occur:

ʔu- ~ ʔw_:-
gu-
mi- ~ ŋ-
-mee

19.11 General Respectful Prefix /ʔu-/

The prefix /ʔu-/ is used with nouns in general to indicate respect for, a) the noun's association with a second or third person, b) its association with the Unknown, and c) its essential value in life.

Because of the personal limitation on the use of this prefix, it may translate as a possessive adjective of second or third person. This is however an indirect result of its function. The glosses below are to be taken in this light.

Examples of Respectful Prefix /ʔu- ~ ʔw_:-/ :

(a) Association with Second or Third Person

ʔu-kabi	'your paper'
ʔu-kutuba	'your words'
ʔu-gaŋjuu	'your health'
ʔu-nigee	'a request'(of you)
ʔu-yurusi	'your permission'
ʔwaacinee	'your business'
ʔweesaci	'a greeting'(to you)

(b) Association with Unknown

ʔu-haka	'tomb'
ʔu-kami	'God'
ʔu-kooru	'incense burner'

(c) Association with Vital Value

ʔu-ca	'tea'
ʔu-jiŋ	'money'
ʔu-tida	'the sun'

19.12 Respectful Prefix /gu-/

The prefix /gu-/ is distinguished from /ʔu-/ by its limited distribution. Most of the items with which it is found are not of a common type. They are of the nominal category.

Examples of Respectful Prefix /gu-/

gu-cakusi	'your eldest son'
gu-burii	'rudeness'(toward you)
gu-miŋdoo	'trouble'(to you)
gu-rii	'thanks'(to you)
gu-suuji	'banquet'
gu-suuyoo	'Ladies and gentlemen!'

19.13 Respectful Prefix /mi- ~ ŋ-/

This prefix is found with a few nouns, sometimes in combination with /ʔu-/:

ŋ-cabi	(paper specially prepared for religious rites)
ŋ-pana	'your nose'
ʔu-mi-ŋgwa[1]	'your child'
ʔu-ŋ-cani[2]	'seed'
ʔu-ŋ-taki	'holy hill'
ʔu-ŋ-saku	'ceremonial wine'

19.14 Respectful Suffix /-mee /

The suffix /-mee/ is used with personal nouns:

suu-mee	'my father'
ʔayaa-mee	'my mother'
ʔusuganasii-mee	'His Majesty the King'

19.2 Polite Nouns

There are certain pairs of nouns with the same referential meaning, one of which is considered more polite or higher class than the other:

Ordinary	Polite	Gloss
ʔaŋmaa	ʔayaa	'mother'
suu	taarii	'father'
ciŋ	yiʸsu	'clothing'
qcú	káta	'person'

19.3 Respectful Verb Stems

Certain verb stems indicating respect may replace their ordinary counterparts. Actual Participles are shown below

---

[1]Assuming that /qkwá/ softened to /-ŋgwa/

[2]From /sáni/. Note that /s/, like /f-h/ and /hy/, is replaced after a syllabic by the corresponding stop. (See p. 140, fn. 1.)

in contrast:

Ordinary	Respectful	Gloss of Latter
wáYi	meʃseeYi	'existing'(persons)
ʔíCi	"	'going'
Ci	"	'coming'
kaMi	ʔuságaYi	'eating' (partaking)
nuMi	"	'drinking'
cíCi	ʔuŋnukaYi	'hear'(from inferior)
ʔíYi	ʔuŋnukiYi	'saying'(to superior)

19.4 Degrees of Politeness in Verb Structure

There are three formations to consider with respect to the degree of politeness of verb forms. These are:

C. The Polite Derivative (Y-theme + abiY-)
M. The Respectful Construction (P + miseeY-)
B. The Passive Derivative (R-theme + ariY-)

The Polite Derivative C is used between "equals" not on intimate terms, in reference to persons and things in general. To show respect, either or both of the following formations (M or B) are used, and they are of course limited to the second and third person.

The three formations combine with stems and inflect fully. Within this framework there are therefore eight degrees of politeness, starting from the basic (familiar, superior, or rude) form:

Eight Degrees of Polite Formation in Verbs

1.	-	5.	-M
2.	-C	6.	-MC
3.	-B	7.	-MB
4.	-BC	8.	-MBC

In the following examples, the order of combination is as represented by the above symbols.

Examples of Eight Degrees of Politeness:

	1. tuX- 'take'	6. muG- 'hold'
-	tuYu ŋ	muCu ŋ
-C	tuYabiYi ŋ	muCabiYi ŋ
-B	tuRariYi ŋ	muTariYi ŋ
-BC	tuRariYabiYi ŋ	muTariYabiYi ŋ
-M	tu-miseeYi ŋ	muCi miseeYi ŋ
-MC	tu-miseeYabiiYi ŋ	muCi miseeYabiiYi ŋ
-MB	tu-misooRariYi ŋ	muCi misooRariYi ŋ
-MBC	tu-misooRariYabiYi ŋ	muCi misooRariYabiYi ŋ

As shown in the above paradigms, the formations with /miseeYi/ are compounds of Truncate plus the auxiliary in clear conjugations, and syntactic constructions of P plus the auxiliary in other conjugations. The respectful prefix /ŋu-/ is usually found with the participle (or truncate) of these forms.

It is further noted that in cases where respectful verb stems (§19.3) exist, they are usually used in the M forms.[1]

19.5 Degrees of Politeness in Limited Predicates

The B (Passive) form is limited to verb stems, and thus cannot appear as a limited predicative formation. This reduces the eight possible combinations above to four, which are found in degrees of politeness of limited predicatives as follows(with C replaced by c (§7.3):

-	curasa ŋ	yá ŋ
-c	curasayibii ŋ	yayíbii ŋ
-M	curasa misee ŋ	yá misee ŋ
-Mc	curasa miseeyibii ŋ	yá miseeyibii ŋ

19.51 The Attitudinal /doo/(§15.12) has a special polite form:

nifee doo nifee deebiru 'thank you'

---

[1]But not with /meŋ́seeYi/, which is itself an M form.

19.6 Examples of Polite Expressions

Predicate	Expression	Gloss
ʔukiX- 'arise'	ʔuuki-miseebiti yi[1] MC)-9-(?	'Good morning!' (Have you arisen?)
wugaM- 'worship'	cuu wuganabira[2] C)--8(	'Good day!' (Let us greet e.o. today!)
	nageesa wuganabiraŋ C)4--(.	'We have not met for a long time.'
ʔaqC- 'walk'	ʔu-gaŋjuu ʔwaaci miseebiiti yi MC)19-(?	'Have you been well?'
hajímiX- 'begin'	hajímiti wuganabira	'Pleased to meet you!' (Let us first meet.)
ŋŋ4- 'see'	naada wugadee naabiraŋ[3] P'y C)4--(.	'I havent met you yet.'
yí3- 'sit'	kumá ŋkáyi yí-miseebiree MC)--9(y	'Please sit here.'
doo 'is'	cuu ya yií tiŋci deebiru	'Today the weather is fine.'
fii- 'cold'	cinuu ya fiisayibiita ŋ yáa c)-1-(.	'Yesterday was cold, wasnt it?'
ʔiríX- 'enter'	ʔwiíri-miseebiree tayi MC)--9(y	'Please come in!'
sagáX- 'partake'	ʔu-sagá-miseebiree sayi MC)--9(y	'Please help yourself!'
ʔuŋnukiX- 'ask'	ʔuŋju ŋkáyi ʔuŋnukiti naabira P'	'May I ask it of you?'
tabiX- 'give'	yutasiku ʔuŋnukiti ʔutabi-miseebiraŋ ga yáa MC)4--(	'May I not ask it of you, please?'

[1] Smoothing: /ʔu- + ʔuki-/

[2] See p. 62, note 2.

[3] C form */ŋŋjabiyi/ is replaced by /naabiyi/.

Predicate	Expression	Gloss
S- 'do'	ʔu-nigee sabira C)--8(	'Please!'(Let me ask of you!)
yuruS- 'forgive'	ʔu-yurusi misooree M)--9(y	'Please forgive me!'
tabiX- 'give'	yuruci ʔu-tabi-miseebiree sayi[1] P' MC)--9(y	(")
kaŋgeeX- 'think'	ʔu-kaŋgee-misocci ʔu-tabi-misocci, nifee deebiru	'Thank you for being so kind in my behalf.'
waru- 'bad'	ʔiq́pee waqsayibiita qsaa c)@1-(.	'It was very bad of me.'
S- 'do'	gu-burii sabita ŋ C)-1-(.	'I was rude.'
naX- 'become'	gu-burii natooyibii qsaa c)3--(.	'Pardon me!'
S-	kwaqcii sabita ŋ	(Thanks for good things to eat and drink.)
ʔwiiriki- 'enjoyable'	cuu ya ʔiq́pee ʔwiirikisayibiita ŋ c)@1-(.	'It was most enjoyable today.'
S-	ʔu-gaŋjuu soo-miseebiri yoo MC)--9(	'Go in good health!'
kwiX- 'give'	gaŋjuu soocci kwi-misoori yoo M)--9(	'Please go in good h.'
keeX- 'return'	yoó ŋnaa keeyabira C)--8(	'I must be going.' (Slowly let me return.'
niŋ́2- 'sleep'	niŋ́ji miseebiree sayi MC)--9(y	'Good night!' (Please sleep!)

[1]Very polite. The basic form of this structure is:
/yuruci kwiree/

CHAPTER XX

THE BASIC AND COMBINING MORPHEMIC SYSTEMS

In all word-classes other than verbs and statives, basic morphemes are in general free forms. Exceptions to this rule are bound forms of the basic and combining morphemic systems.[1] Combining morphemes are (with few exceptions) bound and combine with each other only, while basic morphemes combine not only with each other but with bound alternants of free nominals of the general lexicon.

20.1 Basic Counter Components

Counter components consist of initial and final bound forms of numerals and enumerators. The basic counter system is as follows (underlined components lack free alternants):

Initials (Numerals)		Finals (Enumerators)	
cu-	'1'	-ci[2]	
tá-	'2'	-cici	'months'
mí-	'3'	-cikaŋ	'handfuls'
yú-	'4'	-ciri	'slices'
ʔici-	'5'	-daŋ	'steps'
mú-	'6'	-fani	'fowls'
nana-	'7'	-firu	'days'
yá-	'8'	-kaki	'pieces'
kukunu-	'9'	-keeŋ	'times'
tú-	'10'	-kuci	'mouthfuls'
ʔiku-	'how many?'	-kutuba	'words'
		-kuu	(round things)
		-magayi	'characters' (written)
		-makayi	'bowlfuls'
		-tabayi	'bundles
		-tabi	'trips'
		-taru	'barrelfuls'
		-tukuma	'places'
		-tukuru	'persons'

[1] Already introduced in Ch. XII.

[2] Takes a different set of bound morphs (§12.4).

20.2 Deictic System

The deictic system is composed entirely of basic morphs. It is divided into two parts. In the first part all components are simple morphs; in the second, the initial components are bound forms of the deictic attributives.

I.	Initials	Finals	
	kú-	-ri	(a)
	ʔú-	-ma	(b)
	ʔá-	-gata	(c)
		-nu	(d)

The above initial and final component morphs constitute the following forms:

(a) deictic pronouns (§11.52)
(b) locative deictics (§11.52)
(c) lateral deictics 'this side' etc.
(d) deictic attributives (§10.11)

II.	Initials	Finals	
	caŋ-	-cu	(e)
		-nii	(f)
	kuŋ́-	-na	(g)
	ʔuŋ-	-gutooru	(h)
	ʔaŋ́-	-neetaru	(j)
		-nagee	(k)
		-gutu	(m)
	caq-(etc.)	-pi	(n)
		-sa	(o)

(e) personal deictics (§11.52)
(f) 'this period' etc. (temporal nom.)
(g) 'this kind of' etc. (attrib.)
(h) 'this kind of' etc. "
(j) 'this kind of' etc. "
(k) 'for this long a time' etc. (adverb)
(m) 'in this way' etc. (adverb)
(n) 'this much' etc. (quantitive)
(o) 'this much' etc. (quantitive)

20.3 Residue of Basic Bound Morphemes

The remainder of the basic bound forms are used with nominals of the general lexicon (with restrictions) without affecting word-class:

Initials

wuu-	'male'
mii-	'female'
ʔu-	(respectful prefix, §19.11)
mi-	(respectful prefix, §19.13)
ma- ~ maŋ- ~ maq-	'completely', 'the very'
ma-	(affectionate prefix for female given name)

Finals:

-su ~ -ju	'place'
-saŋ	'Mr., Mrs., Miss'
-mee	(respectful suffix, §19.14)
-gwaa	(diminuative suffix)

Examples:

simee maqkuruu	'The charcoal is jet-black.'
ciouu ya maŋmaruu	'The earth is perfectly round.'
mayunaka nata ŋ	'It is (just) midnight.'
ma-jiruu	'Chiroo!' (a call)
ma-kutu doo	'It's true.' (a true thing)
saataa su-ru basu	'a place where sugar is made'
ʔacimayi-ju ŋ neeŋ	'There's no gathering place.'
yuuji-sanoo ʔaraŋ	'It's not Mr. Yooji.'
kunu mayaa ya mii-munaa	'This cat is a she.'
ʔarée gumaa-gwaa	'He's a shrimp' (small)

20.4 Combining Counter Components

Following are the numerals and enumerators of the combining system:

Initials

naŋ- 'how many?'

mee- 'every'

Numerals (Allomorphs)

A	B	C	
ʔici		ʔiq-	'1'
ni-	niŋ-		'2'
saŋ			'3'
si-,yúŋ-	yú-		'4'
gú-	guŋ-		'5'
ruku		ruq-	'6'
sici-	nana-		'7'
haci-		haq-	
kú-	kuŋ-		'9'
juu-		jiq-	'10'

Finals (Enumerators)

-baŋ	'number'
-baŋmii	(ordinal)
-buŋ	'part'
-bee	(times' (multip.)
-coo	(unit of measure)
-fuŋ	'minute'
-gwaci	'month'
-hyaku	'100'
-ji	'o'clock'
-jikaŋ	'hour' (duration)
-juu	'10'
-kuku	(unit of measure)
-kwaŋ	(unit of money)
-maŋ	'10,000'
-mee	(flat object)
-nici	'day, date'
-niŋ	'year'
-niŋ	'person'
-siŋ	'1000'
-suku	'pair'
-taŋ	(unit of area)
-yiŋ	'yen' (money)

20.41 Morpheme Alternants in Combining Numeral Set

The alternants of column A are of the widest distribution. Those of column B are morphologically selected by the enumerator. Alternants of column C are syllabicated forms (§18.51), morphologically selected, and sometimes in free variation with unsyllabicated forms.

ruku-kuku ruq-kuku '6 koku'

In numerals the following set of integer morphs appears following the enumerator (§12.51):

/ʔici, nii, saŋ, sii, gúu, ruku, sici, haci, kúu, juu/

20.42 Examples of Combining-Numeral Counters

	minutes	Names of months	(flat objects)
How many ___ ?	naŋ-puŋ	naŋ-gwaci	naŋ-mee
1.	ʔiq-puŋ	ʔici-gwaci[1]	ʔici-mee
2.	ni-fuŋ	niŋ-gwaci	niŋ-mee
3.	saŋ-puŋ	saŋ-gwaci	saŋ-mee
4.	yuǵ-fuŋ	yuǵ-gwaci	yuǵ-mee
5.	gu-fúŋ	guǵ-gwaci	gu-mée
6.	ruq-puŋ	ruku-gwaci	ruku-mee
7.	nana-fuŋ	sici-gwaci	sici-mee
8.	haci-fuŋ	haci-gwaci	haci-mee
9.	ku-fúŋ	kuǵ-gwaci	ku-mée
10.	jiq-puŋ	juu-gwaci	juu-mee

	10s	100s	1000s
How many ___ ?	naŋ-juu	naŋ-byaku	naŋ-siŋ
1.	--	hyaaku	síŋ
2.	ni-juu	ni-hyaku	ni-siŋ
3.	saŋ-juu	saŋ-byaku	saŋ-jiŋ
4.	yuǵ-juu	yuŋ-hyaku	yuǵ-siŋ
5.	gu-júu	gu-hyáku	gu-síŋ
6.	ruku-juu	ruq-pyaku	ruku-siŋ
7.	sici-juu	nana-hyaku	nana-siŋ
8.	haci-juu	haq-pyaku	haq-siŋ
9.	ku-júu	ku-hyáku	ku-síŋ

Ordinals

naŋ-baŋmii	yu-baŋmii	haci-baŋmii
ʔici-baŋmii	gu-baŋmii	ku-baŋmii
ni-baŋmii	ruku-baŋmii	juu-baŋmii
saŋ-baŋmii	sici-baŋmii	juu-ʔici-baŋmii

[1]Usually /soogwaci/ is substituted for 'January'. /simucici, siwaasi/ for 11th and 12th months.

20.5 Residue of Combining Morphemes

Although there are quite a number of morphemes in the corpus which probably belong here, there are insufficient examples of them to produce an analysis. For the residue there are only three such morphemes which occur in more than than two items, as follows:

/diŋ-/ 'electricity'

diŋci	'electricity'
diŋwa	'telephone'
diŋpoo	'telegram'

/-sa/ 'vehicle'

kisa	'train'(railway)
bá́sa	'horse cart'
jidoosa	'automobile'
jitiŋsa	'bicycle'

/gaku- ~ gaq- ~ -gaku/ 'learning'

gaku-muŋ	'learning'
gaku-sa	'scholar'
gaqkoo	'school'
buŋ-gaku	'literature'

20.6 Irregular Counter Sets

In a few cases counter sets overlap partially from basic to combining system. Sets for counting persons, years, days and dates are complete in the latter system, but in the case of the interrogative and the lower numbers, alternates from the basic system are more colloquial and frequent:

/ʔiku-tayi, cuyi, tá́yi, miq́-cayi, yuq́-tayi/ (persons)
/ʔiku-tusi, cu-tu, tá-tu, mí-tu/ (years)
/ʔiq-ka, ciitaci, fuci-ka, miq́-ka, yuq́-ka ... tú-ka/ (days)

CHAPTER XXI

WORD-FORMATION

Certain types of word-formation have been discussed: predicative inflection, deictic sets, and morphemic combining systems. At this point all of the major types of word formation in Okinawan in addition to the above are to be presented.

21.1 Verb Stem Formations

21.11 Derivatives

The derivative verb formations are reiterated:

A.	Causative	P"	aS-
B.	Passive-Pot.	P"	ariX-
C.	Polite	P	abiX-
M.	Respectful[1]	T	miseeX-

21.12 Formations with Root Prefixes

Certain verbs may occur with root prefixes /kee-/ or /ʔuci-/. The force of these prefixes is similar. In some cases it is an emphatic completive, analogous to the addition of 'up' or 'away' to certain English verbs (eat up, drink up, went away). In other cases, the force is vague, and is possibly merely rhetorical.

Examples: Root Prefix /kee-/

/tuX-/'take', /wasíX-/'forget', /ha3-/'leave'

jiŋ turaqta ŋ	'My money was taken.'
jiŋ kee-turaqta ŋ	'My money was taken away.' (stolen)

---

[1]Derivative in clear conjugations only. Otherwise syntactic.

kee-wásita ŋ 'I(completely)forgot it.'

warabee kee-haca ŋ 'The child died.'(euphemism)

Examples: Root Prefix /ʔuci-/

jiŋ ʔuq-turaqta ŋ 'My money was taken away.'

ʔuci-wasita ŋ 'I(completely)forgot it.'

The above two examples are not distinguishable in meaning from those where /kee-/ is used. However, distribution of the two prefixes differs in some cases:

múru ʔuci-kawatooyibii ŋ 'Everything is changed.'

21.13 Noun Conversions

Certain verbs appear to be based on noun roots:

Verb	Gloss	Noun	Gloss
kumuX-	'be overcast	kumu	'cloud'
simaX-	'dwell'	sima	'home'
cinaJ-	'tether'	cina	'rope'
haraM-	'be pregnant'	hara	'belly'
hajíkaC-	'shame'	haji	'shame'

21.14 Stative Conversions

Some verb stems are based on stative roots--without or with stem-formatives:

Verb	Gloss	Stative	Gloss
kufaX-	'harden'	kufa-	'hard'
kusaX-	'stink'	kusa-	'stinking'
nuruM-	'cool down'	nuru-	'lukewarm'
sidaM-	'cool'	sida-	'cool'
yuruM-	'slacken'	yuru-	'loose'
yuruS-	'permit, forgive'		

The following verb stems consist of stative root plus stem-formative:

Verb	Gloss	Stative	Gloss
cika-yuX-	'approach'	cika-	'near'
fira-kaS-	'flatten'	fírá-	'flat'
firú-gaX-	'spread'	firu-	'broad'
firú-giX-	'spread'		
nuku-maS-	'warm'	nuku-	'warm'
naga-miX-			
yuru-miX-	'slacken'	yuru-	'loose'
turú-baX-	'be stupified'	turú-	'stupid'

21.15 Compound Stems on P

The Actual Participle of certain verbs joins with roots of others to form compound stems:

naSi-tugiX- 'achieve, accomplish'(causing/sharpen)
tuYi-simaX- 'control'(taking stop)
ʔumuYi-ciC- 'hit on an idea'(thinking strike)

21.151 A Potential construction is formed on P as follows:

kaMi-yuú-S- 'be able to eat'

kamiyuú-su ŋ 'He is able to eat.'
kamiyuú-saŋ 'He is not able to eat.
kamiyuú-suta ŋ 'He was able to eat.'

21.16 Compound Stems on T

The Truncate similarly joins with roots:

ciri-wakaS- 'split'(cutting divide)
ʔubi-ŋjaS- 'recollect'(remembering emit)
mii-wakiX- 'distinguish'(being seen, separate)
ʔuki-tuX- 'receive'(receiving take)
tu-miseeX- 'take'(with respectful auxiliary M)

21.2 Stative Stem Formations

21.21 Compound Stems on P

The Actual Participle can join with bound stative stems /-busa/ 'wants' and /-gisa/ 'appears', forming a compound stative:

ʔicí-busa ŋ	'He wants to go.'
kami-busata ŋ	'He wanted to eat.'
ʔami fuyi-gisa ŋ	'It looks like rain.'
ʔicí-gisa ŋ	'It appears that he is going.'

21.22 Compound Stems on N

Certain nominals (usually nouns) join with certain stative stems:

dee-dakasa	'is high-priced'	(price is high)
dee-yaqsa	'is cheap'	(price is easy)
duu-yaqsa	'is easy to do'	(is easy for the body)
nasaki-bukasa	'is compassionate'	(c. is deep)
suu-karasa	'is pungent'	(is salt-pungent)
tii-beesa	'is dextrous'	(hands are quick)
kawayi-yaqsa	'is changeable'	(changing is easy)

21.3 Noun Derivative Formations

It is in the noun that the greatest variety of word-formation lies in Okinawan. Presentation is divided into derivative formations and compounds, taken up in that order.

21.31 Derivatives from Verbs

Appurtenants

1.	P	kajáyi	'ornament'
2.	T	cimu	'intention'
3.	(Long)	tuyaa	'a taker'

Gerunds

tuyu-si	'the(act of)taking'
turaŋ-si	'the not taking'
(etc.)	

21.32 Derivatives from Statives

Appurtenant:	magii	'big one'
Stative Noun:	magisa	'bigness'
Gerunds:	magisa-si	'the being big'
	magisata-si	'the having been b.'

21.33 Derivatives from Nouns: Appurtenant

Leaving aside the verbal Appurtenants of P and T form (which are almost always impersonal), formative rules for (a) the Long Appurtenant and (b) the stative Appurtenant are:

(a) Replace final vowel(of P)with /-aa/.
(b) Add moreme to(stative)root.

For formation of noun Appurtenants, (a) is used in some cases, (b) in others.[1] This seems structurally significant in that it unites all personal Appurtenants, regardless of original word-class, into a single derivational class.

(a)	fiŋgu	:	fiŋgaa	'smudge'	'smudged person'
(b)	joogu	:	jooguu	'funnel'	'glutton'
(a/b)	teefa	:	teefaa	'joke'	'joker'

Examples:

1. Root /i/ replaced by /aa/

fíji	fijáa	'beard'	'"beaver"'
hági	hagaa	'baldness'	'baldy'
taŋci	taŋcaa	'quick temper'	'p.w.q.t.'[2]
kaŋpaci	kaŋpacaa	'head sores'	'p.w.h.s.'

2. Root /u/ replaced by /aa/

guufu	guufaa	'wen/hunch'	'p.w.w/h.'
miŋjaku	miŋjakaa	'discharge'[3]	'p.w.d.'
tiŋbusu	tiŋbusaa	'navel'	'child w.big n.'
coogiŋ	cooginaa	'comedy'	'clown'

[1]When noun root ends in /a/, either formula applies.
[2]In general, gloss of Appurtenant is 'person with ____ '
[3]From ear.

3. Root /a/ replaced by /aa/

ʔináka	ʔinákaa	'country'	'hick'
kuruma	kurumaa	'cart'	'cartier'
ʔamerika	ʔamerikaa	'U. S.'	'"Yank"'

4. Root /i/ plus /:/

hagi	hagii	'baldness'	'baldy'
naga-cibi	naga-cibii	'long butt'	'x'[1]

5. Root /u/ plus /:/

makutu	makutuu	'true thing'	'honest person'
nuyi-muŋ[2]	nuyi-munuu	'lacquer'	'lacquer maker'

6. Doublet Appurtenant Forms

In a few cases, both (a) and (b) formations are used, producing near synonyms. The form in /-aa/ may be more pejorative:

guuni	guunii	guunaa	'lame person/cripple'
miŋku	miŋkuu	miŋkaa	'deaf person'
hági	hagii	hagaa	'baldy'

21.34 Miscellaneous Appurtenants

1. A formation occurs sporadically which suggests a nominal construction of negative plus /nu/, from which a (b) formation of an Appurtenant:

tariX-	'be sufficient'
dikiX-	'produce'
kamáX-	'matter'

)4--(	Form	Gloss
taraaŋ[3]	*taraaŋnu	taraaŋnuu	'moron'
dikiraŋ	*dikiraŋnu	dikiraŋnuu	'an incompetent'
kamáaŋ	*kamaaŋnu	kamaaŋnuu	'indifferent psn.'

[1]A caller who sits too long.

[2]Desyllabication is assumed.

[3]Smoothing in this form.

2. Other formations like the above are of syntactic origin:

ʔuya-wuraŋnuu	'orphan'
tamasee-neeŋnuu	'spiritless person'

3. Appurtenant of name of person used for thing:

futuki	futukii	'Buddha'	'doll'

4. Appurtenant of name used as nick-name:

yamada	yamadaa	'Yamada'	'Y. old boy'

5. Appurtenant of noun as instrument:

tuci	tucii	'time'	'clock/watch'

21.35 Rhetorical or Pejorative use of /-aa/

Certain forms, mostly of the animate noun sub-class, occur in pairs--one ending in a short high vowel or /ŋ/, the other with an /-aa/ replacive suffix. The force of this replacive is sometimes familiar or pejorative; in other cases it is only a matter of style:

Short Form	Long Form	Gloss
cijuyi	cijuyaa	'plover'
garasi	garasaa	'crow'
seejici	seejicaa	'hammer'
warabi	warabaa	'child'
ʔatabici	ʔatabicaa	'frog'
ʔuni	ʔunaa	'devil'
nusudu	nusudaa	'thief'
wiqcu	wiqcaa	'drunk'(person)
mii-muŋ	miimunaa	'female'
mii-ʔiŋ	mii-ʔinaa	'bitch'(dog)
wuu-muŋ	wuumunaa	'male'
yukusi-muŋ	yukusi-munaa	'liar'

21.4 Noun Compounds

Aside from morphemes of the Combining system (§20.5), the immediate constituents of a compound noun fall generally in the following group of forms:

N	Noun
P	Actual Participle
T	Truncate
A	Long Appurtenant
@	Stative Root

The Stative Root does not occur as a second constituent; thus the above components remain with twenty possible combinations:

(1)	(2)	(3)	(4)	(5)
NN	PN	TN	AN	@N
NP	PP	TP	AP	@P
NT	PT	TT	AT	@T
NA	PA	TA	AA	@A

The above patterns are considered column by column.

21.41 Compounds on N

NN: Highly productive.[1]

Examples:

fuu-jira	'cheeks'(cheek-face)
fuuci-baa	'mugwort leaf'
jii-maami	'peanuts'(earth beans)
kabí-jiri	'piece of paper'
nuudii-guufu	'Adam's apple'(throat wen)
sooki-buni	'ribs'(basket bones)

NP: Rather productive.

kají-tuyi	'tiller grabber'
kusí-maci	'sarong'(hip winding)
kají-fuci	'storm'(wind blowing)
funa-ʔasibi	'boat games'
miji-ʔiriyi	'water container'

[1] A few reduplicative plurals of NN structure exist. Relationship of components is of course coordinate rather than subordinate: /sima-jima/ 'islands'.

NT: Rather productive

haci-ʔwii	'potted plant'(pot planting)
taa-ʔwii	'rice transplant'(paddy planting
haru-tagee	'cultivation'

NA: Rather productive

haru-saa	'farmer'(field doer)
kana-jicaa	'hammer'(metal, being joined to)
karaji-yuuyaa	'coiffeur'(hair dresser)
yuubiŋ-mucaa	'mail carrier'

21.42 Compounds on P

PN: Rather productive.

ciyi-muŋ	'clothing'
kami-muŋ	'food'
ʔaasi-muŋ	'lined clothing'

PP: Rather productive.

kakayi-saraasi	'relationship'(hanging touching)
taci-maci	'whirlwind'(standing whirling)
tuci-naraasi	'explanation'(explaining instructing)
tuyi-simayi	'taking finishing'

PT: Scantly productive.

ʔukuyi-tuduki	'report of a funeral'

21.43 Compounds on T

TN: Very productive.

hati-muŋ	'violent person'
hagi-jii	'barren ground'
siragi-gumi	'hulled rice'
tati-muŋ	'building'
warí-muŋ	'broken thing'

TP: Somewhat productive.

ʔubi-ʔŋjasi	'recollection'(remembering emitting)
ʔŋji-taci	'departure'(leaving setting out)

TT: -- ?

TA: -- ?

21.44 Compounds on A

AN: Scantly productive.

hayaa-suubu	'foot-race'(running contest)
tasiyaa-ʔubuŋ	'fried rice'
ʔooyaa-ʔusi	'fighting bull'

AP: -- ?

AT: -- ?

AA: -- ?

21.45 Compounds on @

@N: Fairly productive.

cura-kaagli	'a beauty'(of face)
guma-yaa-gwaa	'a hut'
magi-jiŋ	'a large sum of money'
siru-qcu	'White person'
taka-dukuru	'a high place'
ʔaká-gani	'copper'(red metal)

@P: -- ?

@T: Scantly productive.

fee-ʔwii	'early planting'

@A: --

21.5 Residual Noun Compounds

21.51 Compounds with Stative Appurtenant

The Appurtenant of /kana-/ 'loving' is found after N in titles. Such constructions are rare:

ʔaji-ganasii	'head of an aji'
ʔusu-ganasii	'His Gracious Majesty'(King)
yuurii-ʔuturuu	'ghost fearer'

21.52 Compounds with Noun Appurtenant

fingaa-mayaa	'dirty face'(smudged-face cat)
habu-kakujaa	'habu-jaw'[1]

21.53 Negative Attributive with Bound Form

When the negative attributive is in construction with a form with initial syllabic, cancellation occurs, and a compound is formed:

sirańcu	'an unknown person'

21.54 Compounds with Diminuative

The diminuative suffix /-gwaa/ (§20.3) is widely used in Okinawan, in much the same way as -chen is used in Bavarian and erh (兒) in Pekinese. It is used however in at least four distinct ways:

1. diminuative
2. pejorative
3. distinctive of species
4. rhetorical

Examples:

1.	mayaa-gwaa	'kitten'(young of cat)
	nuudii-ʔwaa-gwaa	'uvula'[2]
2.	taŋmee-gwaa	'a disreputable-looking old man'
3.	ʔuyi-gwaa	'cucumber'(little melon)
4.	siŋbuŋ-gwaa	'newspaper'[3]

---

[1]The habu snake has very prominent jaw-bones /kakuji/.

[2]Lit. 'the little (thing) up above in the throat'

[3]This could also mean 'small newspaper'. In Shuri however, use of the suffix with various nouns with no particular meaning other than rhetorical is common.

21.6 Adverbs

21.61 Stative Adverb

feeku ʔukita ŋ	'He arose early.'
feeku tudá ŋ	'It flew fast.'
cuuku kuŋ̊dee	'Tie it firmly!'
ʔicasiku hanaca ŋ	'He spoke piteously.'

21.62 P' as Adverb

hamaṭi sirabita ŋ	'He investigated diligently.'
ʔisuji haca ŋ	'He departed in haste.'

21.63)37-(as Adverb

ŋŋcooti sijá ŋ	'He died before their eyes.'

21.64 Reduplicative Adverbs

Reduplication of noun, truncate, or stative root forms adverbs with distributive meaning:

Form	Reduplication	Glosses
daŋ	daŋ́-daŋ nubuta ŋ	'step' 'He climed step by s.'
tâbi	tabi-tabi ca ŋ	'trip' 'He came often.'
tuci	tuci-duci ca ŋ	'time' 'He came sometimes.'
guma-	kumá-guma sirabitaŋ	'small' 'He investigated in detail.'
	kasáni-gasani nifee doo	'Thanks very much.'[1]

Reduplication with replacement of initial phoneme or syllable may produce adverbs with intensified meaning:

caásiŋ	'somehow'
caásiŋ-kaasiŋ ʔicú ŋ	'I'll go somehow or other.'
yaq́tu	'barely'
yaq́tu-kaqtu fiŋgita ŋ	'He escaped by the skin of his teeth.'
ʔuqcayi-fiq́cayi ficá ŋ	'He pulled with might and main.'

[1] /kasániX-/ 'pile up' /kasáni-gasani/ 'heaps'

21.7 Relationals

21.71 P' as Relational

ciriX-	'accompany'	ciriti	'accompanying'
soóX-	'be accompanied by'	soóti	'with'
wúX-	'exist'	wúti	'being in'

21.72)31-(as Relational

wutóoti	'being in'

CHAPTER XXII

PREDICATE EXPANSIONS

Expansion is defined as an increase in complexity of any linguistic structural element (morpheme, word, phrase, etc.) without alteration of its form-class. Basic verbal predicate expansions are of the following types:

1. Adverb(ial), expanding verbal predicate
2. Object in construction with verb
3. Complex predicate

Examples:

1. hamati yudoo ŋ 'He is reading diligently.'
2. sumuci yudoo ŋ 'He is reading a book.'
3. biŋ́coo sóo ŋ 'He is studying.

Examples 1, 2, and 3 are predicate expansions of three types. They may be combined:

(1) (2) (3)
siitoo hamati sumuci biŋ́coo sóo ŋ

The three types are taken up below.

22.1 Predicate Expansions with Adverb(ial)s

Various types of adverbs and adverbials (an expansion) have been seen in Chapter XIII. Further types of adverbial expansion exist. Since an expanded verbal predicate may take an adverb(ial), a series of the latter may precede the verb:

ʔaŋ́coo cinuu nu ʔasa feeku ʔŋmá núti yama ŋkáyi ʔŋjá ŋ
he yest. morn. early h. riding hills to went
'Yesterday morning early he went on horseback into the hills.'

22.2 Predicate Expansions with Objects of Verb

The object of a transitive verb is a nominal or a nominal expansion:

kwaqcii cukutoo ŋ	'She is making good things to eat.'
ʔanée[1] ʔiná kee	'Dont say such a thing!'
ʔaŋ́poo yubee	'Call Ampo!'

Nominal expansions are discussed in the next chapter.

22.3 Complex Predicates

Expansions based on the dependent predicative derivatives (§8.4) apply equally to verb, stative, and essive. Thus in this instance the limited predicatives are treated along with the predicates. The three types of expansions involved are those on the attributive, those on the gerund, and those on the situational.

22.31 Expansions on Attributive

Predicate expansions based on attributives are composed primarily of any attributive predicative forms in construction with a nominal head. The latter may be a noun or a limited nominal of the attributive adjunct class (§16.5). The resulting nominal expansion may stand as an essive nominal, or as a minor predicate, or it is further expanded--as the case may be.

Examples based on verbs:

macu-ru baa nee,[2]	'In case he waits,'
macu-ru gutu sú ŋ	'He acts as if he were waiting.'
macu-ru háji(doo/ya ŋ)	'He probably will wait.'

---

[1] /ʔáni/ 'like that', with referential before negative.

[2] Comma follows minor predicate; no mark follows major.

macu-ru muŋ	'But he is waiting!'
macu-ru muŋ du ŋ yaráa,	'if only he is waiting,'
macu-ru nee(bi) sóo ŋ	'He is pretending to wait.'
mataŋ baa nee,	'in case he doesnt wait,'
mataŋta-ru baa yi	'Didnt you wait!?'(emphatic)
mataŋ gutu,	'without waiting,'
mataŋ muŋ	'He just isnt waiting.'

Examples based on statives:

yaasa-ru háji	'He is probably hungry.'
yaasa-ru muŋ	'He is hungry.'
yaasa-ru muŋ du ŋ yaráa,	'in case he is hungry,'
yaasa-ru gutu sú ŋ	'He acts as if he were hungry.'
maci-busa-ru baa nee,	'in case you want to wait,'

Examples based on existenials:

ʔa-ru baa nee,	'in case there is/are any,'
ʔa-ru háji (doo/ya ŋ)	'There is/are probably some.'
neeŋ/neeraŋ baa nee,	'in case there isnt/arent any,'
tuúkoo neeŋ baa nee,	'in case it isnt far'
wuráŋ baa nee	'in case there isnt/arent any'

Examples based on copula:

citu yá-ru baa nee,	'in case it is a gift,'
kuruu ʔaraŋ baa nee,	'in case it isnt a black one,'

22.32 Expansions on the Gerund

The gerund is a nominal. The gerund and nominal expansions of it stand in object-verb and nominal-essive constructions:

macu-si wasíta ŋ	'He forgot to wait.'
tuci nu tacu-si ŋ wakaraŋ	'He is not even aware of the passage of time.'
waa ga ʔí-si kaŋcigee saŋ	'He misunderstood what I said.'
numu-si ya ŋ	'He is a drinker.'
numu-see ʔaraŋ	'He is not a drinker.'
macu-see naraŋ háji(yá ŋ)	'You probably shouldnt wait.'
gumasa-si tuyi mi	'Are you taking the small one?'

22.33 Expansions on Situational

maciyi nee,	'if/when he waits,'[1]
ʔarí ga yumiyi nee waŋnee yumaŋ	'If he reads, I wont(read).'
mici kara ʔaqciyi nee, ʔukaasaŋ doo	'If you walk in the road, it's dangerous.'
nuci sitíyi nee, ʔici-deeji ya ŋ	'If you throw away your life, it's the most terrible thing.'
maciyi ga ʔŋjá ŋ	'He went in order to wait.'
maciyi du ŋ see,	'in the event that he waits,'
yutasayi du ŋ see, kuu wa	'If it's all right, come.'
tuyi ga ʔicíyi nee,[2] waŋ ʔirée	'When you go to get it, tell me.'

22.4 Complex Verbal Predicates

The number of types of verbal predicate expansions is large. Those in the corpus are listed below according to the form of the nuclear verb.

22.41 Expansions on P

1. P + Verb

yumi hajímayu ŋ	'He is beginning to read.'
yumi ʔuwáyu ŋ	'He finishes reading.'
maci misee ŋ[3]	'He is waiting.'(page 160)
cicí kumu ŋ	'He is informed(of something).'
nací ʔakasu ŋ	'He cries continually.'

2. P + Aspectual Particle

maci ga súra/sabíira	'I wonder if he'll wait.'[4]
maci ga sára/sabítara	'I wonder if he waited.'

---

[1]Underlines in this case identify the meaning of the base of the form occurring in the situational.

[2]Two situationals occur in one expansion.

[3]This construction not used for clear conjugations (§21.16).

[4]The longer alternates are C derivatives (§6.6).

maci ya sáni/sabírani 'You'll wait, wont you?'
maci du sú-ru 'Of course I'll wait.'
maci du sú-ru yi 'Will you wait?'(yes or no?)
maci ŋ saŋ́ muŋ 'He just doesnt wait!'

3. Referential of P (with smoothing)

macee sáni/sabírani 'You'll wait, wont you?'

22.42 Expansions on P'

1. P' + Verb

/C-*/'come' and /ʔiC-*/'go' are used as auxiliaries after P', indicating that the direction of the action is either approaching or receding from the speaker:[1]

fiŋgiti ca ŋ 'He fled hither.'[1]
keeti ca ŋ 'He came back.'
koóti ca ŋ 'He went and bought.'(and returned)
muqci ca ŋ 'he brought/carried here.'
nagariti ca ŋ 'It came floating hither.'
ʔaqci ca ŋ 'They walked here.'
ʔŋ́jí ca ŋ 'He went and came back.'
ŋŋci ca ŋ 'He went to see.'(and returned)

fiŋgiti ʔŋjá ŋ 'He fled from here.'
keeti ʔŋjá ŋ 'He went back.'
ʔaqci ʔŋjá ŋ 'He walked away.'

The following three verbs are used as auxiliaries after P' with the force of 'for the benefit of the speaker':

/kwiX-/ 'give' (negative: /kwaaŋ/)
/turaS-/ 'cause to take' (causative of /tuX-/
/tabiX-/ 'give' (respectful)

Constructions with these auxiliaries are usually in the imperative form, translating into English as 'please':

maqci kwiri/turasi/ʔu-tabi-misoori 'Please wait!'

---

[1]The Completive form presents a clearer situation.

Constructions which are not imperative are used:

maqci kwaaŋ 'He wont wait.'(for me)
maqci ʔu-tabí-misee ŋ 'He is waiting for me.'(Resp.)

2. P' + Aspectual Particle

maqci ga wúra 'I wonder if he is waiting?'
maqci du wu-rú yi 'Is he waiting?'(yes or no)
maqci du wú-ru muŋ 'He is waiting indeed.'
maqci ŋ, 'even waiting/having waited'
maqci ŋ naraŋ 'It is impossible to wait.'
maqci ŋ simu ŋ 'It's all right to wait too.'
maqci ŋ mataraŋ 'He tried to wait but couldnt.'
maqcee[1]simaŋ 'He is not permitted to wait.'
maqcee naraŋ 'He must wait.'
maqcee ŋŋdaŋ 'I've never waited.'
maqcee wuraŋ[2] 'He is not waiting.'

3. P' + Relational

maqci ʔatu, 'after he has waited,'
maqci kara 'after he has waited,'
maqci madi 'until he has waited,'

4. P' + Nominal

kadi caaki yá ŋ 'I've just eaten.'

22.43 Expansions on)1--(

macu ŋ du ŋ yaree, 'even if he waits,'
maci ŋ ci ca ŋ 'He came in order to wait.'
macu ŋ ci ŋ 'in order to wait,'

22.44 Expansions on)4--(

The negative is followed by various nominal particles

---

[1]Referential with smoothing.

[2]Inflectional forms with I.3 /-too/ have no negative forms in the inflectional paradigm. The structural gap is filled by this construction.

in the following constructions:

mataŋ ga ʔara	'I wonder if he'll not wait?'
maci ga sura, mataŋ ga ʔara	'I wonder if he'll wait or not?'
mataŋ du ʔa-ru	'He does not wait.'
mataŋ du ʔa-ru yi	'He's not waiting?!'
mataŋ du ʔa-ŋ dee[1]	'He isnt waiting!'
mataŋ du ŋ ʔaree	'if he doesnt wait,'
mataŋ nee	'If he doesnt wait,'
mataŋ too[2] naraŋ	'He must wait.'
mataŋ too simaŋ	'He must wait.'

22.45 Expansions on Presumptive

A particle /wa/[3] is used in construction with the Presumptive)--8(, with force as in the following examples:

ʔiká wa ŋ,	'whether he goes,'
nisí muti kayi ʔiká wa ŋ	'Whether you go north,(or)
fee muti kayi ʔiká wa ŋ	whether you go south,
yinu muŋ yá sa	it's the same thing.'
koofii yará wa ŋ	'Whether it's coffee, (or)
caa yará wa ŋ	whether it's tea,
yutasayibii ŋ	it's all right.'

The construction of Presumptive plus /ŋci/[4] is useful:

mata ŋci soóta ŋ	'He intended to wait.'
mata ŋci mataraŋ	'He intended to wait but couldnt.'

22.46 Expansion on P"

mati wa du yá-ru	'It's his duty to wait.'

---

[1] Syllabication of /-ru/ suffix before /d/.

[2] /tu/ is in referential preceding negative.

[3] This particle, also found in §22.46, has a force of 'case', and bears comparison with /baa/ 'case'.

[4] A 'particle', reduced form of /ŋdi ʔíci/ (p. 136).

22.47 Long Appurtenant (§8.24) plus /ni/

The construction of Long Appurtenant with relational /ni/ may often be substituted for the Completive Participle without definable change in meaning:[1]

P': sakí nudi, ciburu yamu ŋ

L.A.: sakí numaa ni, ciburu yamu ŋ

'Having drunk wine, my head aches.'

Examples:

kaŋgeeyaa ni naraŋ	'You shouldnt think(about it).'
cukee ŋŋjaa ni, cimu fuju-see masi tee	'It's better to see it once and get your fill of it, I think.'

22.5 Complex Stative Predicates

22.51 Expansions on Stative Adverb

The Stative inflection lacks a negative.(§7.1) Semantically corresponding forms are provided by expansions. Negatives are formed on the referential of the adverb:

Affirmative	Negative	Gloss of Latter
fiisa ŋ	fiikoo neeraŋ[2]	'It's not cold.'
fiisata ŋ	fiikoo neeraŋta ŋ	'It wasnt cold.'
yutasa ŋ	yutasikoo neeraŋ	'It's not good.'
ʔicunasa ŋ	ʔicunasikoo "	'He's not busy.'

The Stative adverb stands in construction with the verb /naX-/'become':

nagaku natoo ŋ	'It has become long.'
sidaku natoo ŋ	'It has become cool.'
gaŋjuuku natoo ŋ	'He has become well.'

[1]This relates to same function of relationals /q́si/, /saáni/ (§10.2), as former is P' of /S-*/, and /sáa/ is L.A.

[2]/neeŋ/ is more colloquial.

22.52 Expansions on Stative Noun

A second negative construction for statives consists of the stative noun in the referential aspect, followed by the negative inflection of /S-*/'do':

tuúsaa sáŋ	'It's not far.'
tuúsaa saŋ́ta ŋ	'It wasnt far.'
yutasaa sáŋ	'It's not good.'
ʔicunasaa sáŋ	'He's not busy.'

Other expansions on stative noun:

tuúsa ga ʔara wakaraŋ	'I dont know if it's far.'
tuúsa ga ʔatara wakaraŋ	'I dont know if it was far.'
cikasa du ya-ru	'It's near.'
tuúsa du ŋ ʔaree,	'if it's far,'

22.6 Binary Nominal Predicates

A Binary Nominal Predicate (BNP) is defined as a construction of nominal plus predicative, with the necessary particle. BNPs are classified as follows:

1. Essives

masí ya ŋ	'It's better.'

2. Facitives

niibici sú ŋ	'He is getting married.'

3. Miscellaneous[1]

haná fiyu ŋ	'He sneezes.'
koóji fucoo ŋ	'It is moldy.'
ʔudí kakitoo ŋ	'They are "Indian-wrestling".'

---

[1]Lit. 'He vents nose.' 'Mold is covering.' '(They)are hooking forearms.' The reason for setting up these constructions as apart from subject-verb and object-verb is the "tightness" of such constructions as compared with /ʔiyú kamu ŋ/ 'He eats fish.'

22.61 Essive BNP

juubuŋ yá ŋ	'It's enough.'
masí ya ŋ	'It's better.'
deeji yá ŋ	'It's terrible.'
ʔifúu ya ŋ	'It's odd.'
yaqkee yá ŋ	'It's a trouble.'
ʔiríyuu ya ŋ	'It's necessary.'

22.62 Facitive BNP

1. Noun + /S-*/

hooci sú ŋ	'She sweeps.'
kwaqcii sú ŋ	'He eats good things.'
saaji sú ŋ	'He wears a turban.'
hyaáyi su ŋ	'We are having a drought.'
haru sú ŋ	'He farms.'

2. P + /S-*/

hanasi sú ŋ	'He speaks.'
tanusimi sú ŋ	'He enjoys himself.'
cina-fici sú ŋ	'They are doing tug-o-war.'

3. T + /S-*/

baqpee sú ŋ	'He makes mistakes.'
tagee sú ŋ	'He cultivates (a field).'

4. Stative Noun + /S-*/

cimu-gurusa sú ŋ	'He feels sorry.'
kanása su ŋ	'He is fond of her.'
ʔatárasa su ŋ	'He prizes it highly.'

5. Gratitive + /S-*/

ʔooqtéeŋ soo ŋ	'It is nice and green.'

6. Nominal Predicative Nucleus + /S-*/

guuni sú ŋ	'He limps.'
jitee sú ŋ	'He stands on ceremony.'

22.63 Miscellaneous Binary Nominal Predicates

cii cikiyu ŋ	'He pays attention.'(applies mind)
tii cikiyu ŋ	'He gets to work.'(applies hands)
karaji cimiyu ŋ	'He gets a haircut.'(fixes hair)
kají fucu ŋ	'It is storming.'(wind blows)
ʔiici fucu ŋ	'He is breathing.'(breath blows)
yaŋmee kakiyu ŋ	'He gets sick.'(sickness catches)
haji kakasu ŋ	'He shames him.'(inflicts shame)
mijí kakiyu ŋ	'He waters them.'
saasi kakiyu ŋ	'He padlocks it.'(hangs lock)
munú kamu ŋ	'He is eating.'
kucí kanayu ŋ	'He argues well.(mouth is competent)
ʔiyú kwaasu ŋ	'He goes fishing.'(feeds fish)
wata mugeeyu ŋ	'He gets enraged.'(guts boil)
qkwá nasu ŋ	'She gives birth.'(produces offspring)
niwi tacu ŋ	'It emits a fragrance.'
kaja tacu ŋ	'It has an odor.'
tusi tuyu ŋ	'He gets older.'(takes years

CHAPTER XXIII

SYNTACTIC CONSTRUCTIONS ON INTERROGATIVE HEADS

23.1 Interrogative Attributives

The following interrogative attributives are used:

canu	~ caŋ	'what'
caá-ru		"
nuu nu		"
núu		"

These forms occur in construction with many nouns. No distinction in meaning is found, and selection is morphological. Alternation may occur:

nuu nu cimu	'with what intention'
caá-ru cimu	" " "

Certain constructions of attributive with noun are so frequent as to constitute word-like units. The following are noteworthy:

Interrog. Attrib.	Noun	Gloss of Noun
caá-ru	baa	'case, occasion'
nuu nu[1]	cimu	'intention, idea'
caá-ru	cimu	" "
canu	fuujii	'kind'
canu	saku	'amount'
caá-ru	waki	'reason'
canu	ʔatayi	'extent'
nûu	naa	'name'

[1]Note that the toneme is dropped here, unless /núu/ has a stress.

Constructions with deictic attributives substituted for the interrogative are similarly frequent.

Examples:

caá-ru baa ni kusuyi numu ga	'In what case do you take medicine?'
ʔunú baa nee, caá su ga	'In that case, what do you do?'
ʔamá kayi ʔŋjée, caá-ru cimu yá ga	'What's the idea of going there?'
nuu nu cimu yamatu ŋkáyi ʔicú ga	'What is your idea in going to Japan?'
canu fuujii ciŋ koóta ga	'What kind of clothes did you buy?'
kunu fuujii yutasa ŋ	'This kind is all right.'
canu saku cikátee ga	'How much have you used?'
ʔunú saku yarée, ʔufóoku doo	'If it's that much, there is plenty.'
haarii-suubu ŋkáyi ʔikáŋsee, caá-ru waki yatá ga	'What was the reason for your not going to the boat-races?'
canu ʔatayi wutá ga	'How long were you there?'
canu ʔatayi kumi koóta ga	'How much rice did you buy?'
nagu madi canu ʔatayi kakayi ga	'How far is it to Nago?'

23.2 Interrogative Morphs in Indefinite Expressions

Interrogatives when used as such require the presence of a related interrogative predicate particle /ga/:

maa ŋkáyi ʔicú ga 'Where are you going?'

Use of an interrogative form with a nominal interrogative particle indicates not a question, but the unknown status of the item indicated (person, thing, place, etc.):

maa ga yará wakaraŋ 'I dont know where it is.'

Interrogative forms occur further without an accompanying /ga/, but in construction with various additives and producing what are called indefinites.

In Table 20, components of the most usual indefinites are shown. Interrogative components (A) are on the left, and the additive components (B) are on the right.

TABLE 20

FORMATION OF INDEFINITES

A. Interr.	'What _ ?'	Gloss-A	B. Additive	
caqpi	w.amount	how little	1. ŋ (with neg.pred.)	
caqsa	w.amount	how much		"any"
cáa	w.amount	how much	ŋ (with affirm.)	
jiru	w.one	which		"no"
máa	w.place	where	2. ga na	"some"
maá ŋkayi		where to		
naŋji	w.hour	when	3. yátiŋ	"any"
núu	w.thing	what		
táa	w.person	who	4. ŋkuyi	"every"
taá tu		who with		
?íci	w.time	when	5. yaráwaŋ	"___-ever it is"
?ikuci	w.number	how many		
?ikutayi	w.number	how many (persons)	6. P' + ŋ	"___ever he(verb)"

Note: Items in B in double quotes are not glosses of the preceding additive, but are components to be used in a glossive formula, as follows: Beginning on the first line and combining A and B gives /caqpi ŋ/. Combining "__" in B with the word following w. in A will gloss the item in question, as 'any amount' (with negative), and 'no amount' (with affirmative). For additives 5 and 6, the blanks are filled in with respective items of the Gloss-A column--with necessary adjustments for English syntax. Thus, /táa yaráwaŋ/'whoever it is', /?ikuci yaráwaŋ/ 'however many it is'.

Identity of morphs and constructions in B :

1. /ŋ/ Aspectual particle
2. /ga/ Aspectual particle
   /na/ Syntactic nominal formant (new)

3. /yátiŋ/, from /yáti ŋ/)¢7-(Asp. pcl.
'even being'

4. /ŋkuyi/ (unknown)

5. /yaráwaŋ/, from /yará wa ŋ/ (§22.45)
'whether it is'

6. P' + aspectual particle.

23.21 Interrogatives plus /ŋ/

caqpi ŋ neeŋ	'There isnt a bit.'
caá ŋ naraŋ	'Nothing can be done.'
caá ŋ neeŋ	'It's all right.'(idiom)
jiru ŋ yutasikoo neeŋ	'Neither is any good.'
maa ŋ neeŋ	'There isnt any anywhere.'
maa ŋkáyi ŋ ʔicí-bukoo neeŋ	'I dont want to go anywhere.'
taa ŋ kuuŋta ŋ	'No one came.'

23.22 Interrogatives plus /ga na/

maá ga na ʔicú sa	'I'll go somehow.'
maá ga na ŋŋca-ŋ nee sú ŋ	'I have the feeling I've seen it somewhere.'
nuú ga na kadi yi	'Have you eaten something?'
nuú ga na tu maŋcoo-ru háji	'It's probably mixed with sg.'
taá ga na yubée	'Call somebody!'
taá ga na ga cooti yi	'Has someone come?'
taá ga na kara, tigami nu coota sa	'A letter has come from someone.'
taá ga na ga ʔaŋ ʔyutá ŋ	'Someone was saying so.'
taá ga na ga, nuú ga na nu hanasi sóo ŋ	'Someone is talking about something.'

23.23 Interrogatives plus /yátiŋ/

caqsa yátiŋ ʔa ŋ	'There is any amount.'
jiru yátiŋ yutasa ŋ	'Any one is all right.'
maá yatiŋ ʔa ŋ	'They have it anywhere.'
maa ŋkayi yátiŋ ʔicí-busa ŋ	'I want to go anywhere(at all).'
nuú yatiŋ simu sa	'Anything is all right.'
taá yatiŋ nayu sa	'Anyone (at all) can do it.'

taá tu yátiŋ hanasi sú ŋ 'He speaks with anyone(at all.'
ʔicí yatiŋ ʔicí-busa ŋ 'I want to go any time.'
ʔikuci yátiŋ simu sa 'Any number(at all) is all rt.'

23.24 Interrogative plus /ŋkuyi/

maa ŋkúyi mijí nu ʔa ŋ 'There is water everywhere.'
maa ŋkúyi ŋkayi ʔicí-busa ŋ 'I want to go everywhere.'
nuu ŋkúyi yutasa ŋ[1] 'Everything is all right.'

23.25 Interrogative plus /yaráwaŋ/

caqsa yaráwaŋ, harayu sa 'However much it is, I'll pay.'
caa yaráwaŋ, cibayi sa 'However it is, I'll stick to it.'
jiru yaráwaŋ, tuyu sa 'Whichever it is, I'll take it.'
nuu yaráwaŋ, kamu ŋ 'Whatever it is, I'll eat it.'
taá yarawaŋ, yaa ŋkáyi ʔirásee. 'Whoever it is, have him come in the house.'

23.26 Interrogatives plus P' plus /ŋ/

maá ŋkayi ʔŋjí ŋ, yií qou nu wú ŋ 'Wherever you go, there are good people.'
caá si ŋ, jiŋ hararaŋ 'Anyway I cant pay it.'
jiru tuti ŋ, suŋ su ŋ 'Whichever I take, it's a loss.'
nuú kadi ŋ, kweeraŋ 'Whatever I eat, I dont get fat.'
ʔikuci tuti ŋ, múru neeŋ nayu ŋ 'However many he takes, they all get lost.'

23.27 Further Sets of Indefinites

There is evidence of a further set, composed of interrogative plus verb plus predicate particle /ŋtéeŋ/ /ŋteémaŋ/:

caqsa yuda ŋteémaŋ, ʔimee wakaraŋ 'No matter how much I read it, I dont understand the meaning.'
maá ŋkayi ʔicu ŋtéeŋ yaqkee nu ʔa ŋ 'Wherever you go, there is trouble.'

---

[1]For 'everything' and 'everyone', there are simple forms, /múru/ and /ŋna/. No other expressions of the /ŋkuyi/ set were found.

CHAPTER XXIV

NOMINAL EXPANSIONS AND STRUCTURAL FORMULAS

24.0 Structural Symbols

The following symbols are used for respective elements in structural formulas:

Nominals: N			
N	Noun	/mayaa/	'cat'
Ṉ	Pronoun	/ʔuŋju/	'you'
N̊	Name	/ʔaṕpoo/	'Ampo'
N̊ʔ	Interrogative	/núu/	'what?'
N̆	Limited Nominal	/ʔifúu/	'oddness'
Q	Quantitive	/ʔufóoku/	'much'
Participials: P			
P̥	Actual	/tuyi/	'taking'
P'	Completive	/tuti/	'taking'
P"	Unreal	/turi/	'(if)taking'
P̲	Long Appurtenant	/tuyaa/	'taker'
P̂	Stative Appurt.	/magii/	'big one'
G	Gerund	/tuyu-si/	'(act of) taking'
Predicatives: R			
V	Verb	/tuyu/	'takes'
@	Stative	/magisa/	'is big'
X	Existential	/wú/	'exists'
(¢	Copula	/yá/	'is')[1]
Attributives			
A	Absolute Attrib.	/yíi/	'good'
a	Deictic Attrib.	/kúnu	'this'
E	Adverb/Pre-Stative	/yúu/	'well, hard'

[1]The copula is not a Predicative (R) for structural purposes.

Symbols for Particles

Nominal		Predicative	
%	Relational	.	/ŋ/
?	Question	.	/sa/
,	Subject	.	/qsaa/
/	Referential	?	/ga/
;	/du/	?	/mi/
ɣ	/ŋ/		

Syntactic Symbols

-	Attributive relationship (symbolized in formulas by pre-position)
:	Object
·	Apposition (raised dot)
+	Addition or alternation

Processes

~	'may be replaced without expansion by'
≐	'exhibits in certain circumstances the more specific structure of'
≾	'may be exampled in the expanded form of'
≿	'may be generally represented by the more contracted form of'
-*	'the following structure is proscribed'

24.1 Sentence Formulas[1]

R	R	A predicative sentence
	N	A nominal sentence
R ≐	V.	X. @.
R ≾	N,R	(≐ N,V. N,X. N,@.)
R ≾	N¢.	
R ≾	QX.	QV. -*(Q,X. Q,V.)
N/R ≐	N/V.	N/@ -*(N/X. N/¢.)

[1]In most but not all cases the above formulas apply to negative as well as to affirmative sentences. For specific indication of interrogative structure, adjustment is simple substitution (of N̂ for N, etc.).

24.2 Structural Substitutabilities

Subject to innate limitations, the following substitutabilities exist:

$$N \sim \underline{N}\ \ \underset{\cdot}{N}\ \ \underset{\circ}{N}\ \ \overset{\circ}{\underset{\cdot}{N}}\ \ \underset{\times}{N}\ \ Q$$

$$P \sim \underset{\circ}{P}\ \ P'\ \ P''\ \ \underline{P}\ \ \underset{\times}{P}\ \ G$$

$$\Delta \sim N\text{-}\ \ V\text{-}\ \ @\text{-}\ \ E\text{-}$$

$$N,\ N/ \sim Q$$

24.3 Expansion Formulas[1]

1.	Attributive on Nominal:	N	$\precsim$	AN	aN	
2.	Nominal with Nominal:	N	$\precsim$	N·N	N+N	
		AN	$\sim$	NN		
			$\doteq$	($\underline{NN}$	$\underset{\cdot}{NN}$	$\underset{\circ}{NN}$
				$\overset{\circ}{\underset{\cdot}{N}}N$	$\underset{\times}{NN}$	QN)
3.	Participial:	P	$\precsim$	EP	N:P	N,P
4.	Verbal:	V	$\precsim$	EV	N:V	N,V
5.	Existential:	X	$\precsim$	--	--	N,X
						$-*(EX$ N:X)
6.	Stative:	@	$\precsim$	E@	--	N,@
						$-*(N:@)$
7.	Adverbial:	E	$\precsim$	N%	E%	
8.	Relational:	%	$\precsim$	-N%		

[1] An expansion formula read in reverse order is a contraction formula.

24.4 Mechanics of Expansion

Nests of expansion of varying degrees of complexity occur, and limits of the process cannot be stated on the basis of the data. But, however complicated the expansion, it is expressible as a simple formula of the kind shown above, with one or more of its component parts being susceptible to further restatement as expansions. In the following examples, the limits of such an inner expansion are indicated by double quotes, and the relevant formula is given. Example:

VN, with V ≷ N:V

sumuci ʔuyú-ru maćya 'a mart where books are sold'
" N:V "

24.41 Attributive on Nominal[1]

AN	yiǰ qcu	'good person'
	fiŋsuu múŋ	'poor person'
aN	kunú yaa	'this house'

24.42 Nominal with Nominal

N·N Apposition

yuuji ʔaŋ́poo 'Ampo Yooji' (a personal name)

N+N Addition or Alternation

tii fǰsa	'arms and legs'
kamǰ simu	'the upper and the lower'
ʔayaa taarii	'mother and father, parents'
ʔarǰ kuri	'this and that'
miici yuúci	'three or four'

---

[1] In this case, N is usually a noun.

24.43 Nominal on Nominal

NN 1. Noun on Nominal:

kii nu fáa 'tree leaf'

cawaŋ nu mucikata 'way of holding a tea-cup'

mayaa nu gutu 'cat-like' (the way of a cat)

sumuci ʔuyu-ru maciya nu kutu 'the thing of a mart where books are sold'
" V N "

ni-hyaku-niŋ nu qcú nu bcónasu 'a bonus for 200 persons'

ŊN 2. Pronoun on Nominal:

ʔarí ga yaa 'his house'

ʔarí ga kaáma nu yaa 'his distant house'
" N N "

N̊N 3. Name on Nominal:

ʔaŋ́poo nu yaa 'Ampo's house'

ʔaŋ́poo nu mísa-ru yaa 'Ampo's new house'
" @ N "

N̊N 4. Interrogative on Nominal

taá nu yaa 'whose house?'

taá ga yiita-ru mayaa 'the cat that who received?' (whose received cat?'
" @ N "

NN 5. Limited N on Nominal

ʔifúu na nigee 'a strange request'

kaama nu sima-jima 'distant islands'

wajika nu sima 'insignificant island'

QN 6. Quantitive on Nominal

taáci nu kii 'two trees'

ni-hyaku-niŋ nu nnjaataa '200 spectators'

wajika nu ʔucinaa nu ʔuciwaa nu ʔuŋ́pi nu kutu[1]
" N Q "

---

[1]See §24.51, p. 207.

24.44 Participial Expansions

EP 1. Adverb on Participial

yuú határaci	'working well'
yuú hanasaa	'good speaker'
ʔiqpée magii	'a very big one'
yuú cukutee-si	'having been well-made'

O:P 2. Object on Participial

ʔiyú kwati	'eating fish'
munu dikiyaa	'one who gets things done'
ʔiyú kwayu-si	'the fact of eating fish'
" ʔyaa kwaqcii N N kamu-si "	'eating your good food'

N,P 3. Subject on Participial

mayaa nu kwáti	'the cat eating,'
mayaa nu kwayú-si	'the (fact of)the cat eating'
mii nu magii	'the one with big eyes'
waŋ ʔuqtu nu tutoo-si	'the fact of my brother's having taken it'

24.45 Verbal Attributive Expansions: VN

A ~ V- (§24.2), so AN ~ VN

yiita-ru mayaa	'the cat he was given'
yumaŋta-ru baa	'a case of not having read'
taŋkitoo-ru basu	'a place to avoid'

V is expandible according to formulas of §24.3/4.

Substituting in VN we have: (EV)N, (N:V)N, and (N,V)N.

1. (EV)N

" tuŋ taqca-ru qcu E V "	'the person who stood up suddenly'
" mee ni kaŋgeeta-ru kutu E V "	'the thing I thought before'
" yamatu kara coo-ru yii E V "	'picture which came from Japan'

2. (N:V)N

ʔiyú kwayú-ru mayaa 'the cat (that is) eating fish'
" N:V "

ʔikusa su-q-tukuru 'place where a battle was fought'
" N:V "

3. (N,V)N

mayaa nu kwatá-ru ʔíyu 'the fish the cat ate'
" N, V "

waa ga simatoo-ru sima 'the island where I live'
" N, V "

feéree nu ʔaméetoo-ru fuúji 'the seemingness of the swarming of robbers'
" N, V " "

ŋkasi nu qcu nu sa-ru gutusi 'the way of action like that of people of olden times'
" N, V "

cici nu yiʔ-saku ʔagáta-ru tuci 'the time of the moon being risen to a considerable extent'
" N, V "
" E V "

waqtaa haamee nu cuu-ru háji 'the probability of our grandmother coming'
" N, V "

waa ga ŋŋja-ru tiŋma 'the boat I saw'
" N, V "

24.46 Existential Attributive Expansions: (N,X)N,(QX)N

1. (N,X)N

siija nu wu-ru qcu 'person who has elder sibling'
" N, X "

táyi nu wikíi nu wú-ru qcu 'person who has two brothers'
" Q N "

dateeŋ nu kii nu ʔa-ru sima 'island with many trees'
" Q N "

2. (QX)N

wikíi táyi wú-ru qcu 'person who has two brothers'

kii dateeŋ ʔa-ru sima 'island with many trees'

24.47 Stative Attributive Expansions: @N

A ~ @, so AN ~ @N

magisa-ru mayaa 'big cat'

ʔicunasa-ru tuci 'busy time'

Such structures are expandible according to the formulas of §24.3/7.

1. (E@)N

ʔiápee magisa-ru mayaa 'very big cat'

duku ʔicunasa-ru tuci 'a time when one is too busy'

2. (N,@)N

juú nu nagasa-ru mayaa 'a long-tailed cat'

duu nu ʔicunasa-ru tuci 'the time when one is busy oneself'

24.48 Adverbial Attributive Expansions

Many adverb(ial)s occur in attributive constructions:

1. Temporals:

caa nu siwa 'constant worry'

namá nu hanasi 'the present subject'

" ta-cici mee kara nu sigutu " 'the work that began two months ago'
N %

2. Locatives

" yaa ŋkayi nu doogu " 'the implements in the house'
N %

" suyi kara nu cikéemuŋ " 'messenger from Shuri'
N %

24.49 Use of Relational Expansions

A considerable number of syntactic relationals, mostly of type -N%, are in common use:

yaa nu kusí ŋkayi 'behind the house'

yaa nu tanaka ŋkáyi 'between the houses'

yaa nu ʔwíi kara 'from the top of the house'

24.5 Structure of Nesting

24.51 Nominal Nesting

Structural nesting occurs frequently with nominal heads. The distribution of such nesting may be expressed by the following process:

N ≷ AN ≷ N ≷ AN .... (etc.)

This means that a nominal head N with attributive A (or any attributive substitute) may stand elsewhere as an expanded head N, with a further attributive A, and so on.

The following order of nesting holds for AN in general:

Order	Struc.	Example	Gloss
1.	NN	ʔuta nu sumuci	'book of poetry'
2.	@N	ʔoósa-ru "	'blue book'
3.	AN	yií sumuci	'good book'
	NN	riqpa na "	'fine book'
4.	QN	taáci nu "	'two books'
5.	NN	waŋ sumuci	'my book'
	NN	ʔaŋpoo nu "	'Ampo's book'
	VN	yiita-ru "	'received book'
6.	aN	kúnu sumuci	'this book'

The following six-ply nest contains the above orders:

ʔanu yiita-ru taáci nu riqpa na ʔoósa-ru ʔutá nu sumuci

6. " a N → ==========="
5. " V N→ ==========="
4. " Q N → ==========="
3. " N N → ==========="
2. " @ N → ==========="
1. " N N→ ==========="

1. 'song book'
2. 'blue song book'
3. 'fine blue song book'
4. 'two fine blue song books'
5. 'the two fine blue song books which were received'
6. 'those two fine blue song books which were received'

Following is a different type of nominal nesting:

wajika nu ʔucinaa nu ʔuciwaa nu ʔuq́pi nu kutu

4. " ========== → Q N "
3. " ========== → A Q "
2. " ========== → A N "
1. " ========== → A N "

1. 'insignificant Okinawa'
2. 'midst of insignificant Okinawa'
3. 'so little as the midst of insignificant O.'
4. 'the thing of (it being) so little as the midst of insignificant Okinawa'

24.52 Verbal Nesting

Nesting on verbal heads[1] is expressible as follows:

V ≤ EV ≥ V ≤ EV ... (etc.)

For example:

1. yama ŋkáyi ʔŋjá ŋ 'He went to the hills.'
2. mata " " 'He went again.'
3. ʔŋma nuti " " 'He went by horse.'
4. cinuu " " 'He went yesterday.'

Combining:

cinuu ʔŋmá nuti mata yama ŋkáyi ʔŋjá ŋ

4. " E V → ========== "
3. " E V → ========== "
2. " E V → ========== "
1. " E V = "

1. 'He went to the hills.'
2. ' " " " " " again.'
3. ' " " " " " " by horse.'
4. ' " " " " " " " " yesterday.'

[1]And by extension, on participial heads.

CHAPTER XXV

CONSIDERATIONS OF STRUCTURAL THEORY

At this point a set of hypotheses will be made in regard to certain data. Rejection of these hypotheses leaves the analysis with a number of more or less odd coincidences: acceptance leads to a general theory of Okinawan structure.

25.1 Subordinating and Subject Particles

There are two sets of homophonous particles /nu ~ ga/, one set with subordinating function, the other a subject marker as it were. While the chance homophony of two items of the form /nu/ is readily acceptable, the chance existence of an alternant /ga/ with identical complementary distribution is inacceptable. These particles are now re-examined.

Consider the function of the nominal particle in the following examples:

a)	mayaa nu kwatá ŋ	'The cat ate.'
b)	mayaa nu wú ŋ	'There is a cat.'
c)	mayaa nu yaasa ŋ	'The cat is hungry.'
d)	mayaa nu gutoo ŋ	'It is like a cat.'

In (a), the subject particle is clearly identifiable as such--at least, that is the story told by the English translation. Once the subject particle of (a) is accepted, the steps to (b), (c) and (d) tend to follow, with acceptance of /nu/ as the same item in every case.

The final sentence may be slightly altered without substantial change in meaning:

d') mayaa nu gutu ʔa ŋ

There is a limited nominal /gutu/ 'way, likeness', which satisfies the above, giving the translation:

'The cat's likeness exists.'[1]

Thus, /gutoo/ is revealed as a bogus predicate--actually a nominal-plus-existential construction with smoothing. This means that in the case of (d') and of (d), /nu/ cannot be distinguished from the subordinating particle.

Consider further the use of /ga/ in the following sentences:

e) ʔaŋ́coo, waa ga siija yá ŋ 'He is my elder.'

f) waa ga susée másí 'My doing it is better.'

g) waa ga sú sa 'I'll do it.'

In (e), /waa ga/ occurs before a noun, and English requires the translation 'my'. In (f), before a gerund, the same. In (g) however, English requires 'I' as subject. In both (f) and (g), /waa ga/ stands before the same verb stem. The possibility that it is the English translation which separates the two sets of /nu ~ ga/ is posed. But if (g) is translated:

'My doing it is.'

the need for two sets disappears.

---

[1] /ʔa ŋ/ is here rendered 'exists' as previously. It is to be reappraised below (See §25.5, §25.61).

Similarly:

waa ga ʔiyúta ŋ	'I said it.' *(My saying it was.)
waa ga ʔiyú-see	'What I said was mistaken.' *(My saying was mistaken.)
ciburu nu yaŋ	'headache' (ache of head)
ciburu nu yamu ŋ	'My head aches.' *(Ache of head is.)

The starred translations demand inquiry into the nature of predicatives and predicate particles. Meanwhile a hypothesis in regard to the above nominal particles can be made:

Hypothesis I: The "subject" particle is functionally related to the subordinating particle.

25.2 Stative Noun and Stative Inflectional Stem

Differentiation between the homophonous stative noun and inflectional stem was based on the fact that the first was defined with respect to nominal distribution and the second with respect to an inflectional apparatus. Consider the following non-standard sentences:

a) mayaa nu magisaa neeŋ[1] 'The cat is not big.'

Converting (a) to an affirmative:

b) * mayaa nu magisa ʔa ŋ

With smoothing and shortening, (b) becomes:

b') mayaa nu magisa ŋ 'The cat is big.'

As in the case of /gutu/ above, the inflectional stem may be a nominal in construction with the existential.

Hypothesis II: The stative stem is a function of the stative noun.

---

[1]This sentence is accepted by some speakers and rejected by others. It may be obsolescent or dialectal. /magisaa/ is in the referential before the negative predicate (§10.311).

25.3 Referential Particle and Copula

It is remarkable that, contrasting with the general regular pattern of predicative roots, the negative of the copula pairs formally with the affirmative of the existential:

'is'	'is not'	'there are'	'there are not'
yá	ʔaraŋ	ʔa	neeraŋ

Consider in this connection the grammatical rule which in general requires a referential form before a negative:

(a) harusaa yá sa 'He is a farmer.'
(b) harusaa ya ʔaraŋ sa 'He is not a farmer.'

The negative sentence (b) may be analyzed as follows:

1)	/harusaa/	a nominal (noun)
2)	/ya/	an exclamatory particle calling attention to nominal
3)	/ʔa/	a predicative form meaning 'exists'[1]
4)	/-raŋ/	morph meaning negative
5)	/sa/	completive particle

If the negative morph is dropped from (b), the resulting sentence is acceptable as an unusual equivalent to (a):

(a') harusaa ya ʔa sa

With smoothing and shortening, furthermore, (a') becomes (a). Thus the odd formal relationship of /ʔa : ʔaraŋ/ falls into place, if the following is accepted:

Hypothesis III: The affirmative copula is composed of the referential particle plus existential /ʔa/ plus two morphophonemic processes.

---

[1]Relationship with /ʔá-/'there'(§20.2) may be considered.

25.4 Nominal and Predicate Particle /kutu/

The nominal /kutu/'thing' refers to abstractions. It may translate also as 'fact, affair, matter' etc. Examples:

yaná kutu súna 'Dont do a bad thing!'

kaŋnuu na kutu yá sa 'It's an important thing.'

kunu kutoo wakaraŋ 'I dont understand this thing.'

ʔyaá ga ʔicá-ru kutu cicá ŋ 'I heard what you said.'

ʔaŋgutooru kutu ʔyaŋti ŋ simu sa 'It's better not to say such a thing.'

kurée tuumiikagaŋ nu kutu 'This is (by way of being) a telescope.'

nuda-ru kutu nu neeŋ 'I've never drunk.'(Having drunk thing's non-existence.)

Predicate particle /kutu/ usually translates as 'since, because, and'. Examples:

wutáyu kutu, yukutoo ŋ 'He's resting because he's tired.'
'He's tired and he's resting.'

yaasa kutu, munú kamu ŋ 'Since he's hungry, he eats.'
'He's hungry and he eats.'

But /kutu/ as head of a nominal attributive construction may also translate as 'because':

wajika nu ʔucinaa nu ʔuciwaa nu ʔuqpi nu kutu du yá-ru

'It is because I'm merely in the middle of insignificant Okinawa.'

Or, approaching the original structure somewhat:

'It is the mereness of the thing of (being in) the middle of insignificant Okinawa.'

Similarly, the examples above could be rendered as

'The thing of his being tired--he's resting.'

'The thing of his being hungry--he's eating.'

Hypothesis IV: Predicate particle /kutu/ is the same morpheme as nominal /kutu/.

25.5 The Forms of /munu/

It may be assumed that alternant /munu/ is the full form of the morpheme meaning 'thing'(concrete), and that the usual /muŋ/ is the result of syllabication. The full form may occur when the final syllable is in a supported position:

munu kamu ŋ 'He eats (food).'
munu-kuuŋaa 'beggar'(food-beggar)

This item is one of the most basic of the language. It is used in the various senses of the basic material things of life, translating as 'person, animate, food, meal, drink, clothing, material', as well as 'thing' in general. Infrequently it may refer to an activity, or other things of an abstract nature.

In view of the very common use of this morpheme, the question arises of why it has not exhibited shortened forms in the fashion of other such basic items(§18.2). There is reason to believe that shortened forms of /munu/ are common--extremely so in fact, as will be shown.

/muŋ/ has been seen as head of predicative attributive expressions(§22.31):

ʔicú-ru muŋ 'But he's going!'
ʔikáŋ muŋ 'He's not going!'(definitely)

Equivalent pairs such as the following indicate that /muŋ/ may shorten to /ŋ/:

taqcoo-ru muŋ naa 'But he is standing!'
taqcoo-ru ŋ naa " " " "

But, while /taqcoo-ru muŋ/ (without /naa/) exists, /taqcoo-ru ŋ/ does not. Nor is there much alternation between /muŋ/ and /ŋ/ as above. Approaching the problem from another angle, predicate particles /nu/ and /ŋ/ may be compared:

a) yaasa ŋ (yáa) 'He's hungry(isnt he?)'
b) yaasa nu (yáa) 'He's hungry(isnt he?)!'
c) ŋjasa nu,numaraŋ 'It's bitter and so I cant drink it.'

The difference between (a) and (b) is purely one of emphasis. The pair of particles /ŋ : nu/ may be considered as separate morphemes, differing in emphasis, or they may be considered as morpheme alternants, with selection by a stress morpheme. The latter solution is more economical--since the stress morpheme is present in either case--and moreover seems in accord with other data (§18.5).

In example (c), /ŋ/ cannot occur instead of /nu/. The high order of junction after /nu/ (J-8), indicating a suspension, may well explain this.[1]

Further, the /nu/ of (c) may translate into 'because', 'since'. This brings /nu/ close to /kutu/ (§9.22/1 and above). If Hypothesis IV is accepted, then the item which functions like /kutu/ 'thing', may also mean 'thing'. And, as suggested above, /muŋ ~ munu/ means 'thing' very much in Okinawan. Thus:

Hypothesis V: Predicate particles /nu/ and /ŋ/ are shortened forms of /muŋ/ 'thing'.

---

[1]Compare desyllabication of /muŋ/ before J-5:
/munu kamu ŋ/ 'He is eating.'

25.6 Nominal Structure as Basic

25.61 Simple Nominal Constructions

Hypothesis V makes it possible to view clauses ending in predicate particle /ŋ/ as nominal constructions:

mayaa nu kwayú ŋ	'The thing of the cat's eating.'
mayaa nu ʔa ŋ	'The thing of the cat's existence.'
mayaa nu magisa ŋ	'The thing of the cat's bigness.'[1]
ciburu nu yamu ŋ	'The thing of the head's hurting.'

The above structural interpretation is in accord with other data. There is the penchant for copular nominal sentences (§11.7) in the colloquial. There is the general freq-frequency of nominal clauses, followed or not by a particle:[2]

kada-ru baa yi	'Did you eat it?' (Having eaten situation?)
kamaŋta-ru baa yi	'Havent you eaten?' (Not having eaten situation?)
caási ŋ kuuŋ háji	'He'll probably not come in any case.' (The probability of his not coming no matter what.)
kanása-ru naaka, ʔimasimiree	'If you love him, censure him.' (Within (the extent of) loving ...)
kadi yi	'Have you eaten?' (Having eaten?)
kamaŋti yi	'Havent you eaten?' (Not having e.?)

25.62 Paired Nominal Constructions

The aphoristic construction Old saint, young sinner is recognized as lying outside the bounds of normal English.[3] Okinawan has a saying of similar structure:

wii-muŋ, furí-muŋ 'Drunk man; crazy man.'

---

[1] A simpler alternative to the solution of §25.2(b).

[2] See especially §22.31.

[3] Leonard Bloomfield, Language 152 (New York, 1948).

Such a structure is called a paired nominal, and is not aphoristic in Okinawan, although the first nominal is as a rule in the referential:

ʔanú yii-kacaa ya fiŋsuu-muŋ 'That artist (is) a poor man.'

Paired nominals also occur with essives. A type with repetition of the head nominal seems structurally significant:

ʔyaá náa ya, nuú náa yá ga 'What is your name?' (What name is your name?)

kunú hana nu ʔiroo, nuu ʔirú yá ga 'What is the color of this flower?'

Another type of paired nominal structure is paratactic:[1]

kurée magii; ʔarée gumaa 'This is big; that is small.'

Considering, then, the two types of structural facts: 1) a strong tendency toward constructions that are unquestionably nominal and 2) wide use otherwise of constructions which appear to be nominal, but in the guise of something contrasting with nominal--particularly as seen from the viewpoint of a smooth English translation:

Hypothesis VI: Basic structure is of type N(Y), where N is nominal and Y any type of particle.

N: ʔweŋcu 'A mouse (it is).'

NY: ʔweŋcu yáa 'A mouse, isnt it?'

---

[1]Paired predicate structures are comparable:

koofii numu mi; caa numu mi 'Will you drink coffee or tea?' (which)

ʔicú mi; ʔikáni 'Are you going or not?'

ʔŋjuci ga sura; ʔŋjukaŋ ga ʔara 'Will it move or not?'

25.7 Further Forms

25.71 Subordinating Particle and Attributive Suffix

The subordinating particle(SP) /nu/ and the attributive suffix /-ru/ have identical functions and have been separated on formal grounds alone:

ʔamá nu qcú	'the person there'
ʔicú-ru qcú	'the person who is going'
magisa-ru qcú	'big person'

Occasionally the following alternants of the suffix occur:

ʔicú nu qcú	'the person who is going'
magisa nu qcú	'big person'

Hypothesis VII: The attributive suffix is a weakened form of the subordinating particle.

25.72 Subordinating Particle and /munu/

The SP /nu/ is phonemically identical with the shortened form of /munu/, /nu/. Since there is identity of form and they are never in contrast, they are to be distinguished on a basis of either semantic dissimilarity or of structural theory.

As for the semantic question, in languages of the Siamese family, the morpheme for 'thing' and for 'of'(possessive) is one. Thus semantic incompatibility can hardly be maintained. For the structural question, acceptance of the SP as derived from a nominal is in harmony with the trend of the preceding hypotheses.

Hypothesis VIII: The subordinating particle is a shortened form of the nominal /munu/.

25.73 The /du .. -ru/ Construction

On the model of /wii-muŋ, furi-muŋ/ (§25.62), a theoretical sentence may be constructed (using the full form of /munu/) as follows:

a) *mayaa munu, kwáyu munu

This is not an Okinawan sentence, but a word-for-word translation gives 'Cat thing, eating thing.' Sentence (a), undergoing normal processes of shortening and syllabication, would become:

b) *mayaa nu, kwayú nu
c) mayaa nu, kwayú ŋ 'The cat eats.'

Sentence (c) is a normal unit of the language, with a meaning which can translate as above.

Again let it be supposed that stage (b) is accompanied by a different stress scheme and prosody, conveying the meaning: 'The cat (not the dog) eats.' Such a prosody could conceivably be accompanied by dissimilation, with strengthening of the articulation of the first /nu/ and weakening that of the second, yielding:

d) mayaa du[1]kwayu ru 'The cat (not something else) eats.'

Hypothesis IX: Aspectual particle /du/ and its governed particle /ru/ are specialized forms of /nu/, from /munu/.

---

[1]Note that in the colloquial, /ru/ occurs instead of /du/ (p. 98, fn. 1).

25.74 Aspectual Particle /ŋ/

Compare the following:

mayaa nu kwáyu ŋ 'The cat eats.'
mayaa ŋ kwáyu ŋ 'The cat too eats.'

Separate functions were found for aspectuals /nu/ and /ŋ/. The phonological relationship (in view of the existing morphophonemic process) may be coincidental--but it need not be lightly cast aside. As in the case of /du/ above, a different prosody could be the basis for the phonemic distinction.

Hypothesis X: Aspectual particle /ŋ/ is a further specialization of /múnu/.

25.75 Interrogative and Subordinative /ga/

It seems reasonable to assume that the two interrogative particles /ga/ are the same morpheme. There is of course no need to account for this morpheme any further, but there is a correspondence which, when all is considered, is hard to reject. Again, constructing a hypothetical nominal sentence, this time with /kutu/:

*núu kamu kutu 'What eating thing?'

The above structure is subjected to three processes:

1) Shortening: *núu kamu ku
2) Softening: *núu kamu gu
3) Opening: nuú kamu ga

The third stage is a sentence meaning 'What are you eating?'

Thus far, one is at liberty to reject this relationship between /kutu/ and /ga/. There is the /ga/ alternant of the subordinating particle /mu/ still unaccounted for however. And if /nu/ is accepted as a reduced form of /munu/, 'thing', then its /ga/ alternant could well be a shortened etc. form of /kutu/, also 'thing'. This seems particularly attractive as a hypothesis in view of the fact that the central economy of the language, which has shown itself to be so structurally productive, provides no other possibility. Finally, the fact that these two seemingly unconnected morphs can each qualify as morphophonemic variants of /kutu/ makes each the strongest supporting argument for the relationship of the other.

Hypothesis XI: Interrogative and subordinative particles /ga/ are morphophonemic variants of /kutu/ 'thing'.

25.76 Interrogative Particle /mi/

The polar question signal occurs in three forms:

	Statement	Question	Gloss of Stmt.
Y:	tuyu ŋ	tuyu mi	'he takes'
T:	tuta ŋ	tuti yi	
R:	turaŋ -	turani	'he doesnt take'

Of these three forms, /yi/, which follows the nominal, has the widest distribution. A hypothetical construction of the nominal type, using the shortened form /mu/[1] of /munu/ gives: */tuyu mu yi/.

---

[1]Shortened form /mu/ is not frequent, but seems to be present in /mu-jukuyi/ 'crops'. (/cukuyi/ 'producing')

Smoothing and shortening provide the Y question form, /tuyu mi/.

The T question construction, which stood out as an irregularity in the paradigm (§9.211), now appears as a simple NY construction (Hypothesis VI).

The R question construction points toward a former /yi/ rather than /mi/.

25.8 Conclusion

If the above set of hypotheses is accepted (and it is supposed that they are sufficiently interrelated to stand or fall together--with the exception of IX and X), then Okinawan is seen as a language whose basic structure is characterized by simplicity and the flexible use of a small number of units.

Considerable apparent complexity results from the operation of the morphophonemic processes, but for the most part they work, within defined limits, with regularity.

Note: Appendices A to F provide wordlists of simple independent forms of the six most frequent word-patterns. These lists are complete so far as the corpus is concerned, and are used as samples for pattern study and analysis in Chapter III.

APPENDIX A

A WORDLIST OF STRUCTURAL TYPE 1 (CV:)

baa	aunt	jaa	room
baa	situation	jii	ground
caa	tea	jii	character (writing)
caa	always	joo	gate
cáa	how?	joo	stopper
cii	breast	joo	elephant
cii	mind, spirit	jóo	emotion
cíi	blood	júu	tail
cíi	bucket	kaa	hide (skin)
cíi	hook	káa	well (drinking)
cuu	today	kée	ladle
dáa	well! (anger)	kii	tree
dee	stand, base	kíi	fur, hair
dée	price	kuu	flour
díi	come on!	kuu	patch
doo	candle	kuu	shell (of shell-life)
duu	body	kwee	compost
fáa	leaf	kwée	adze
fee	south	kwii	voice
fée	ash	kwíi	box, chest
fée	fly (insect)	máa	where
fii	fire	mee	rice
fii	fart	mee	front
fíi	day	mii	eye
fuu	head (of grain)	mii	opening
fuu	luck	míi	fruit
fuu	wheat cake	míi	three
fúu	sail	móo	grass-field
fúu	cheek	muu	(a seaweed)
fúu	yes?	naa	cord, string
guu	pair, set	naa	colza (cole)
guu	go (game)	naa	more
haa	tooth	náa	name
háa	ha!	náa	you
híi	yes?	náa	well (expletive)
hóo	vagina	náa	yard

nee	earthquake
nee	seedling
nii	burden
nii	root
nii	vicinity
noo	mind, brain
nuu	plain
núu	what?
rii	thanks
ruu	dragon
rúu	scull
see	grasshopper
sii	vinegar
sii	reef
sii	sheath
sii	nest
síi	chestnut
síi	cliff
síi	spirit
síi	city
soo	oboe
soo	rod
sóo	sense, attention
suu	father
suu	salt
suu	tide
taa	paddy
táa	who?
táa	two
tii	hand, arm
tii	gutter, trough
tii	one
too	level land
tóo	well!
tuu	deep (of ocean)
túu	ten
waa	broadmindedness
waa	I
wíi	nephew
woo	king
wúu	banana cloth
wuu	strap
yaa	house
yáa	arrow
yáa	eight
yii	picture
yii	reed
yíi	chair
yuu	hot water
yuu	evening
yúu	world
yúu	four
yúu	well (adverb)
?áa	ah!
?ee	(fish)
?íi	yes
?óo	oh!
?úu	yes
?waa	pig
?wíi	top, above
?yáa	you (familiar)
?yée	hey!

APPENDIX B

A WORDLIST OF STRUCTURAL TYPE 2 (CVCV)

basu	place
básu	bus
bira	onion
biwa	loquat
biŋ	bottle
buci	whip
búsi	samurai
buŋ	part
buŋ	tray
cáku	guest
cíbi	butt
cíbu	crock
cici	moon
cici	soil
ciji	pill
ciji	top
cíji	prefect
cika	grip
cika	mound
ciku	chrysanthemum
cimi	crime
cími	nail, claw
cimu	heart
cimu	intention
cina	rope
cini	usual thing
cinu	horn
cira	face
ciri	piece, slice
círi	garbage
círi	paulownia
círi	fog
círu	tendon
círu	stork
cíta	ivy
citu	gift
ciyu	dew
ciŋ	clothing
dábi	funeral
dáki	bamboo
daŋ	step
diki	produce
dísi	disciple
duku	poisen
duru	mud
dúsi	friend
fiji	answer
fiji	(part of loom)
fíji	beard
fíji	elbow
fíra	ascent
fíra	petal
firi	fin
firu	daytime
fíru	garlic
físa	leg, foot
físi	cliff
fita	unskillful
fiŋ	vicinity
fuci	edge
fúda	card
fúdi	brush
fúdu	size
fúji	wistaria
fúka	shark
fuku	clothing
funi	boat, ship
funi	bone
furu	pig-sty
fusi	tune
fusi	knot
fúsi	star
fúsu	navel
fúta	cover
fuya	shoes
fuya	lamp chimney
fúyu	winter

gáma cave
gáni crab
gasi famine
gasu gas
gaya miscanthus
guci stem
guma sesame
gumi dust
gumu rubber

hâba width
hábu snake
hada skin
hági baldness
haji shame
háka tomb
haki brush
háku box
hama beach
hami fodder
hana flower
hána nose
háni feather
hara belly, abdomen
haru spring (season)
haru field
hási bridge
hata loom
hâta flag
hata edge

jiku scroll
jimu duty
jîri in-law
jiŋ money
juri whore

kâba face powder
kâbi paper
kâbi moth
kábu turnip
kâca mosquito net
kâci hedge
kadu corner
kâgu cage
kája smell
kaji number
kaji rudder
káji wind (air)
káji gristle
káji back of neck
káma oven
kami above, a god

kana plane (tool)
kána kana (syllabic characters)
káni metal
kára empty
kasa umbrella
kása pox
kasi dregs
kási oak tree
kata shoulder
káta side
kaya zebra grass
kíji wound
kúba palm tree
kubi wall (inside house)
kúbi neck
kúca storage place for valuables
kuci bones, skeleton
kuci east wind
kúci mouth
kuji starch
kúji nail
kuju last year
kuma bear (animal)
kumi rice
kumi group
kumu cloud
kúni country (land)
kura saddle
kura store-room
kuri chestnut
kúri this (thing)
he, she, it
kusa grass
kusa ague
kusi comb
kúsi seat (of body)
kusu bodily discharge(solid)
kusu pepper
kutu thing (abstract)

kwaŋ crown (for head)

maci market
madu window
máji first of all
maku curtain
mári rare
másí better
mata crotch
máta again
mayu eyebrow
mici honey
míci road
míji water
mimi ear
misi rice (cooked)
múci rice-cake
muci pitch (material)
muji cereal
míji cloth
múmi unhulled rice
mumu thigh
múmu peach
múra (political division)
múru everything
músi worm, bug
musi if
muti direction
mutu origin
múyi hill
mûyi measure
mũ thing (person, food clothing, etc.)

náci summer
nada tear (of eye)
nagi length
naji quiet sea
nama raw
náma now
nami wave
nana seven
nasi pear
nayi fruit
nici heat
niji screw
nísi north
niwi fragrance
nuci life
nuka rice bran
numi flea
numi chisel
núnu cloth
nuyi seaweed
nuyi paste

pã bread
pĩ pin

saba (fish)
sába sandals
sabi rust
sáci front
sáka descent
sáki rice wine
sáki salmon
saku amount
sáni seed
sára plate
sári say!
sata rumor
sawa marsh
sã door suspension
siba tongue
síca bottom
sici chance
sici season
sici spade
síci threshold
sigu soon
siji cedar tree
síji sea-gull
síka deer
sima island, home
sima stripe pattern
síma wrestling
simi charcoal
símí corner
simu frost
símu bottom, lower
sína sand
sína goods, merchandise
sini shin
sisi meat
sítu mother-in-law
siwa wrinkle
síwa worry
sĩ thousand
suba side
suba buckwheat
súdi sleeve
suku (fish)
súku desk
súku bottom
súsu skirt
sutu outside
sũ loss

tábi trip
taci sword
táci waterfall
tą́ci dragon
táka hawk
taki height
taku kite
taku octopus
tama ball
tama jewel
támi benefit
tána shelf
tani penis
taru bucket
tayi pendant
tą́ŋ charcoal
tą́ŋ dog-tick
tíci enemy
tíci iron
tira temple
tíŋ sky
tuci time
túji wife
tuku virtue
túku profit
túku alcove
tumu stern
tusi year
túyi bird

wábi apology
waci armpit
waja trick
waki reason
waku frame
wara straw
wasi eagle
wata belly
wą́ta cotton
wą́ŋ rice-bowl
wą́ŋ bay
wútu husband

yaci disturbance
yadu shelter
yaku bad luck
yama hill
yami darkness
yą́ni resin
yáyi spear
yaŋ pain

yúci snow
yúda branch (of tree)
yúka floor
yuku breadth
yumi bow (archer's)
yúmi bride
yuru night
yúta fortune teller
yúyi lily

ʔąca tomorrow
ʔáci autumn
ʔáda vengeance
ʔádu heel
ʔągi land (from sea)
ʔąja (political division)
ʔąji path
ʔáji gills
ʔáji village head
ʔáji taste
ʔąka dirt
ʔąki fish
ʔáku lye
ʔami rain
ʔámi net
ʔâmi sweets (to eat)
ʔąna hole
ʔára unhulled rice
ʔári that (thing) yonder
he, she, it
ʔasa morning
ʔasa hemp
ʔasi sweat
ʔąsi leg (of meat)
ʔáti address, notice
ʔatu last, after
ʔawa millet
ʔåya pattern
ʔáyi ant
ʔayu trout

ʔibi prawn
ʔíca squid
ʔici pond
ʔici five
ʔíci when?
ʔíji courage
ʔimi dream
ʔímí mourning
ʔiri drill
ʔíri west
ʔiru color

ʔisa doctor
ʔísi stone
ʔísu sea-shore
ʔita lumber
ʔíyu fish
ʔiŋ́ dog

ʔúci inside
ʔuji maggot
ʔuji agnomen
ʔuki buoy
ʔumi sea, ocean
ʔuni devil
ʔura lining (of clothing)
ʔúri that (thing)
he, she, it (there)
ʔuru coral
ʔúsi bovine
ʔúta song
ʔútu noise
ʔuya parent
ʔuyi melon
ʔúŋ fortune

ʔŋ́ma horse
ʔŋ̀mi pus
ʔŋ̀mi plum
ʔŋ̀mu potato
ʔŋna dung
ʔŋni rice plant

ŋ́ji thorn
ŋ̀ju gully, ditch
ŋna clam
ŋ̀na everyone
ŋ̀ni chest (of body)
ŋnu raincoat (straw)

qcú person
qkwá offspring, child

APPENDIX C

A WORDLIST OF STRUCTURAL TYPE 3 (CV:CV)

baaki	basket	kaagi	shadow
biíru	beer	kaami	jar
booji	monk	kaara	tile
boosi	hat	kaára	river
boósu	spring rains	kaasa	wrapper
boótu	boat	keena	biceps
		koóji	mold, mildew
byooci	sickness	koóri	ice
		kooru	censer
caági	black pine	koosi	itch
ciíci	circumstances	kuubu	seaweed
coobu	ledger	kuuga	eggs
coosi	pitch (acoustic)	kuúji	public affairs
cuusi	injection	kuuki	air
daagu	dumpling	kwaasi	cookies, cake
deéji	terrible thing		
diici	litchi	maaci	pine tree
doogu	tool	maami	beans, peas
doori	logic	maaru	turn, girth
		maayi	ball
feeku	early	meési	flattery
fiina	grass	miiju	good appearance
fiira	trowel	moofu	blanket
fiiru	brazier	muuku	son-in-law
fiitu	dolphin		
fuuci	grippe	naaba	mushroom
fuuci	mugwort	naabi	pot
fuúji	appearance	naáca	next day
fuúka	balloon	naada	not yet
		naaka	middle
geeci	cold (disease)	naaku	pulse
guufu	wen	neébi	imitation
		neétu	match (together)
haaci	basin	nuuji	rainbow
haaya	pillar	nuuri	moss
haayi	needle	nuuru	(female votary)
hooci	broom	nuusi	owner
hoóri	pineapple		
hootu	pigeon	peéji	page
hyaaku	hundred		
hyaáyi	drought		
hyoosi	occasion		
hyuusi	bulbul (bird)		

(completed on following page)

saaji towel
saara (fiber)
saaru monkey
saasi lock
saáyi morning sickness
seeci clever person
seefu government
seeku carpentar
siibi stem
siigu penknife
siija elder sibling
siisi soot
siisi lion
siitu pupil
soóda soda
soóji sliding door
sooki basket
suubu contest
suuji path
suúji feast
suuku proof

taabi foot gloves
taagu bucket
taara straw sack
teefa joke
teeku drum
tiida sun
tiiru basket
toofu bean curd
tuuci always
tuuru lamp
tuuyi manner

wuuji sugar cane
wuuki tub
wuuŋ hatchet

yaasi palm tree
yaaŋ next year
yiiŋ stoop (of house)
yooji small brush
yoosi appearance
yuuci axe
yuuji business
yuuna (tree)

ʔaasa sloke
ʔeeji signal
ʔeeku (pole for propelling boat)
ʔoǫji fan
ʔoómu parrot
ʔuubi sash, girdle
ʔuubu (head sores)
ʔuudu quilt
ʔuusi mortar

ʔwaabi surface
ʔweeka kin
ʔweeki rich

ʔyeeju friend

ʔŋŋca soil

ŋŋsu bean paste
ŋŋ́cu year before last

APPENDIX D

A WORDLIST OF STRUCTURAL TYPE 4 (CVCV:)

basaa	(cloth)
batáa	butter
budóo	grapes
cicee	opportunity
cicuu	full moon
cigée	joint (movable)
cikée	mission
cikoo	climate
cinée	household
cimuu	yesterday
dujoo	loach
ficée	forehead
fudii	scar
fudíi	lightning
furíi	crazy person
fuyuu	(a lotus)
gumaa	little thing
hacáa	bee
hagii	bald person
jijaa	ill-natured person
jijóo	circumstances
kacúu	bonito
kakoo	diaper
kubuu	dent
kuraa	sparrow
kurée	rank
kutuu	harp (koto)
kuruu	black thing
kutii	bull
magii	big thing
marúu	round thing, circle
mayaa	cat
mugée	bit (horse's)
muyóo	aspect
muyúu	celebration
nagee	long time
naree	custom
nigee	request
sabee	(insect)
sajee	trochoid
sakée	prosperity
sibee	harelip
sikáa	coward
sikee	world
sisóo	master (artisan)
sugíi	handicraft
surii	crowd
tucii	clock, watch
turii	shrine gate
turúu	dolt
warée	smile, laugh
wikíi	brother
yabúu	Chinese medical practitioner
yagoo	nickname
yasee	getable
yasíi	[illegible]sp
ʔabaa	elder sister
ʔafii	elder brother
ʔakáa	redness
ʔanáa	escort (nurse)
ʔayaa	mother
ʔifee	cenotaph
ʔiríi	inlet
ʔiwee	celebration
ʔukoo	joss stick
ʔŋmii	elder sibling

APPENDIX E

A WORDLIST OF STRUCTURAL TYPE 5 (CV:CV:)

biibii	toy
booboo	baby
boojaa	baby
ciifaa	(garment)
ciiguu	mute (person)
ciiruu	yellow
ciituu	cockscomb
coódee	sibling
cuubaa	strong man
cuukaa	tea-kettle
deedee	orange (fruit)
feerée	
fiijaa	goat
fiiraa	cockroach
fiitaa	(garment)
fuucii	bellows
fuunaa	pose
gaanaa	swelling
gooyaa	balsam-pear
guunii	cripple
haamee	grandmothe
haarii	boat racing
hoocaa	kitchen knife
kaacii	summer solstice
kaagaa	reflection
kaamii	turtle
keejoo	signal
koofii	coffee
koosaa	knuckle
kuubaa	spider
kuucoo	Chinese violin
kuudaa	jelly-fish
kuuruu	top (toy)
meenaa	sheep
miigaa	mioga
mooyaa	dancer
neébaa	mimicker
neeguu	lame person
niisee	young man
nuudii	throat
saájaa	snowy heron
saątaa	sugar
seéwee	happiness
siijaa	sea-gull
siimii	cicada
siinoo	sieve
soobee	inferior product
soóbee	business
soogaa	ginger
soomaa	cross-eyed person
soonoo	camphor
sooyuu	sauce
suurii	platter
taaree	basin
taarii	father
teebii	torch
teegee	in general
teetoo	leader
tuuruu	stone road
wiiruu	string
yaacuu	acapuncture
yaaduu	gecko
yoobaa	weak person
ycojoo	treatment
yuubee	concubine
yuurii	ghost
ʔaagii	fritter
ʔiiouu	thread
ʔiiraa	jelly-fish
ʔootoo	(orange)
ʔooyee	fight
ʔŋŋmee	grandmother
ŋŋdii	turnip

APPENDIX F

A WORDLIST OF STRUCTURAL TYPE 6 (CVCVCV)

bakici	bucket
baniŋ	swab
baŋci	house number
biŋta	side-burns
bubuŋ	portion
buraku	hamlet
burasi	brush
buriki	tin
butáŋ	button
cakúsi	eldest son
cataku	tea-cup stand
cibaci	camellia
cibumi	bud
ciburu	head
cibúyi	(trailing part of garment)
cibuŋ	feeling
cicára	strength
ciciji	azalea
cicini	fox
ciciŋ	bundle
cijaku	brass
cijíŋ	drum
cikasa	gov't office
cimágu	hoof
cinubu	(sores)
ciruji	cockspur
cisiri	pipe smoking
cisuku	rule
citumi	employment
ciŋsi	knee
diŋgu	apple
diŋwa	telephone

fibici	echo
ficáyi	light
ficíji	sheep
fidati	boundary
fifaci	(plant)
fijayi	left
fijici	(part of loom)
finuci	Japanese cypress
fiŋgu	dirt
fuguyi	scrotum
fukuji	(tree)
fukuru	bag
fukúyi	dust
futuki	doll
futúŋ	quilt
gacuŋ	scad
gajaŋ	mosquito
gamaku	waist
guduŋ	stupid person
gujira	whale
gusiku	castle
gutuku	trivet
gwansu	ancestor
hagama	caudron
hajici	tatooing
hajímí	beginning
hakama	(garment)
hakayi	scales
hanasi	speech
hasaŋ	scissors
hasiru	door
hataki	field
jakúru	pomegranate
jaqsi	magazine
jibaŋ	undershirt
jicasi	lice eggs
jikáŋ	time

kabaŋ satchel
kagaŋ mirror
kagiŋ degree
kajáyi ornament
kajíri limit
kakasi scarecrow
kakuji lower jaw
kakúyi enclosure
karaji hair (head)
karasi mustard
karási loan
karasu (marinated sea food)
kasimi haze
kasira chief, head
katáci shape
katana sword
kawáyi substitute
kaŋda sweet-potato vines
kaqpa raincoat
kibúsi smoke
kujaku peacock
kujími evening bell
kukaru woodpecker
kukuru heart (figurative)
kumuyi pond
kunibu bergamot orange
kuruma cart, wagon
kurúŋ clothes
kusáyi chain
kusuyi medicine
kutuba word, language
kuyumi calendar
kuŋda calf (of leg)
kuqpu cup, glass

macica (spinning tool)
macigi eye-lash
macíya shop, store
macíyi festivity
magáyi bend
majíri (political division)
makayi rice-bowl
marúca chopping-board
maqkwa pillow (block)
miduri sprouts
mikaŋ orange (mandarin)
mikumi plan, project
mimiji earthworm
miruku milk (canned)
misáci cape (of land)
misiŋ sewing machine
mumíji red leaves
mumiŋ cotton cloth
murusi chunk
musiru mat cover

nagani back
nagari stream
nagasi shower (rain)
nasaki sympathy
naŋja silver
naŋji hardship
nijíri right (hand)
nujúci sake cup
nujúmi hope
nusudu thief

pajáma pajamas

rakúda camel
raŋpu lamp
riŋci jealousy

sabaci comb
sabani canoe
safuŋ soap
sakána (side-dish to eat with sake)
sakúra cherry
sanaji shorts
sasiŋ photograph
saŋgu coral
sibáyi play, theater
sibíri (prickling feeling of limb when stopped circulation is restored.
sibuyi white gourd melon
sijáma manner
sijíŋ nature
sikiŋ society
sikuci work
sirabi investigation
sirayi termite
siraŋ louse
sirúbi check-mark

sirúsi	sign
sisúŋ	descendants
siŋji	(a soup)
siŋka	retainers
sudaci	rearing
sumuci	book
surumi	dried cuttle-fish
susuyi	mop
tabaku	tobacco
tabayi	knot
tagúyi	kind, sort
takara	treasure
tamagu	eggs
tamáŋ	porgy
tamisi	test
tamuŋ	fire-wood
tatáŋ	floor mat
tayuyi	news, tidings
taŋci	quick temper
taŋsi	bureau
tiŋci	weather
tiŋma	rowboat
tugáyi	tip
tukúru	place
tunayi	neighbor
tusuyi	old person
tuŋbi	Siberian black kite
tuŋci	residence of upper class
warabi	child
wasabi	horse-radish
wikiga	man
winagu	woman
wudúyi	dance
yakára	outstanding person
yanábu	(tree)
yanáji	willow
yasimi	rest, vacation
yiŋsu	raiment
yudáyi	slobber
yukúsi	lie, falsehood
yurusi	permission
ŋkaji	centipede
ŋkasi	in olden times
ŋmátu	port, harbor
ʔabusi	path (between paddies)
ʔabuyi	stirrup
ʔadani	(tree)
ʔafiru	duck (domestic)
ʔagáyi	east
ʔajiŋ	pestle
ʔakáyi	sliding door
ʔakúbi	yawn
ʔamaŋ	hermit crab
ʔarari	hail
ʔasáti	day-after-tomorrow
ʔasíbi	game
ʔasija	clogs, geta
ʔataku	cormorant
ʔatayi	yard-garden
ʔawari	misery
ʔaŋda	oil
ʔicubi	strawberry
ʔicuku	cousin
ʔijuŋ	spring (water)
ʔikayi	anchor
ʔikuci	how many?
ʔikusa	war, battle
ʔináka	country (from city)
ʔirana	sickle
ʔirici	scales (hide)
ʔiriku	sea-slug
ʔiŋki	ink
ʔubúku	boiled rice
ʔubuŋ	" "
ʔuduŋ	residence of noble
ʔujira	quail
ʔujiŋ	tray
ʔumuti	front
ʔumútu	(flower)
ʔusaci	raw vinegared vegetable)
ʔusági	rabbit
ʔusiru	soup
ʔuwáyi	end
ʔuŋju	you (polite)
ʔuqtu	younger brother
ʔŋbási	(plant)
ʔŋbúsi	weight
ʔŋmaga	grandchild
ʔŋnaji	eel

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