

INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms

300 North Zeeb Road
Ann Arbor, Michigan 48106

76-11,525

BUNKOWSKE, Eugene Walter, 1935-
TOPICS IN YALA GRAMMAR.

University of California, Los Angeles
Ph.D., 1976
Language, linguistics

Xerox University Microfilms, Ann Arbor, Michigan 48106

© Copyright by

Eugene Walter Bunkowske

1976

THIS DISSERTATION HAS BEEN MICROFILMED EXACTLY AS RECEIVED.

UNIVERSITY OF CALIFORNIA

Los Angeles

Topics in Yala Grammar

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Linguistics

by

Eugene Walter Bunkowske

1976

The dissertation of Eugene Walter Bunkowske is approved.

William R. Hutchinson

William R. Hutchinson

Paul M. Schachter

Paul M. Schachter

Wm. E. Welmers

William E. Welmers, Committee Chairman

University of California, Los Angeles

1976

DEDICATED

TO

THE YALA PEOPLE

TABLE OF CONTENTS

		Page
Introduction:		
0.	Introductory.....	1
0.1.	Yala Usage.....	1
0.2.	Yala Classification.....	2
0.3.	Yala Tonal System.....	4
0.4.	Central Yala Speech.....	4
0.5.	Field Work.....	5
0.6.	Writing Conventions.....	5
 I. The Phonemes:		
1.	Sound System.....	8
1.1.	Consonants.....	8
1.2.	Vowels.....	10
1.3.	Tone.....	11
2.	Phonetic Values and Positional Variation... ..	11
2.1.	Consonants.....	11
2.2.	Vowels.....	36
2.3.	Tone.....	45
3.	Syllable Structure.....	49
4.	Syllable Usage.....	49
4.1.	Prefixes.....	49
4.2.	Roots.....	50
5.	Phrase-Clause and Sentence Markers.....	51
5.1.	Phrase-Clause Markers.....	51
5.2.	Sentence Markers.....	51
6.	The Usage of the Markers.....	52
6.1.	Phrase-Clause Markers.....	52
6.2.	Sentence Markers.....	53
7.	Orthography.....	58
7.1.	Early Work.....	58
7.2.	Old Orthography.....	59
7.3.	Modern Orthography.....	59
 II. The Morphemes		
8.	Introductory.....	62
8.1.	Prefixes.....	66

TABLE OF CONTENTS

		Page
8.1.1.	Ø and A.....	68
8.1.2.	Ø and E.....	69
8.1.3.	LE and A.....	70
8.1.4.	WO and A.....	72
8.1.5.	U and I.....	74
8.1.6.	YE.....	76
8.1.6.4.	YĖ.....	77
8.1.7.	YE.....	78
8.1.8.	LE.....	80
8.1.9.	I.....	80
8.1.10.	I.....	84
8.1.11.	Prefix Tones.....	86
8.1.11.3.2.	Contrastives.....	88
8.1.12.	Diminutives.....	89
8.1.13.	Summary.....	92
8.2.	Roots.....	95
8.2.1.	Prefixed Roots.....	96
8.2.1.1.	Simple.....	96
8.2.1.2.	Complex.....	97
8.2.1.3.	Reduplicated.....	107
8.2.1.4.	Functions.....	108
8.2.1.4.1.	Numbers.....	108
8.2.1.4.2.	Colors.....	113
8.2.1.4.3.	Question Words.....	116
8.2.1.4.4.	Time Words.....	118
8.2.1.4.5.	Pronouns.....	119
8.2.1.4.6.	Demonstratives.....	121
8.2.1.4.7.	Locationals.....	122
8.2.1.4.8.	Adverbs.....	125
8.2.1.5.	Assimilability.....	126
8.2.2.	Non-prefixed Roots.....	127
8.2.2.1.	Verbals.....	127
8.2.2.1.1.	Simple.....	127
8.2.2.1.2.	Complex.....	129
8.2.2.1.3.	Reduplication.....	129
8.2.2.1.4.1.	Transitive.....	132
8.2.2.1.4.2.	Intransitive.....	140
8.2.2.1.4.2.3.	Natural Action.....	142
8.2.2.1.4.3.	Movement.....	144
8.2.2.2.	Verbal Auxiliaries.....	145
8.2.2.3.	Adverbials.....	148
8.2.2.4.	Adjectivals.....	152
8.2.2.5.	Conjunctives.....	153
8.2.2.5.1.	Unassimilable.....	154

TABLE OF CONTENTS

	Page
8.2.2.5.2.	Assimilable..... 155
8.2.2.5.2.1.2.1.	Associative..... 157
8.2.2.5.2.1.2.2.	Coordinative..... 159
8.2.2.5.2.1.2.3.	Comparative..... 160
8.2.2.5.2.2.	Verbal..... 160
8.2.2.5.2.3.	Relative..... 161
8.2.2.5.2.4.	Prepositional..... 161
8.2.2.5.2.5.	Complement..... 169
8.2.2.6.	Descriptives..... 171
8.2.2.6.1.	Reduplicating..... 171
8.2.2.6.2.	Non-reduplicating..... 174
8.2.2.6.3.	Ideophones..... 188
8.2.3.	Other Roots..... 190
8.2.3.1.	Dependent Pronouns..... 190
8.2.3.2.	Emotive Words..... 191
8.2.3.3.	Clause Openers..... 193
8.2.3.4.	Utterance Closers..... 194

III. Eliding Boundaries:

9.	Introductory.....	196
9.1.	Assimilation.....	196
9.2.	Coalescence.....	197
9.3.	Secondary Feature Placement.....	197
9.4.	Absorption.....	197
9.5.	Elision.....	197
9.6.	Syllable Joining.....	197
9.7.	Elidable Boundaries.....	197
9.8.	Application.....	200
9.8.1.	Consonant Assimilation.....	201
9.8.2.	Secondary Feature Placement.....	204
9.8.3.	Absorption.....	207
9.8.4.	Vowel Change.....	208
9.8.4.1.	Coalescence.....	208
9.8.4.2.	Assimilation.....	211
9.8.5.	Tone Assimilation.....	215
9.8.6.	Elision.....	218
9.8.6.1.	Consonant.....	219
9.8.6.2.	Tone and Vowel.....	220
9.8.6.3.	Boundary.....	221
9.9.	Rules.....	223
9.10.	Rule Application.....	229
9.11.	Generalizations.....	237

ACKNOWLEDGEMENTS

This exercise would never have been undertaken or reached
completion without

the steady encouragement and gentle persuasion of
Professor William E. and Bee Welmers,

the tireless cooperation of

Mr. Ferdinand Oga Oji

and

the love and faithful assistance of my wife,

Bernice.

VITA

- July 3, 1935--Born, Wecota, South Dakota
- 1955--A.A., Concordia College, St. Paul
- 1957--B.A., Concordia Seminary, St. Louis
- 1960--M.Div., Concordia Seminary, St. Louis
- 1960-1975--Missionary Work, Nigeria
- 1963-1964--Research Assistant, Department of English, University of California, Los Angeles
- 1963-1964--M.A., University of California, Los Angeles
- 1967-1968--C.Phil., University of California, Los Angeles
- 1961-1974--Field Work
- 1970-1975--The Institute for Liberian Languages (Linguistics Consultant)
- 1974-1975--United Bible Societies (Translations Consultant)

PUBLICATIONS

- Bunkowske, Eugene Walter
1972 "Eliding Boundaries in Ogoja Yala." Research Notes from the Department of Linguistics and Nigerian Languages of Ibadan, Nigeria 5:59-71.

ABSTRACT OF THE DISSERTATION

Topics in Yala Grammar

by

Eugene Walter Bunkowske

Doctor of Philosophy in Linguistics

University of California, Los Angeles, 1976

Professor William E. Welmers, Chairman

BACKGROUND

Yala, which is spoken mainly in the South-Eastern State of Nigeria, is a member of the Kwa branch of the Niger-Congo family in the Niger-Kordofanian languages of Africa. Yala is most closely related to Idoma (Benue-Plateau State of Nigeria).

The Yala language, although included in Koelle's Polyglotta Africana (1854), has only recently been systematically investigated. This dissertation is the first systematic presentation of some of the more interesting topics that have come to light. The explanatory material is further elucidated by the inclusion of appropriate Yala illustrative material as well as graphic and formulaic presentations.

The material which is included in this dissertation was gathered between 1961 and 1974 while living and working with the Yala people. The full-time systematic data gathering, analysis and preliminary

ABSTRACT OF THE DISSERTATION

write-up was done from 1968 through 1971. The final write-up was done during five months in 1974 and 1975.

THE INTRODUCTION

The introduction presents the Yala people, locates their living area and explains their language usage. It also summarizes the comparative relationship of the various Yala and Idoma dialects to each other and points out the particular significant of the Yala tonal system. Finally, the introduction spells out the 'Writing Conventions' that are used throughout the course of the presentation.

TOPIC I: THE PHONEMES

This chapter gives a systematic presentation of the Yala sound system which includes: twenty-one basic consonants, eleven labialized consonants, fifteen lateralized consonants, fourteen palatalized consonants, seven basic vowels, seven long vowels, a syllabic nasal and three tones. The phonetic value and the positional variants of each sound, where relevant, are specified.

This chapter also deals with: vowel harmony, syllable structure, phrase-clause and sentence markers as well as with the intricacies of the Yala tonal system which includes the complex and fascinating interrelationship of: a discrete level tone system with three tonemes, downdrift and terracing (downstep).

This chapter is concluded with a section on orthography development in Yala.

ABSTRACT OF THE DISSERTATION

TOPIC II: THE MORPHEMES

This chapter outlines the root and prefix morphemes of Yala. The various constituent structures within which root morphemes function are considered in terms of an overarching framework of prefixed (simple, complex or reduplicated), non-prefixed (simple or complex) or other roots. The prefixes are considered under the rubric of their ability to mark noun classes and nominalizations.

After an introductory section on the basic constituent structures of Yala this chapter systematically presents the Yala noun class system including the nineteen class marking prefixes, some of which function in singular-plural pairs.

The chapter then goes on to deal with root morphemes under the following headings: nominals, verbals, verbal auxiliaries, temporals, adverbials, adjectivals, conjunctives, prepositionals, pronouns, descriptives, ideophones, clause openers, utterance closers and nominalizations. It also gives a systematic presentation of the numbers, color words, question words and time words of Yala as well as the unique Yala way of segmenting the locational and demonstrative areas of meaning.

The section on non-reduplicating descriptives is particularly thought-provoking in that it illustrates the ingenious Yala method of using certain consonantal combinations to signal a broad, so to speak, generic meaning parameter within which varying vowel and tone qualities are used to signal the particular shade of that broad generic meaning

ABSTRACT OF THE DISSERTATION

that the speaker desires to express.

TOPIC III: ELIDING BOUNDARIES

This chapter deals with the pervasive tendency in Yala as well as in many other West African languages for linguistic elements to collapse into each other at definable boundaries in predictable ways. The overall phenomenon has been termed: Eliding Boundaries. The processes which play an important part in this phenomenon in Yala are: assimilation (progressive and regressive), coalescence, secondary feature placement (labialization, dentalization, lateralization and palatalization), absorption, elision and syllable joining.

After defining the relevant processes in the eliding boundary phenomenon, the twelve elidable boundary environments of Yala are catalogued. Following this the various eliding boundary processes are explained in detail and applied in terms of their effect upon: consonants, vowels, tones, juncture and syllables.

This chapter is concluded with a formal set of twenty ordered derivational rules. When this set of ordered rules is applied to one of the elidable Yala environments, a consistent symbolization of the actual oral phonetic presentation that a Yala man hears and speaks will be generated. The final section lists seven generalizations that seem appropriate when considering the 'eliding boundary' situation in Yala.

INTRODUCTION

0. Yala is the principle language of Ogoja Division in the Southeastern State of Nigeria.

0.1. Yala has a threefold language usage.

0.1.1. It is the first language of 50,000 to 60,000 people (1963 Nigerian census) who live in an area of approximately 375 square miles to the north and west of Ogoja town between 6.30 and 6.50 degrees north latitude and between 8.25 and 8.55 degrees east longitude contiguous to the northern boundary of Nigeria's Southeastern State. Yala is also the first language of approximately 5,000 speakers in Ikom Division and 3,000 speakers in Obubra Division of the Southeastern State. The Ikom Yala people live just west of Ikom town along the north bank of the Cross River. The Obubra Yala people live about ten miles to the west and north of the Ikom Yala people on the south bank of the Cross River.

0.1.2. Yala is used as a second language with near native speaker status among the Yache and Gabu people (Bunkowske-Rasch, 1973, Do the Yache and the Gabu People Speak Yala?, unpublished survey) who live to the north and east of the Ogoja Yala people in Ogoja Division.

0.1.3. Yala also serves as the local trade language for Ogoja

INTRODUCTION

Division. It is an especially important means of communication for the numerous speakers of the other languages who live contiguous to Ogoja Yala and make the Yala markets at Okuku and Ọkpọ́má the hub of their commercial enterprises. This is particularly significant since the Okuku market is well known as the largest rural market of Southeastern Nigeria.

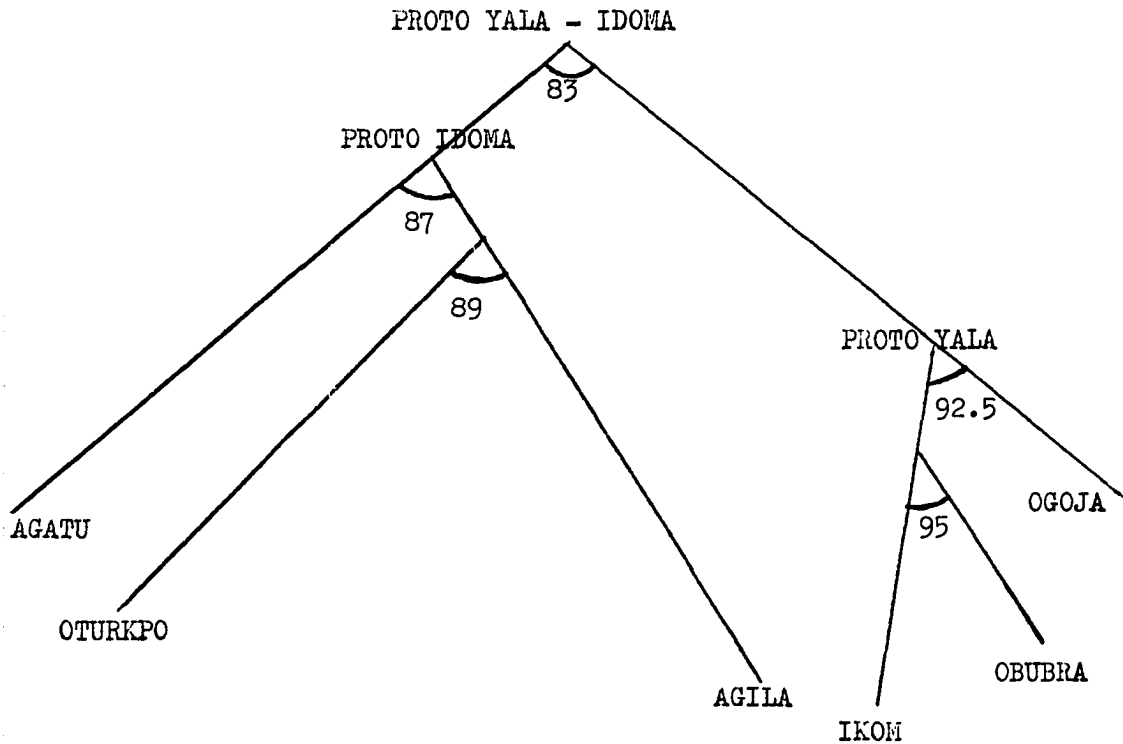
0.2. In his 'Polyglotta Africana' of 1854, Sigismund Wilhelm Koelle spoke of Yala as an unclassified Niger-Delta language. Professor Joseph H. Greenberg in 1955 classified Yala as belonging to the Central Branch of the Niger-Congo family of Africa. In his refined classification of 1966 Greenberg classified the speech of the Yala people as belonging to the Kwa Branch of the Niger-Congo family of the Niger-Kordofanian languages of Africa. Yala has three branches in the Southeastern State of Nigeria. They are Ogoja Yala, Ikom Yala and Obubra Yala. Yala is most closely related to Idoma in the Benue-Plateau State of Nigeria.

0.2.1. Lexico-statistical comparison between Ogoja Yala, Ikom Yala, Obubra Yala, Agila Idoma, Oturkpo Idoma and Agatu Idoma have been completed. The comparative instrument used was the Swadesh 200 word list. Percentages of cognation are listed in the table below:

INTRODUCTION

	OG	OB	IK	OT	AGI	AGA
OGOJA		93	92	83	84	83
OBUBRA	93		95	83	84	82
IKOM	92	95		83	83	83
OTURKPO	83	83	83		89	88
AGILA	84	84	83	89		86
AGATU	83	82	83	88	86	

0.2.2. These percentages can be nicely summarized in the following chart:



INTRODUCTION

0.3. Yala is best known as the language which was first used to demonstrate the fact that a discrete level language with three tones can also have downdrift and terracing (Yala (Ikom), A Terraced-Level Language with Three Tones, a paper presented at the Seventh West African Languages Congress, Lagos, March 1967, by Professor Robert G. Armstrong). The first mention of Yala in literature was in Polyglotta Africana (Koelle, 1854). Koelle included 277 Yala words and phrases in his comparative study. Although this list is very useful it would have been even more valuable if Koelle had marked tone. In 1951, Professor Robert G. Armstrong took down 1,055 words and short utterances in Ogoja Yala (Armstrong, unpublished notes). Professor Armstrong's notes are especially valuable since he took time to do a careful notation of tone. The present study is the first attempt to give a more comprehensive presentation of certain parts of the Yala language.

0.4. People from all parts of Yala speak of Ǫkpóomā¹ or Central Yala as the 'best' Yala and tend to copy the phonological and syntactic patterns approved in Central Yala speech. This linguistic phenomenon is reinforced by the fact that Central Yala cultural patterns (age company naming, New Yam Festival dating, meat sharing patterns, homage in extraction of salt, etc.) play a dominant role in establishing the social pattern of life, not only throughout Ogoja Yala, but also to a lesser extent in the neighboring linguistic domains as well. The basic linguistic analysis that I have done and the presentation that follows

INTRODUCTION

is based, therefore, on Central Yala speech.

0.5. The field work for this project was done between 1961 and 1974 while working as a missionary with the Evangelical Lutheran Mission (a division of the Lutheran Church - Missouri Synod in the United States). Mr. Ferdinand Ōga' Ōji' was my constant companion and co-worker through a good part (1967-1974) of this time. His assistance was supplemented by that of a good number of Ogoja Yala speakers of the Central Dialect. Some on a formal basis and others in the less formal environment of numerous conversations in markets, church services and meetings, social functions of all kinds and the general intercourse of life in Ōkpoōmā which helped me to understand how the Yala language operates and how it can be used effectively to communicate ideas. Various speakers of Ikom Yala, Obubra Yala, Western Ogoja Yala, Eastern Ogoja Yala, Agatu Idoma, Agila Idoma and Oturkpo Idoma have also made their useful contributions as we studied these dialects of Yala and Idoma from a comparative point of view. Mr. Bernard Ōgbēche' Ode must also be mentioned for his useful contributions in the area of Yala phonology.

0.6. The following 'Writing Conventions' are introduced here and followed throughout the course of the presentation.

0.6.1. IPA symbolization will be used exclusively except for the following exceptions:

INTRODUCTION

<u>IPA</u>	<u>OUR USAGE</u>
ç	CH
ŋ	NG
ɲ	NY
ʃ	SH
ϕ	FH

0.6.2. In addition to the revised IPA symbolization I have found it necessary to add the following symbolization for a number of r-like sounds that are present in Yala:

The Plain Approximant	R
The Forward Flap	RL
The Trill	RR
The Tap	Ṛ

0.6.3. We will follow the normally accepted usage of /KP/, /GB/ and /NGM/ as symbols for the labio-velar stops and nasal.

0.6.4. The labialized consonants will be marked by a /W/ immediately following such consonants.

0.6.5. The lateralized consonants will be marked by an /L/ immediately following such consonants.

0.6.6. The palatalized consonants will be marked by a /Y/ immediately following such consonants.

INTRODUCTION

0.6.7. High tone will be marked with an apostrophe / ' / above the syllable nucleus that carries it.

0.6.8. Mid tone will be marked with a dash / ¯ / above the syllable nucleus that carries it.

0.6.9. Any vowel or syllable nucleus that is unmarked / / has a low tone.

0.6.10. Lengthened vowels (double vowels) will be signaled by the presence of two vowels of the same quality following each other carrying the same tone marks (e.g. 00, 0̄0̄ or 0̄0̄').

0.6.11. Tone glides occur on short vowels and will be signaled by the presence of two vowels of the same quality with the first vowel carrying the initial pitch of the tonal glide and the second vowel carrying the final pitch of the tonal glide (e.g. 0̄0, 0̄0 or 0̄0'). Vowels that carry a tone glide are normally slightly lengthened, possibly as much as to a mora and one-half but certainly no more. They are quite distinct from the double vowel with two morae (cf. 0.6.10.).

I. THE PHONEMES

1. The sound system of Yala is made up of: twenty-one basic consonants, eleven labialized consonants, fifteen lateralized consonants, fourteen palatalized consonants, seven basic vowels, seven long vowels, a syllabic nasal and three tones.

1.1. Consonants.

1.1.1. The basic consonants are:

	LABIAL	ALVEOLAR	PALATAL	VELAR	LABIO-VELAR
STOPS:	VL: P	T	CH	K	KP
	VD: B	D	J	G	GB
NASALS:	M	N	NY	NG	NGM
APPROXIMANT:	CENTRAL: F	R	Y	H	W
	LATERAL: L				

1.1.2. The labialized consonants are:

	LABIAL	ALVEOLAR	PALATAL	VELAR	LABIO-VELAR
STOPS:	VL: (P)		(CH)	K	
	VD: B	(D)		G	(GB)
NASALS:	M			NG	
APPROXIMANT:	CENTRAL: H				
	LATERAL: (L)				

PHONEMES

A parenthesis () around a consonant denotes that this consonant is labialized only in complex (compounds formed by the joining of two or more roots) forms.

1.1.3. The lateralized consonants are:

	LABIAL	ALVEOLAR	PALATAL	VELAR	LABIO-VELAR
VL:	P	T	CH	K	KP
STOPS:					
VD:	B	D	J	G	GB
NASALS:	M			NG	NGM
APPROXIMANT:	F			H	

1.1.4. The palatalized consonants are:

	LABIAL	ALVEOLAR	PALATAL	VELAR	LABIO-VELAR
VL:	P	T	CH		
STOPS:					
VD:	B	D	J		
NASALS:	M		NY		
CENTRAL:	F	R	Y	H	W
APPROXIMANT:					
LATERAL:		L			

The significant absence of N on the list of palatalized consonants is accounted for by the fact that NY is included as a full consonant in its own right (cf. 1.1.1.). The phonological structure of NY is, in fact, quite different from that of palatalized consonants in that NY carries no internal transitional vocalic quality while such a transitional vocalic quality is a basic feature of palatalized consonants

PHONEMES

(cf. 2.1.4.). It is also significant that the NY and Y may be palatalized. When this occurs the transitional vocalic quality appears, where it is normally expected, between the basic consonant and the added feature of palatalization.

1.2. Vowels.

1.2.1. The basic vowels are:

	UNROUNDED		ROUNDED
	FRONT	CENTRAL	BACK
HIGH	i		u
MID	e		o
LOWER-MID	ɛ		
LOW		a	ɔ

The chart above gives the relative tongue positions for the various vowels.

1.2.2. The double vowels are:

PHONEMES

	UNROUNDED		ROUNDED
	FRONT	CENTRAL	BACK
HIGH	ii		uu
MID	ee		oo
LOWER-MID	es		
LOW		aa	oo

1.2.3. The nasal /n/, at times, carries tone and thus functions as a vowel (syllabic nasal). The syllabic nasal /n/ has the variants: [m], [ny], [ng] and [ngm] in certain environments (cf. 2.2.10.).

1.3. Tone:

Yala has a discrete level tone system with three tones. They are:

HIGH	(^ˈ)
MID	(^ˉ)
LOW	() (unmarked)

2. Phonetic values and positional variation.

2.1. Consonants.

2.1.1. The basic consonant system.

2.1.1.1. The consonants /p, t, k, b, d and g/ have a basic phonetic value which is similar to their English counterparts. Represent-

PHONEMES

ative examples of these six consonants are:

p:	po	'to hear'	opa	'cloth'
	pa	'to roast'	ipū	'leaf'
	pi	'to squeeze'	opu	'door'
t:	ta	'to shoot'	sta	'three'
	tū	'to enter'	atā	'pepper'
	tee	'small'	ctū	'mind'
k:	ka	'to speak'	oko	'neck'
	kō	'to divide'	likū	'death'
	ku	'to die'	oku	'comb'
b:	bī	'to hold'	ebe	'place'
	bu	'to dig'	abā	'master'
	ba	'to join'	oba	'mat'
d:	de	'to give'	ādā	'sir'
	dē	'to fetch'	wodu	'wealth'
	dōo	'cool'	idu	'cobra'
g:	gō	'to sew'	ugū	'fowl'
	gū	'to close'	igu	'maize'
	ga	'to pass'	legō	'axe'

2.1.1.2. The palatals /ch and j/ have a basic phonetic value which is very similar to their English counterparts. In Yala these

PHONEMES

palatals are articulated with the tongue blade instead of with the tongue tip as they normally are in English. Representative examples of these two consonants are:

c:	chē	'to agree'	'achi	'bush'
	cha	'to return'	'iche	'today'
	chē	'to break'	ysche	'world'
j:	je	'to know'	ɔjā	'thing'
	jē	'to grow'	ajs	'ground'
	ji	'to weave'	oji	'what'

2.1.1.3. The simultaneously articulated consonants of Yala /kp, gb and ngm/ are articulated at the labial and velar positions. The closure is simultaneous. This is followed by a backward movement of the tongue back against the top of the mouth which causes a lowering of the pressure in the mouth. The release again is simultaneous. At the moment of release air rushes into the mouth both from the front and the back causing a small 'pop' which is most noticeable in the labio-velar nasal /ngm/ in initial position. This 'pop' is followed by an egressive air flow. A similar situation has been reported in Senadi (Welmers, 1950) and in Yoruba (Ladefoged, 1968). Representative examples of these three consonants are:

PHONEMES

kp:	kpo'	'to pack'	okpo	'money'
	kpa'a	'straight'	ikpo'	'leg'
	kpuu''	'huge'	lɛkpa	'forest'
gb:	gbā	'to grind'	ɔgb'a	'root'
	gbō	'to watch'	lɛgb'a	'cry'
	gb'a	'to vomit'	wɔgb'o	'banana'
ngm:	ngmo'	'to kill'	lɛngm'e	'kola'
	ngm'e''	'heavy'	wɔngma	'fence'
	ngma'	'to be worth'	aɬangmā	'rib'

2.1.1.4. The voiced stop consonants /b, d, j and g/ of Yala, like their English counterparts, are unaspirated. This is also true of the voiced simultaneous stop of Yala /gb/. The unvoiced consonants /p, t, ch and k/ of Yala are different from their English counterparts in that they are unaspirated or, at most, only slightly aspirated. The Yala voiceless simultaneous stop /kp/ is also unaspirated. This difference in voiceless stops certainly helps to account for the fact that most English and German speakers tend to have difficulty distinguishing between the voiced and voiceless stops of Yala since in their native tongue voicelessness is so closely associated with aspiration. Since aspiration is absent in Yala there is a tendency to interpret all of the stops as voiced. This may possibly also give us a clue as to why all the words in Koelle's 1854 wordlist which today have either /ch/ or

PHONEMES

/j/ are recorded as having /dsh/. The fact that German does not have either of the palatal phonemes /ch or j/ may also be significant. On the other hand, it may be that with Koelle we are catching Yala just before the final phase of a split between voiced and voiceless stops took place. That is, after the basic stops had split and just before the affricated stops split. The fact that no reasonable conditioning factors around which such a split could have emerged can be found, however, seems to militate against the latter assumption.

2.1.1.5. The nasal consonants /m, n and ng/ have phonetic values and ranges of articulation which are not noticeably different from the corresponding values and ranges of the English phonemes although English does not have a word-initial ng. Representative examples of these three nasals are:

m:	má	'to see'	omā	'salt'
	mu	'to fill'	amē	'breast'
	ma	'to mold'	y ['] smá	'sight'
n:	na	'to wash'	woná	'fufu'
	nū	'to swell'	snē	'four'
	nāa	'to take'	linu	'roof'
ng:	ngū	'to learn/teach'	angūu	'tooth'
	nginingini	'silent'	sngú	'bee'
	ngonongono	'deep'	wongu	'date palm'

PHONEMES

2.1.1.6. The Yala palatal nasal /ny/ is somewhat similar to what appears medially in the English word onion. It is articulated with the tongue blade at the same point of articulation as the other Yala palatals /ch, j and y/. Representative examples of the palatal nasal are:

ny:	nyi	'to bury'	ānys	'who'
	nyē	'to lick'	ɛnya	'run'
	nyā	'to turn'	inyo	'glass'

2.1.1.7. The Yala approximants /y and w/ have phonetic values which are very similar to their English counterparts. The /y/ like the other Yala palatals /ch, j and ny/ is articulated with the tongue blade.

Many Yala speakers pronounce these two approximants in inter-vocalic position with a weakened articulation with the result that the syllable nucleus before and after the weakly articulated approximant are joined and the weakened approximant /y or w/ becomes syllabic. Another accompanying result is that the elapsed time of the two syllables which have collapsed into each other is reduced from two morae to about one and a half morae. This is particularly noticeable in words like:

i ^ˈ yi	'what'	owu	'harmattan'
i ^ˈ wu	'yam heap'	liyī	'name'
sys	'walk'	wowu ^ˈ	'canoe'

Many other examples of this phenomenon could be given. In certain

PHONEMES

words a good number of Yala speakers drop the intervocalic /y and w/ completely with a further shortening of syllable time. This is especially noticeable in:

owe	[oe]	'overside'
owa	[oa]	'red'
lowo	[loc]	'red camwood'
yowō	[yoo]	'dog'

Numerous additional examples of this phenomenon could be given. Some Yala speakers also either weaken or entirely drop /y and w/ in initial position in the following words:

yapliija	[apliija]	'spiritual power'
yēkpē	[ēkpē]	'bottle'
womu	[omu]	'prophecy'
woyi	[oyi]	'type of vine'

Representative examples of these two approximants are:

w:	wā	'to come'	wōwū	'canoe'
	wī	'to steal'	owī	'arrow'
	waa	'all'	owū	'cotton'
y:	ya	'to make'	yayi	'duiker'
	ye	'to walk'	yeyī	'blood'
	yuu	'black'	yēhī	'pot'

PHONEMES

2.1.1.8. This section deals with the Yala approximants /h and f/.

2.1.1.8.1. The Yala approximants /h and f/ are interesting in that for some Ogoja Yala speakers, especially older speakers, the [h] and [f] are variants of the basic phoneme /h/. That is, the [f] variant is enunciated before the back extreme vowel /u/ and the [h] variant elsewhere. For a few of the oldest speakers in this group the [h] variant is articulated as [sh] in the words: ihī [ishī] 'yam', ihili [ishili] 'shilling' and lihī [lishī] 'market'. Incidentally, Koelle's Yala wordlist of 1854 shows [sh] in ihī and lihī and in all the other words in which Ogoja Yala today hear [h] except ahlo 'snore' which Koelle records as [ahuuro]. Ikom and Obubra Yala have moved in another phonological direction with the variant [s] in ihī [isi] and lihī [lisi] and in most other words in which Ogoja Yala has the [h] variant. Most Yala speakers have [s] in one word. That is isisi 'sixpence' which was appropriated from English via the Igbo sisi 'sixpence'.

2.1.1.8.2. Present day Central Dialect speakers have assigned independent phonemic status to /h/ and /f/ as evidenced by the contrasts between:

fyaa	'common speech'	hyaa	'to tear'
lafys	'to blame'	shya	'beniseed'
līfyē	'left'	ihyo	'judgeship'

PHONEMES

The independent status of /h/ and /f/ is further strengthened when one studies longer utterances such as:

shyaaje	'under'	/shyaaje/
nfyaaaje	'I swept the ground'	/n fyɛ aje/
hwɔhla	'to cut a carrying net'	/hɛ wɔhla/
fwɔhla	'to remove a carrying net'	/fu wɔhla/
hyɛɛkā	'to cut monkey'	/hɛ yɛkā/
fyɛɛkā	'to sweep monkey'	/fyɛ yɛkā/

2.1.1.8.3. Most Yala speakers who assign independent status to /h/ and /f/ neutralize the distinction between /f/ and /h/ before the back vowels /u, o and ɔ/. Some speakers, however, make a clear phonemic distinction between /f/ and /h/ throughout and do not use [f] and [h] in free variation before the back vowels /u, o and ɔ/. For them it is always [h] in that environment. This evidence seems to indicate that we are on the way to a more complete phonemic split between /h/ and /f/ in Ogoja Yala.

2.1.1.8.4. The Yala approximant /h/ cannot be assigned a particular point of articulation or tongue height. It is a central-mouth approximant with the height of the tongue and the forward or backward point of articulation dependent entirely upon the vowel quality which follows it. In a word like ihī 'yam' the /h/ is articulated high and forward. In shɛ 'laugh' /h/ is articulated lower and a bit back. In

PHONEMES

shā 'coal' the /h/ is articulated with the tongue quite flat and low in the mouth.

2.1.1.8.5. The Yala approximant /f/ has a labio-dental restriction which takes place when the lower lip approaches the top teeth but in most cases does not touch the teeth. In the speech of some speakers there is, in fact, a quick and very light tap of the teeth in addition to the close approximation. In either case this approximant /f/ is normally associated with a strong egressive flow of air which in most cases is also restricted by the tongue in the palatal region.

2.1.1.8.6. Representative examples of the approximants /h/ and /f/ are:

h:	h [']	'to cut'	lshu [']	'head'
	he	'to cook'	ihī	'yam'
	hī	'to call'	shā	'prayer'
f:	f [']	'to glitter'	ifu	'mushroom'
	fū	'white'	aflo	'corn milk'
	fī	'narrow'	ofys	'slave'

2.1.1.8.7. It is evident by looking back over the examples above that the approximant variants [h and f] are splitting and achieving independent status in an environment before the high vowels /i or u/. It is also possible by studying the present day alternations in articulating these approximant sounds in certain words to give a reasonable ac-

PHONEMES

count of what phonological processes are at work here. All of the forms quoted below can actually be heard in the speech of some present day Yala speakers. The process, then, seems to be as follows:

1. From the older original forms:

uhi	'fear'
hye'	'sweep'
uhye	'broom'

2. The approximant /h/ becomes rounded (labialized) before palatalization or /i/ as in:

[uhwi]	'fear'
[hwys']	'sweep'
[uhwye]	'broom'

3. Next, the labialized velar [hw] is dentalized before rounding to give us the labialized, dentalized velar approximant [fhw] pronunciation as in:

[ufhwi]	'fear'
[fhwys']	'sweep'
[ufhwye]	'broom'

4. Next, the labialized, dentalized velar approximant [fhw] is reduced to the dentalized velar consonant [fh] as in:

PHONEMES

[ufhi]	'fear'
[fhys [']]	'sweep'
[ufhye]	'broom'

5. Finally, the velar feature of the approximant is lost and the dentalized velar [fh] is reduced to the labiodental approximant [f] as in:

[ufi]	'fear'
[fys [']]	'sweep'
[ufye]	'broom'
[fyaa [']]	'common speech'
[lifyē]	'left'

For a further example of how the labialized /h/ is being reduced to /f/ in present day Yala see section 2.1.2.2.

2.1.1.9. The Yala approximants /r and l/ are very elusive because they are found in either complementary distribution (i.e. [l] in initial position and medially before the vowels /a and o/ and [r] elsewhere medially) or in free variation (i.e. either [l] or [r] being articulated by the same speaker in medial environments before the high vowels /i, u, e and o/ and medially in any environment in compound words whose final form originally had an initial [l]).

For a good number of speakers, especially younger speakers, there is a definite contrast between /r/ and /l/ in at least the following

PHONEMES

words:

ra'	'to buy'	la'	'to seek'
rā	'to chew'	lā	'to lay'
re	'to stand'	le	'to own'
oro'	'snail'	olo'	'time'
sra'	'to call'	sla'	'lice'
arō	'ears'	alo	'we'

Speakers for whom the phonemic distinction has become real also tend to choose /r/ or /l/ in other words and stick to that articulation against all arguments. For such speakers /l/ is an alveolar lateral which has a phonetic value and range very similar to the English /l/ phoneme. The /r/ for such speakers is an alveolar approximant articulated at approximately the same position as the /l/ in initial position for the same speaker. In medial position, however, their /r/ has a retroflexed forward flap variant [r̠]. The point of initial articulation is alveolar at approximately the same position as the /l/ and initial variant of /r/ described above. The tongue then moves forward to a position just behind the teeth before the articulation is released. Most often this retroflexed forward flap also carries the feature of laterality. This has led many people to say that this variant is neither [l] nor [r] or rather in most cases that it is a little of each. In words like: līre' 'right' and lerī 'palm tree' the initial [l]

PHONEMES

is being assimilated by the medial [rɪ] in the speech of many speakers. This gives us the phonetic output [rɪrɪle] and [rɪsrɪli]. Representative examples of the /r and l/ consonants are:

r:	ra ^ˈ	'to buy'	aru ^ˈ	'shirt'
	rā	'to chew'	urū	'feather'
	re	'to stand'	orī	'rope'
l:	la ^ˈ	'to seek'	lələ	'word/action'
	lā	'to lay'	'agāla	'grasshopper'
	le	'to own'	leya	'friendship'

2.1.2. Labialization adds the feature of lip rounding to the basic consonants. Other than that the phonetic value of the basic consonants does not change. The lip rounding of labialization in Yala is produced by closing the side portions of the lips, leaving a gap in the middle. Before the two lower back vowels /o and ɔ/ there is also a slight protrusion of the upper lip. Sometimes there is a similar tendency before the low vowel /a/ also.

2.1.2.1. There are twenty-five roots in which the velar consonants /k, g and ŋ/ are labialized. Representative examples of these three labialized consonants are:

kw:	kwīkwī	'feeble'	akwa	'bridge'
	kwōkwō	'stiff'	skwɔ	'thorn'

PHONEMES

gw:	gwa [']	'to drink'	yegwā	'snake'
	gwō	'to beat'	igwē	'a bird'
ngw:	ngwaa	'normal'	ingwō [']	'earthworm'
	ngwangwa [']	'light'	lingwa [']	'mudfish'

2.1.2.2. The labialized velar approximant /h/ is found in at least thirteen roots. Although it is articulated as the labialized velar approximant [hw] by most speakers, some speakers favor a labialized, dentalized velar approximant [fhw] articulation and others reduce it to the dentalized velar approximant [fh] articulation with some favoring even the further reduction to a simple labio-dental approximant [f] articulation. For many Yala speakers, however, there is an unrestricted and unconscious usage of any of these four variants in any given root at various times. That is, one can hear from the same person on different occasions: [shwala] or [sfhwala] or [sfhala] or [sfala] for the word: shwala 'a type of yam'. Representative examples of the labialized velar consonant are:

hw:	hwaa [']	'high'	ahwe [']	'joke'
	hwō	'to pain'	ohwe [']	'reed'

It is to be expected that as the phonemic status of the labio-dental approximant /f/ becomes better established, it will also take a full place as a labialized consonant in the Yala phonological system. It may also be suggested that the labialized, dentalized velar [fhw]

PHONEMES

may some day gain contrastive status as a labio-velar approximant paralleling the labio-velars /kp, gb and ngm/ of Yala.

2.1.2.3. The labial consonants /b and m/ have a labialized off-glide before /ɔ/ in just two roots. They are: 'ubwɔ̄ 'mud bed' and 'smwɔ̄ 'palmwine'.

2.1.2.4. Although the labial consonant /p/, the alveolar consonants /d and l/, the palatal consonant /ch/ and the labio-velar consonant /gb/ have no labialized off-glide before the back non-high vowel /ɔ/ in roots, they do participate in the rounding process (labialization) when:

- A. They are the last consonant in the initial root of the compound followed by a final /u/ (examples 1 and 2 below).
- B. They are followed by a non-/u/ vowel and then by a second root which begins with /w/ (examples 3 - 7 below).

The following examples are illustrative:

1. ipwɔ̄lɛ̄ 'king'
 from: lipu wɔ̄lɛ̄
 inside-house

PHONEMES

2. ipwōōnū 'palace'
 from: lipu onū
 inside-one far removed
3. ɔchwōls 'chief'
 from: ɔchā wōls
 night stayer-house
4. ɔdwōbi 'bad one'
 from: ɔd̄s wōbi
 one fetching-bad
5. ɔdwoma 'barrenness'
 from: ɔda wōma
 one lacking-womb
6. ɔgbwōls 'elder's title'
 from: ɔgbō wōls
 guardian-house
7. alwōda 'people of Wōda'
 from: als Wōda
 those owning-Wōda

2.1.3. Lateralization adds the feature of laterality (Ladefoged, 1971, page 56) to the basic consonants listed in 1.1.3.

2.1.3.1. The lateralized off-glide of Yala is enunciated at the

PHONEMES

alveolar point of articulation at approximately the same point as that of the approximants /l and r/ in initial position. The point of articulation is the same but the manner of articulation is either lateral [l] or central and trilled [rr] or central and tapped [ɾ]. The pattern which is used by most speakers is that:

2.1.3.1.1. The lateral off-glide from the labials /p, b and m/ has the lateral [l] articulation everywhere.

2.1.3.1.2. The lateral off-glide from the approximants /f and h/ has the lateral [l] articulation everywhere with the trilled [rr] and the tapped [ɾ] as alternate pronunciations for [l] in:

aflor ^o	'bitterleaf'
ufla ^o	'food from millet'
hlāa	'to descend'
ahlo	'snore'
yshlōo	'gorilla/chimpanzee'

in the speech of some Yala speakers.

2.1.3.1.3. The lateral off-glide from the alveolars /t and d/ and the palatals /ch and j/ has the lateral [l] articulation before the high non-extreme vowels /e and o/ and the trilled [rr] articulation elsewhere. Both the lateral [l] articulation and the trilled [rr] articulation

PHONEMES

are shifted to a tapped [ɾ] articulation before the non-extreme vowels /e, o, ɛ and ɔ/ in the speech of some Yala people and used as a fluctuating variant of [l] and [rr] before the non-extreme vowels /e, o, ɛ and ɔ/ in the speech of other Yala speakers.

- 2.1.3.1.4. The lateral off-glide from the velars /k, g and ng/ has the lateral [l] articulation before the high non-extreme vowels /e and o/ and the trilled [rr] articulation elsewhere. The velars also have the lateral [l] articulation as a variant of the trilled [rr] articulation before the non-high extreme vowel /a/ in the speech of some Yala people. Both the lateral [l] articulation and the trilled [rr] articulation are shifted to a tapped [ɾ] articulation before the non-extreme vowels /e, o, ɛ and ɔ/ in the speech of some Yala people and used as a fluctuating variant of the [l] and [rr] articulation before the non-extreme vowels /e, o, ɛ and ɔ/ in the speech of other speakers.

- 2.1.3.1.5. The lateral off-glide from the labio-velars /kp, gb and ngm/ has the lateral [l] articulation before the non-extreme vowels /e, o, ɛ and ɔ/ and the lateral [l] articulation fluctuating with the tapped [ɾ] articulation

PHONEMES

tion elsewhere.

2.1.3.2. Representative examples of the lateralized consonants

are:

pl:	pla	'to hang'	aplikpo	'scrotum'
	ple	'narrow'	yapliija	'spirit power'
tl:	otla	'a tree'	stlo	'sesame seed'
chl:	chlāa	'to answer'	chlechle	'fullness'
	achla	'rice chaff'	chladada	'straight'
kl:	kla	'to cover'	akli	'small pox'
	klāa	'to cut'	yeklo	'poverty'
kpl:	kpla	'to borrow'	akpla	'palm branch'
	kplūkplū	'strong'	yakpla	'thunder shrine'
bl:	bla	'to remember'	yabla	'duiker'
	blii	'firm'	ubleēnyī	'tongue'
dl:	dla	'to hit'	dlelele	'slender one'
	dloo	'slippery'	dlalala	'slender ones'
jl:	ējlō	'swallow (bird)'		
gl:	gla	'to deceive'	yēglāa	'time'
	gle	'unfirm'	ogla	'playground'

PHONEMES

gbl:	gbla	'to resemble'	igblu'	'dried yam'
	gblaa'	'to repair'	ogblo'	'club'
ml:	mlɛ	'to swallow'	ɛmlɛkpe'	'rust'
	mɫa	'to normalize'	ɛmlaa'	'how many'
ngl:	ngla'	'hurriedly'	ɔnglɔ̄	'man/male'
	nglāa	'to liquidize'	yɛngla	'sympathy'
ngml:	ngmlaa'	'to fall off'	ngmlu'	'circular'
fl:	flɛ'	'light'	aflo'	'corn milk'
	aflo'lo'	'bitterleaf'	aflu'	'yam leaves'
hl:	hla'	'to desire'	ahlɔ	'snore'
	hlɔ'	'crooked'	wɔhlu'	'mongoose'

2.1.3.3. Although I have not listed the approximant /r/ as being lateralized, we can say that it participates in non-contrastive lateralization. That is, in medial position for many Yala speakers it has the forward retroflexed flap [rɫ] variant with a lateralized release (cf. 2.1.1.9.). The very real possibility exists that this lateralized variant of [r] will gain full contrastive status in time.

2.1.3.4. The basic approximants /y and w/ do not participate in lateralization. This is quite probably accounted for by the fact that they are often weakened or elided intervocally (cf. 2.1.1.7.) and tend to assimilate or be assimilated by /l/ across an elidable morpheme

PHONEMES

boundary (cf. 9.8.1.2.).

2.1.3.5. The basic approximant /r/ also does not participate in lateralization. This is quite probably accounted for by the fact that it like /w and y/ tends to assimilate /l/ across an elidable morpheme boundary (cf. 9.8.1.2.1.).

2.1.3.6. The basic nasal /n/ also does not participate in lateralization. This is probably caused by the fact that it also tends to be assimilated by /l/ across an elidable morpheme boundary (cf. 9.8.1.2.2.).

2.1.3.7. In terms of the historical development of lateralization Koelle's 1854 wordlist is enlightening. Below are three of his forms which seem relevant; followed by the meanings and the present-day pronunciations.

<u>KOELLE</u>	<u>DEFINITION</u>	<u>PRESSENT-DAY</u>
[aaburuungba]	'wasp'	[amrukpa]
[aahuuro]	'snore'	[ahrro]
[ɔnguuro]	'man/male'	[ɔngrrɔɔ]

This, at least, seems to indicate that a number of today's lateralized consonants became lateralized as the result of high back extreme [u] vowel reduction and elision before [r]. It may not be too bold to say that lateralized consonants in other forms may have gotten that way by a similar process.

PHONEMES

We are further enlightened as to the process through which lateralization probably takes place by noticing that several lateralized consonants in present day Yala speech have an alternate articulation, especially among older speakers, which includes a slight rounded off-glide after the consonant previous to the lateral off-glide. This shows up in words like:

<u>LATERALIZED</u>	<u>DEFINITION</u>	<u>ROUNDED AND LATERALIZED</u>
[ukrrɔ̃]	'work'	[ukwrrɔ̃]
[ngrrāa]	'liquidize'	[ngwrrāa]
[krrɔ̃krrɔ̃]	'breaking ground'	[kwrrɔ̃kwrrɔ̃]
[oklɛ̃jɛ̃]	'squirrel'	[okwlɛ̃jɛ̃]

This slight rounding before lateralization in the speech of older people is probably the last remnant of a reduced high extreme back vowel [u] which has been entirely elided in the speech of most Yala people.

2.1.4. Palatalization adds the feature of palatal constriction to the basic consonant. The palatalized off-glide of Yala is enunciated with the tongue blade at the palatal point of articulation in approximately the same position as that of the consonantal approximant /y/ in initial position.

2.1.4.1. Palatalization is accompanied by the presence of a transitional high-front vocalic quality. Although a Ciy interpretation seemed tempting at first, I have chosen to interpret this process as

PHONEMES

palatalization of the consonant because of the quality that the nominalizing prefix vowel and the reduplicating prefix vowel have with the set of roots under consideration. For example, *pyāa* 'to leave/move' is nominalized as *opyāa* and reduplicated as *pōpyāa* which fits the regular vowel quality constraints for nominalization and reduplication (cf. 8.2.1.2.1.1.1. and 8.2.2.1.3.). If *pyāa* had been interpreted as *pīyāa* the vowel quality constraints for nominalization and reduplication would have required *opīyāa* and *pōpīyāa* which are never uttered by Yala speakers.

2.1.4.2. Representative examples of the palatalized consonants are:

py:	<i>pyāa</i>	'to leave/move'
	<i>pyē</i>	'to pick up'
	<i>' apyɔ</i>	'click of disgust'
ty:	<i>' tyaa</i>	'to be mixed'
chy:	<i>chya</i>	'to break'
by:	<i>byāa</i>	'to spoil'
dy:	<i>dya</i>	'to weaken'
jy:	<i>jya</i>	'to examine/squeeze'
	<i>' jyaa</i>	'to bend'
	<i>ojya</i>	'noise'

PHONEMES

my:	mya	'to mix'
	myaa	'to roll'
	lemye	'hunger'
	smys	'mosquito'
ny:	nyya	'to struggle for'
fy:	fye	'to sweep'
	fyeə	'secretly'
	līfyē	'left (side)'
	ɔfyə	'slave'
ry:	ryaa	'to soften'
yy:	yyaa	'to split (lengthwise)'
hy:	hyaa	'to tear'
	hyāa	'to change'
	hyuu	'deeply'
	shya	'beniseed'
wy:	wyāa	'to stir'
	wyēē	'sound of a slowly falling object'
	ɔwyā	'month/moon'
ly:	lyaa	'to pain'
	lyāa	'to stomp'
	elya	'thought'

PHONEMES

2.2. Vowels.

2.2.1. This section deals with the Yala vowels /i, e and o/.

The Yala vowel /i/ is a high extreme non-back unrounded vowel. The

Yala vowel /e/ is a non-high non-extreme non-back unrounded vowel.

The Yala vowel /o/ is a non-high non-extreme back rounded vowel.

These three vowels have phonetic values which are very similar to their English counterparts. Representative examples of these vowels are:

i:	pi	'to squeeze'	'achi	'bush/grass'
	hi	'to farm'	ihī	'yam'
	bī	'to hold'	īpū	'leaf'
e:	pe	'to flow'	'ochē	'servant'
	he	'to cut'	she	'laugh'
	chē	'to agree'	sbe	'place'
o:	gō	'to sew'	lēchō	'stone'
	hō	'to remain'	oko	'neck'
	dō	'cool'	oya	'friend'

2.2.2. The Yala vowel /a/ is a non-high extreme non-back unrounded vowel. It has a phonetic value which is a bit raised and more centralized than its English counterpart. Representative examples of this vowel are:

PHONEMES

a:	pa	'to roast'	acha	'wing'
	hā	'to rain'	ita	'kind'
	ga	'to pass'	apu	'towel'

2.2.3. The Yala vowel /e/ is a high non-extreme non-back unrounded vowel. It has a phonetic value which is a bit higher and possibly a bit more centralized than the English and Yala vowel /ɛ/. Representative examples of this Yala vowel are:

e:	de	'to give'	ache	'fish basket'
	he	'to cook'	ehe	'no'
	che	'to place'	eyī	'face'

2.2.4. The Yala vowel /u/ is a high extreme back rounded vowel. It has a phonetic value which is a bit lower and more centralized than its English counterpart. Representative examples of this Yala vowel are:

u:	pu	'to bend'	swu	'firewood'
	bū	'to originate'	uhu	'spirit'
	gū	'to close'	uwī	'thief'

2.2.5. The Yala vowel /o/ is a high non-extreme back rounded vowel. It has a phonetic value which is centralized like the Yala vowel /u/ but lower than /u/. It has no exact counterpart in English. Representative examples of this Yala vowel are:

PHONEMES

o:	pó	'to hear'	ichō	'up'
	ngmó	'to kill'	okpo	'money'
	kpo	'to pack'	otu	'night'

2.2.6. Although /ɛ/ and /e/, and /o/ and /ɔ/ contrast before /a/ in words like:

ó	ogla	'playground'	ogwā	'rainy season'
	ēēdā	'moderation marker'	sga	'soldier ant'
	jeka	'to assume'	ska	'elephant hair'

there are many words in which most speakers of Yala use a raised variant of /ɛ or ɔ/ when it is followed by a consonant and the vowel /a/. These variants will normally be interpreted as /e or o/ by non-native speakers of the language. Such an interpretation, however, will consistently be denied by the native speaker. The following example words include the raised variant of /ɛ or ɔ/:

ɛpa	[ɛpā]	'two'	ɔjā	[ɔjā] 'thing'
stá	[ɛtā]	'three'	ɔmā	[ɔmā] 'salt'
ɛbā	[ɛbā]	'fortune teller'	ɔgā	[ɔgā] 'hare'
ɛnya	[ɛnyā]	'race'	ɔpá	[ɔpā] 'cloth'
lɛya	[lɛyā]	'friendship'	ɔhā	[ɔhā] 'some'

2.2.7. For most speakers of Yala the vowel /o/ has a raised variant when following /a/ and the lateralized consonant /kl/ in the word

PHONEMES

āk̄lō 'pure wine'. This variant will normally be interpreted as /u/ by non-native speakers of the language. Again, as is the case with /s and o/ (cf. 2.2.6.), the native speaker rejects this interpretation out of hand. In this connection it should be noted that there is a contrast between /u/ and /o/ after /a/ followed by a consonant in words like:

 'aflo 'corn milk' ahu 'point'

2.2.8. In 2.2.1. through 2.2.5. above we have demonstrated the need to recognize seven contrastive vowels in Yala. To get the fuller picture, however, we must also say that there is a limitation on the vowel contrast of prefix vowels in two syllable forms. That is, there is a vowel harmony restriction which creates a five vowel contrast in prefixes before a seven vowel contrast in roots in two syllable forms.

In order to get at the underlying generalization of the vowel harmony system of Yala we can say that:

- A. I, U, E and O are high vowels.
- B. E, O, E and O are non-high vowels.
- C. I, U and A are extreme vowels.
- D. E, O, E and O are non-extreme vowels.
- E. U, O and O are back vowels.
- F. I, E, E and A are non-back vowels.

or charted for an easy overview that:

PHONEMES

	<u>HIGH</u>	<u>EXTREME</u>	<u>BACK</u>
I	+	+	-
U	+	+	+
E	+	-	-
O	+	-	+
ɛ	-	-	-
ɔ	-	-	+
A	-	+	-

The following visual chart outlines the vowel harmony situation as it exists in two-syllable VCV or CVCV nominals without exception in Yala.

<u>VOWEL 1</u>	<u>VOWEL 2</u>						
	I	U	E	O	ɛ	ɔ	A
I	+	+	+	+	+	+	+
U	+	+	+	+	+	+	+
E	+	+	+	+			+
O	+	+	+	+			+
ɛ	+	+			+	+	+
ɔ	+	+			+	+	+
A	+	+	+	+	+	+	+

On the basis of the distributional chart we can say that:

PHONEMES

1. E or O cannot be followed by E or O.
2. E or O cannot be preceded by an E or O.
3. E or O cannot be followed by E or O.
4. E or O cannot be preceded by E or O.

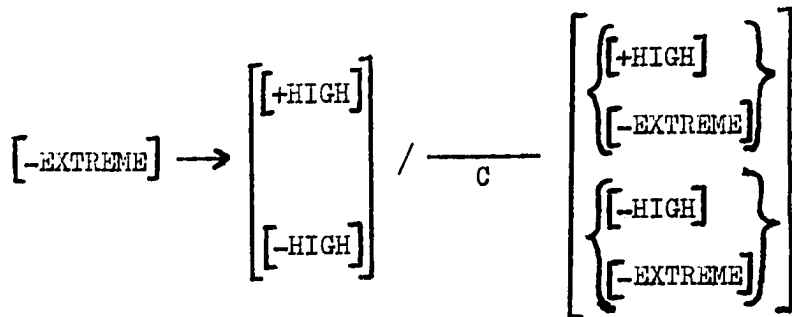
That is, the following sequences of vowels are automatically ruled out by the Yala vowel harmony restrictions.

*ets	*edo	*ols	*oyo
*ege	*sko	*obe	*opo

The basic rule which accounts for the facts above is that:

ALL -EXTREME vowels (E, O, E or O)
 become +HIGH (E or O) when preceding
 +HIGH and -EXTREME vowels (E or O)
 and become -HIGH (E or O) when preceding
 -HIGH and -EXTREME vowels (E or O).

Formulaically we say:



If the bottom portion of this rule is further generalized to read:

PHONEMES

or formulaically:

$$[-\text{EXTREME}] \longrightarrow [-\text{HIGH}] / \frac{\quad}{\text{c}} [-\text{HIGH}]$$

it will also account for the great majority of cases in which the native Yala speaker feels constrained to interpret a -EXTREME vowel /e, ɛ, o or ɔ/ prefix which precedes a root with /a/ as of the -HIGH variety /ɛ or ɔ/ (cf. 2.2.6.).

The same vowel harmony restrictions apply throughout the basic forms in Yala except for a very few exceptional cases in compound forms such as: $\bar{\text{E}}\bar{\text{n}}\bar{\text{e}}\bar{\text{y}}\bar{\text{i}}$ 'a girl's name'.

For a sizable minority of Yala speakers such exceptional forms are regularized. That is, such Yala speakers would have the variant pronunciation $[\bar{\text{E}}\bar{\text{n}}\bar{\text{e}}\bar{\text{y}}\bar{\text{i}}]$ for $\bar{\text{E}}\bar{\text{n}}\bar{\text{e}}\bar{\text{y}}\bar{\text{i}}$.

2.2.9. Each basic vowel in the language has a lengthened counterpart. We speak of these as double vowels. The phonetic value of each lengthened vowel is not different from the phonetic value of the short or basic variety of that vowel. Double vowels appear most often in descriptive (adjective or adverb-like) words, emotive words and ideophones. The following examples show the double vowels in contrast to their basic counterparts:

$\text{p}\bar{\text{i}}$	'to squeeze'	$\text{p}\bar{\text{i}}\bar{\text{i}}$	'particularly'
$\bar{\text{e}}\text{k}\bar{\text{p}}\bar{\text{e}}$	'bottle'	$\bar{\text{i}}\text{k}\bar{\text{p}}\bar{\text{e}}\bar{\text{e}}$	'millet'
$\text{f}\bar{\text{y}}\bar{\text{s}}$	'to sweep'	$\text{f}\bar{\text{y}}\bar{\text{s}}\bar{\text{s}}$	'quietly'

PHONEMES

wa'	'to bear fruit'	waa''	'all'
go'	'to sew'	goo''	'long'
gbō	'to watch'	gbōō	'loudly'
fu'	'to glitter'	fuu''	'whiteness'

2.2.10. The nasal /n/ functions as the nucleus of a syllable in the following forms for all Yala speakers:

n	'I'
mn'	'questioning sound'
n̄n	'sound of a just event'
nhn̄n	'sound of agreement'

2.2.10.1. The nasal sound [m] serves as a variant of the syllabic nasal /n/ for some Yala speakers in the emotive form:

nnnn/mmmmm'	'cry of sharp pain'
-------------	---------------------

2.2.10.2. In many West African languages the syllabic nasal is homorganic with the following consonant. This phenomenon is present in its full-blown form in Yala. That is, the nasal sounds [m], [ny], [ng] and [ngm] serve as positional variants of the syllabic nasal /n/ under the following conditions:

n	→ m/	—	labial (p, b, m or f)
n	→ ny/	—	palatal (ch, j, ny or y)
n	→ ng/	—	velar (k, g, ng or h)

PHONEMES

n → ngm/ — labio-velar (kp, gb, ngm or w)

This phenomenon is demonstrated in the following representative Yala example utterances in which the original form, the morphologically changed form and the translation are all underlined:

<u>N</u> ma' Ode.	[<u>m</u> ma']	' <u>I</u> saw/am seeing Ode.'
<u>N</u> bi' ihī.	[<u>m</u> bi']	' <u>I</u> carried/am carrying yams.'
<u>N</u> fye' sbe.	[<u>m</u> fye']	' <u>I</u> swept/am sweeping the place.'
<u>N</u> cha' me.	[<u>ny</u> cha']	' <u>I</u> have returned.'
<u>N</u> jōōkū.	[<u>ny</u> jōōkū']	' <u>I</u> knew/know.'
<u>N</u> ya' uklo'.	[<u>ny</u> ya']	' <u>I</u> did/am doing work.'
<u>N</u> kā wōkā.	[<u>ng</u> kā']	' <u>I</u> conversed/am conversing.'
<u>N</u> gō' opa'.	[<u>ng</u> gō']	' <u>I</u> sewed/am sewing cloth.'
<u>N</u> hē' schi'.	[<u>ng</u> hē']	' <u>I</u> cut/am cutting wood.'
<u>N</u> kpo' iho'.	[<u>ngm</u> kpo']	' <u>I</u> packed/am packing loads.'
<u>N</u> gbo' walā.	[<u>ngm</u> gbo']	' <u>I</u> slept/am sleeping.'
<u>N</u> wā' amu.	[<u>ngm</u> wā']	' <u>I</u> came here.'

2.2.10.3. In the following Yala forms a homorganic nasal serves as a variant of the Yala vowel /i/ for some Yala speakers:

<u>i</u> niīnē/ <u>ni</u> niīnē	'yesterday'
<u>i</u> chē/ <u>ny</u> chē	'today'
<u>i</u> ngēēnē/ <u>ng</u> ngēēnē	'like this'
<u>i</u> ngōō/ <u>ng</u> ngōō	'thus/so'

PHONEMES

ikloo/ngkloo 'last time'

2.3. Tone.

2.3.1. Yala is a discrete level tone language with three tones. The following examples give us the three tones in ascending (low-mid-high) order:

obījo'	'cane rat'
ahāla'	'hot coals'
idīgbo'	'green'
ochwōla'	'chief'
ongl̄sba'	'bride'

The following examples are especially helpful in establishing the number of tones in Yala:

pi'	'to squeeze'	ohu'	'reason'
pī̄	'to wedge'	ohū̄	'cold'
pi	'to pull'	ohu	'twenty'
bā'	'to join'	igu'	'cotton tree'
bā̄	'to give out'	igū̄	'hunchback'
ba	'to beg'	igu	'maize'
kū'	'to catch'	wcha'	'a tree'
kū̄	'to squat'	wchā̄	'swamp'
ku	'to join'	wcha	'poison (for fish)'

PHONEMES

2.3.2. In forms with two syllables all tonal combinations are possible as demonstrated by the following examples:

ada	'wild lily'	okpo	'money'
ihī	'yam'	obā	'trench'
ihó	'load'	ochi	'stick'
āchs	'people'	ōnys	'who'
ādā	'sir'	ēns	'madam'
lēchi	'true'	līre	'right'
'ada	'a place'	'ihi	'waste'
'adā	'father'	'ayā	'knife'
'ada	'a clan'	'okpo	'valley'

2.3.3. The high tone / ' / has no positional variants. That is, it is articulated by any individual speaker at essentially the same pitch level no matter what the environmental situation may be.

2.3.4. The mid tone / - / normally also has no positional variants except in the word pinyē 'small' in which many Yala speakers raise the mid tone to a pitch level very near to high. We are probably catching a type of tonal assimilation here in mid-stream which has been completely carried through in a number of other words and can no longer be traced.

2.3.5. The low tone / / (unmarked), however, has a positional variant in utterance final position. That is, in utterance final

PHONEMES

position low tone / / starts at its normal low pitch level and then is further lowered and relaxed before silence. This, however, does not entail any compensatory lengthening. In addition, there are a number of Yala speakers who use a high pitch or mid pitch variant of low tone in free variation with the low pitch variant in the following words: *leyi* [leyi/leyi] 'year' and *ɔpa* [ɔpa/ɔpa] 'cloth'. Again we are probably witnessing tone assimilation and coalescence in progress.

2.3.6. Yala is very interesting because of the fact that while the major dialects of Yala have a discrete level tone system with no 'appreciable down-drift' (Welmers, 1974) or down-step, the Ikom dialect has not only the three level tones but also a system of down-drift and down-step. Professor Robert G. Armstrong (1967) has described down-drift as "the tendency of low and mid tone to depress the pitch of a subsequent higher tone" and "down-step as an effect which is caused by a latent or hidden non-high tone". The following example is given in order to give a visual understanding of the effect that the two varied tonal systems of Ogoja and Ikom Yala have on the actual phonetic output of an utterance which is identical in both dialects in its underlying form.

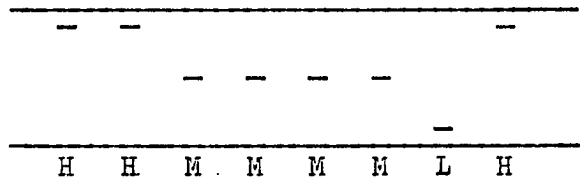
Ó kpo achò la agò la otu.
He-packed-stones-from-holes-at-night
'He packed stones from holes at night.'

PHONEMES

In Ogoja Yala:

1. The low pitch on the /a/ of achō 'stones' is assimilated upward to mid pitch.
2. The low pitch on the /a/ of the first and second la is elided out.

This gives us:



H 'high', M 'mid' and L 'low'.

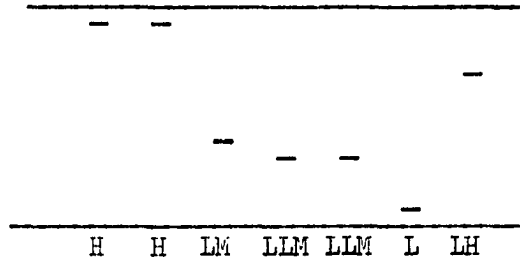
In Ikom Yala:

1. The mid pitch on the /o/ of achō 'stones' is depressed to a lowered mid pitch by the preceding low tone on the /a/ of achō 'stones'.
2. The mid pitches on the /a/ and /o/ of āgō 'holes' are depressed to an even lower mid pitch by the preceding low pitch on the /a/ of la 'from'.
3. The high pitch on the /u/ of otu¹ is depressed to a lowered high by the preceding low pitch on the /o/ of otu¹ 'night'.
4. The three low tones that caused all the depressing

PHONEMES

elide.

This gives us:



H 'high', LM 'lowered mid',
LLM 'lowered-lowered mid',
L 'low' and LH 'lowered high'

For a fuller description of down-drift and terracing I would recommend Professor Robert G. Armstrong's excellent paper "Yala (Ikom), A Terraced-Level Language with Three Tones" which he presented at the seventh West African Languages Congress in Lagos during March of 1967.

3. The syllable structure of Yala forms a framework in which the sound system functions. The basic syllable patterns of Yala are: V, CV and VC.

4. The usage of the Yala syllable patterns can best be described in terms of Yala prefixes (cf. 8.1.) and roots (cf. 8.2.). In the following sections the syllable being illustrated in the example will be underlined.

4.1. First we will consider the situation in Yala prefixes.

PHONEMES

4.1.1. Most Yala prefixes are of the V shape as in:

<u>o</u> chs	'person'	<u>a</u> mē	'breast'
<u>u</u> ba	'drum'	<u>i</u> nyi	'elephant'
<u>ə</u> bs	'place'	<u>o</u> rī	'rope'

4.1.2. A smaller number of Yala prefixes are of the CV shape as in:

<u>l</u> chō	'stone'	<u>l</u> ifyē	'left'
<u>w</u> orō	'ear'	<u>y</u> enyi	'water'
<u>y</u> anō	'oil'	<u>y</u> ēglāa	'time'

4.2. The following sections describe how Yala roots make use of the basic Yala syllable patterns.

4.2.1. The vast majority of basic roots in Yala are made up of one syllable of the CV shape as in:

<u>p</u> o	'to hear'	<u>ə</u> bs	'place'
<u>j</u> e	'to know'	<u>o</u> pu	'door'
<u>d</u> e	'to give'	<u>l</u> ēgō	'axe'

4.2.2. Some basic CV roots of Yala have a lengthened vowel nucleus as in:

<u>p</u> ii	'particularly'
<u>w</u> aa	'all'
<u>ik</u> pēē	'millet'

PHONEMES

4.2.3. Some longer roots of several CV syllables have been recorded. Such as:

<u>i</u> ['] <u>chi</u> ['] <u>na</u> ['] <u>b</u> ['] <u>o</u> [̄]	'tortoise'
<u>o</u> ['] <u>ko</u> ['] <u>no</u> ['] <u>g</u> ['] <u>li</u> ['] <u>g</u> ['] <u>ba</u> [']	'compound gate'
<u>i</u> ['] <u>g</u> ['] <u>b</u> ['] <u>e</u> ['] <u>e</u> ['] <u>k</u> ['] <u>u</u> ['] <u>li</u> ['] <u>k</u> ['] <u>o</u> [̄]	'a town name'
<u>o</u> ['] <u>y</u> ['] <u>o</u> ['] <u>o</u> ['] <u>o</u> ['] <u>u</u> ['] <u>g</u> ['] <u>b</u> ['] <u>o</u> ['] <u>n</u> ['] <u>y</u> ['] <u>e</u> [']	'slave'

4.2.4. There are also a few Yala roots which have a V syllable shape as in:

<u>o</u> ['] <u>e</u> [']	'overside'
<u>w</u> ['] <u>o</u> ['] <u>a</u> [']	'round tray'
<u>y</u> ['] <u>a</u> ['] <u>o</u> [']	'small hoe'
<u>w</u> ['] <u>o</u> ['] <u>e</u> [']	'hunting reserve'

4.2.5. One Yala root with a VC syllable shape has been recorded.

It appears in:

<u>u</u> ['] <u>m</u> [']	'me'
---	------

5. Phrase - clause and sentence markers.

5.1. Phrase - clause markers.

5.1.1. Pause (comma) /,/

5.1.2. Break (dash) /-/

5.2. Sentence markers.

PHONEMES

- 5.2.1. Stop (period) /./
- 5.2.2. Length-Fall (question mark) /?/
- 5.2.3. Intensity-Length-Fall (exclamation point) /!/
- 5.2.4. Rise (special concern mark) ///

6. Markers, their description and use.

6.1. Phrase - clause markers.

6.1.1. The comma /,/ in Yala is phonetically self-defined by a short period of silence. It is not marked by any pitch change. The pause is used in the following situations in Yala:

A. Direct Address:

Ode, ał̄ ā pyāa.

'Ode, let's go.'

B. Apposition:

'Edla, ɔnglōo yī Yala, ye amu ye ē wā.

'Edla, the Yala man, is coming.'

C. Nominals in Series:

Schwōls, Agbo, Ode bala Oga hō amu.

'Schwols, Agbo, Ode and Oga are here.'

D. Verbals in Series:

Okō rē snya, ta ' agwā gbaa he ibi iniīnē.

'Oko ran, swam and jumped yesterday.'

PHONEMES

E. Conditional Clauses:

Ó gè tá, Iyaji gé hō tāa ami.

'If he refuses, Iyaji should live with me.'

F. Temporal Clauses:

Ó gbo wólā ma, n wā.

'When he slept, I came.'

6.1.2. Break /-/ is signaled by either a short period of silence or the absence of any assimilation or elision between two nominals. It marks the juncture between the subject and predicate in an equational type utterance when the morpheme *we* 'is' is not present. The following examples are illustrative:

1. Ode - ochwōls ns.

'Ode is chief.'

2. Ibu, onglōo yī Yala - ochwōls ns.

'Ibu, the Yala man, is chief.'

3. Ó we oyi la Okpōmā.

'He is a child of Okpōma.'

6.2. Sentence Markers.

6.2.1. The period /./ is signaled by a longer period of silence than either pause /,/ or break /-/. When stop or period follows a low toneme, this low toneme has a relaxed and lowered off-glide before silence (cf. 2.3.5.). Stop or period signals:

PHONEMES

A. The end of an affirmative statement:

Ó re ojòrè yī u.

'He ate my food.'

B. The end of a question-word question:

Oji nīi a ya ma.

'What have you done?'

6.2.2. A question mark /?/ is phonetically self-defined as a lengthening of the utterance final vowel. If this vowel is basically high in pitch, the lengthened vowel carries a pitch which starts at high and falls to mid. If this final vowel is basically mid in pitch, the lengthened vowel carries a pitch which starts from mid and falls to low. If this final vowel is basically low in pitch, there is vowel lengthening with no change in pitch. The Yala question mark signals the end of a Yala question utterance as in the following:

Ó re ojòrè yī u?

'Did he eat my food?'

6.2.3. Exclamation /!/ is phonetically self-defined by one of the following five variants:

6.2.3.1. In the imperative mode there are two exclamatory variants which signal a challenge or an intensification of the meaning of the original form.

6.2.3.1.1. The first variant may be used in command utterances

PHONEMES

that end in $w\bar{e}$ 'completive (non-present with negative contrast)' or $g\bar{s}$ 'completive (past-present with positive contrast)' and have an exclamatory form which calls for a lengthening of the utterance final vowel and the addition of mid tonal pitch as in:

$R\bar{e}$ $sny\bar{a}$ $w\bar{e}$! [$w\bar{e}\bar{e}\bar{e}$] 'Run (as you have said that you can)!'

$R\bar{e}$ $sny\bar{a}$ $g\bar{s}$! [$g\bar{s}\bar{s}\bar{s}$] '(Don't just stand there. Run (even though you were previously told not to run)!'

These two utterances are in definite semantic contrast with:

$R\bar{e}$ $sny\bar{a}$ $w\bar{e}$. 'Run anyway (although some do not think you will).'

$R\bar{e}$ $sny\bar{a}$ $g\bar{s}$. 'Run now (in contrast to the previous command not to run).'

6.2.3.1.2. The second variant may be used in command utterances that do not end in $w\bar{e}$ or $g\bar{s}$. They have an exclamatory form which calls for lengthening of the utterance final vowel and the addition of high tonal pitch as in:

$R\bar{e}$ $sny\bar{a}$! [$r\bar{e}sny\bar{a}\bar{a}\bar{a}$] 'Run! (I challenge you to do it even though you don't want to)'

$Py\bar{a}\bar{a}$! [$py\bar{a}\bar{a}\bar{a}\bar{a}$] 'Leave (even though you don't want to)!'

These two utterances are in definite semantic contrast with:

$R\bar{e}$ $sny\bar{a}$. [$r\bar{e}sny\bar{a}$] 'Run.'

$Py\bar{a}\bar{a}$. [$py\bar{a}\bar{a}$] 'Leave.'

6.2.3.2. In the use of emotive words there are also two exclama-

PHONEMES

tory variants which signal an intensification of the basic emotive meaning.

6.2.3.2.1. The first variant is a fall from high to low pitch on the final vowel of some emotive words that have a basic high pitch utterance final vowel. There is very little, if any, compensatory lengthening. The following example is illustrative:

Ehe! [ehee] 'Emphatic no!'

This is in definite semantic contrast with:

Ehe. [ehē] 'No.'

6.2.3.2.1. The second variant is a lengthening of the penultimate syllable nucleus of emotive words as in:

Eyē! [eeyē] 'Emphatic cry for sympathy.'
Ōo! [ōō] 'Emphatic cry of a mistake.'

These are in definite semantic contrast with:

Eyē. [eyē] 'Cry for sympathy.'
Ōo. [ō] 'Cry of a mistake.'

6.2.3.3. The fifth and final exclamatory variant is signaled by an increase in articulatory intensity for all other exclamatory expressions. Here, like in English, the degree of emotional intensity can be signaled by increasing the articulatory intensity on an ascending scale. This provides for a sliding scale of many different levels instead of

PHONEMES

just a two-way contrast between normal and forceful utterance articulation. The example that follows is representative:

Al̄o ā pyāā! 'Let's go (emphasized)!'

This again is in definite semantic contrast with:

Al̄o ā pyāā. 'Let's go.'

6.2.4. Special concern is phonetically self-defined as:

1. A lengthening of the nucleus and a rising pitch from low to mid on the nucleus of an utterance final low tone syllable as in:

N je' s̄b̄s̄ yī w̄o/ [w̄oō]

'Really/honestly I know your place.'

This is in definite semantic contrast with:

N je' s̄b̄s̄ yī w̄o. [w̄o]

'I know your place.'

2. A lengthening of the nucleus and a rising pitch from mid to high on the nucleus of the utterance final mid tone syllable as in:

N w̄ā 'iniīnē/ [iniīnēē]

'Really/honestly I came yesterday.'

This is in definite semantic contrast with:

PHONEMES

N wā 'iniĩnē. [iniĩnē]

'I came yesterday.'

3. A lengthening of the nucleus and a falling and then rising pitch from high to mid to high on the nucleus of the utterance final high tone syllable as in:

Ō kú sjī mē/ [mēēēē]

'Sorry, it is (already) finished.'

This is in definite semantic contrast with:

Ō kú sjī mē. [mē]

'It is finished.'

From a semantic point of view 'special concern' either signifies concern or courtesy depending upon the semantic domain in which it operates.

7. Orthography.

7.1. Koelle and Armstrong took Yala down in phonetic transcription without any attempt to suggest the actual number of contrastive units that would be needed to systematically write Yala. Koelle attempted to mark stress but did not mark tone. His stress marks are basically an imposition of normal Western intonation patterns upon the Yala word no matter what the basic tonal patterns may have been in Yala. Armstrong marked tone carefully and realized that stress is not signif-

PHONEMES

icant in Yala.

7.2. The first attempts at a practical writing system for Yala were produced by the Roman Fathers in the 1940's and '50's. The result of their efforts can most easily be studied in their catechism of 1961. It is doubtful that they ever saw either Koelle or Armstrong's work. Their writing system was ambiguous and non-systematic. While both Koelle and Armstrong recognized a seven vowel contrast in Yala the Fathers wrote Yala with five vowels. They did not mark tone or differentiate between /gb/ and /ngm/. Forms were often written with two different spellings in the same sentence and it is not possible to discover any logic for their division of words which was often done in different ways in the same sentence. The result was disastrous. No one could read anything until it had first been memorized.

7.3. The modern orthography of Yala grows out of the work of the present author and his co-workers. It is used extensively in teaching reading in the Yala and Yache elementary schools and is the standard orthography in the Yala primers, post-primer materials, Scripture portions and Bible translation. This writing system has proven itself practical for the task for which it was designed and capable of opening the world of reading and literature for the people who speak Yala as their first language.

7.3.1. The Yala orthography includes the following twenty-eight

PHONEMES

(twenty consonants, seven vowels and /n/ serving as either a vowel or consonant) letters: A, B, CH, D, E, E, F, G, GB, H, I, J, K, KP, L, M, N, NY, NG, NGM, Œ, O, P, R, T, U, W, Y.

7.3.2. Tone is marked as follows:

7.3.2.1. High tone is marked with an apostrophe (') above the syllable nucleus that carries it (e.g. $\overset{\cdot}{O}$ or $\overset{\cdot}{E}$).

7.3.2.2. Mid tone is marked with a dash (¯) above the syllable nucleus that carries it (e.g. \bar{O} or \bar{E}).

7.3.2.3. Low tone is left unmarked (e.g. O or E).

7.3.2.4. Tonal glides are written over two vowels of the same quality. The first vowel is marked for the initial pitch of the tone glide and the second vowel for the final pitch of the tone glide (e.g. $\overset{\cdot}{OO}$ or $\overset{\cdot}{O}\bar{O}$ or $\bar{O}O$). Although there is normally a small amount of compensatory lengthening of the vowel nucleus, this lengthening is not contrastive from a systematic point of view (cf. 0.6.11.).

7.3.3. Vowel length is marked by writing two vowels of the same quality with identical tones (e.g. OO or $\bar{O}\bar{O}$ or $\overset{\cdot}{O}\overset{\cdot}{O}$).

7.3.4. Word division is systematic throughout and based on the present state of understanding of the Yala grammatical patterns including the all-important factors of automatic assimilation and coalescence of vowel quality, tone quality and in a few cases, consonant quality

PHONEMES

across grammatical boundaries (cf. 9.).

7.3.5. A single constant spelling of each word is strictly adhered to except for a very few cases in which linguistic processes of change are in progress but have not been completed in all environments.

7.3.6. The contrastive markers: comma /,/ , dash /-/ , period /./ , question mark /?/ , exclamation point /!/ and special concern marker /// are used to signal contrastive syntactic forms and semantic functions at the phrase, clause and sentence level.

II. THE MORPHEMES

8. The morphemes of Yala are the smallest sequences of sound to which meaning can be assigned. This section will classify the morphemes of Yala. The basic classification has been done on structural grounds. Functional subclassification is based on distribution and semantic considerations with semantic considerations proving especially important in the area of prefix classification.

Although it is not the purpose of this chapter on morphemes to give a systematic and comprehensive presentation of Yala syntax, the following structural information is given as a framework within which the morphological categories and constituents of this chapter can be understood in an organized fashion.

In terms of Greenberg (Universals of Language - 1966, page 77) Yala is an SVO type of language. This is demonstrated by the following illustrative examples:

Ode ma ¹ Okō.	'Ode saw Oko.'
Ode nāa um okpo.	'Ode took my money.'

The basic S, V and O constituents may be either basic (cf. 8.2.1., 8.2.2.1., 8.2.3.1. and 8.2.3.2.) or complex (cf. 8.2.1.4.6., 8.2.2.2., 8.2.2.4., 8.2.2.5.2.1., 8.2.2.5.2.2. and 8.2.2.5.2.3.).

MORPHEMES

The simple SVO constituent structure is, in practice, filled out by the addition of various other constituent structures which may all be subsumed under the term complements. The additional structures are:

1. The temporal structure (cf. 8.1.10. and 8.2.1.4.4.) as in:

N wā iklɔc la ikɔɔbahe.

'I came two days ago on Sunday.'

2. The locational structure (cf. 8.2.1.4.7.) as in:

0 hō ma uma.

'It is near here.'

3. The adverbial structure (cf. 8.2.1.4.8. and 8.2.2.3.) as in:

ɔwɔ hā liwō kpɛɛɛ ji.

'It rained more than expected!

ɔwɔ hā liwō gbaa ɔkɔkū.

'It rained very much.'

4. The conjunctive structure (cf. 8.2.2.5.1. and 8.2.2.5.2.5.) as in:

N gbō eyī ma o wā.

'I waited and he came.'

MORPHEMES

Ó ka gb̄oō n̄i n p̄o.

'He talked loudly so that I heard.'

5. The prepositional structure (cf. 8.2.2.5.2.4.) as in:

N h̄e la ukp̄aa.

'I cut with a machete.'

Ó j̄s̄ b̄aa ami ma.

'He grew like me.'

Ó bȳaa la ami la op̄op̄u la ōch̄i.

'It spoiled with me on the road in the morning.'

6. The descriptive structure (cf. 8.2.2.6.) as in:

Ó l̄s̄ kl̄oō.

'It is crooked.'

Ar̄o ī inyi l̄s̄ bagabaga.

'An elephant's ears are floppy.'

7. The clause opening structure (cf. 8.2.3.3.) as in:

Àa a p̄o.

'Surely you heard (didn't you).'

8. The utterance closing structure (cf. 8.2.3.4.) as in:

N̄aa obe k̄oō.

'Take affectionate greetings.'

MORPHEMES

The examples which follow are given to illustrate how the complement structures listed above function together in longer Yala utterances.

Jeka Ōwə hā liwō kpatakpata kpe'ss ji
assumption-God-rain-rain-sound of beating-very much-unspeakable-

'I think you know that it really rained (sound of beating)

la ami la opōpū ichs la ōchī koō.
on-me-on-road-today-in-morning-attention

on me more than one can even say on the road this morning.'

Jeka lslā hō aboo jugūjugū bala ami la opōpū
assumption-thing-remain-there-confused-with-me-on-road-

'I think you know that a confusing thing really happened

ichs la ōchī koō.
today-in-morning-attention

to me on the road this morning.

In terms of the overall framework that has just been outlined we now turn our attention back to the Yala morphemes which can be classified as:

1. Root Morphemes.
 - A. Prefixed roots.
 - B. Non-prefixed roots.
 - C. Other roots.
2. Prefix morphemes (cf. 8.1.13.).

The nineteen prefix morphemes mark a form as nominal and in a good

MORPHEMES

number of cases are diagnostic in classifying the noun classes of Yala as well as signaling a singular-plural distinction in about ten percent of the cases.

8.1. Traditionally one structural class in many Niger-Congo languages has been analyzed as consisting of a root and an affix. These affixes are either prefixes or suffixes and in many languages function as a marker of noun classes. In Yala the nineteen prefixes (cf. 8.1. 13.) mark the forms as nominal and in the case of about ten percent of the forms signal a singular-plural distinction (Ikom and Obubra Yala retain many more singular-plural distinctions). It is also possible to recognize (at least in some of the forms) a vestige, as Professor Welmers calls it (Welmers, African Language Structures, 1973, University of California Press), of the noun class system that for so long was taken as the trademark of the Benue-Congo (Bantu) languages of Africa.

The following sets of Yala forms demonstrate how the Yala prefixes signal a narrowing or expanding or slight shifting of what, at least at the broadest generic level, could be considered semantic similarity. In the cases of sets II, III and IV it will probably be more satisfying to think of each set as including three or four homophonous roots.

SET I

'	hu	'cause'
'	ohu	'reason'

MORPHEMES

ahu	'point'
lshu	'head'
wshu	'power'

SET II

kū	'squat'
yēkū	'squatting'
ūkū	'finger/toe nail'
īkū	'claw'
lskū	'fist'
likū	'death'
okū	'corpse/disembodied spirit'
ekū	'disembodied spirits'
yekū	'masked dancer'
' ikpeekū	'carved human figure'

SET III

gba	'remove'
wogba	'unmarried'
' wogba	'a tree which stands alone'
agba	'vomit'
' agba	'saliva'
lsgba	'cry'

MORPHEMES

SET IV

gō	'cut/make heaps'
legō	'axe'
agō	'weaver bird'
wōgō	'hole'
āgō	'holes'
lōgō	'opening'

The proto-Bantu prefixes have been reconstructed in slightly varied ways in the literature (cf. Meinhof, 1948, Meeussen, 1967, and Welmers, 1973). Unless otherwise stated the Welmers set of reconstructions will be the ones quoted. The presentation which follows will identify the various Yala prefixes and give examples of their usage.

8.1.1. Many personal nominals in Yala are marked as singular by the prefix /o-/ and as plural by the prefix /a-/. The /o- and a-/ singular-plural classification pair seems to correspond very closely to the proto-Bantu class 1 /mo-/ and class 2 /va-/. Representative examples of the /o- and a-/ singular-plural personal pair of classifying prefixes are:

<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
ōche	āche	'person'
ōnye	ānye	'who'
onglōo	anglōo	'man'

MORPHEMES

onyā	anyā	'woman'
oyi	ayi	'child'
ofys	afys	'slave'
ochs	achs	'servant'
ōchoga	āchoga	'stranger/guest'

8.1.2. Another significant singular-plural prefix marking pair is the singular /o-/ and the plural /e-/. This pair of prefixes tends to mark:

1. Plants and plant products.
2. Abstractions.
3. Group dependent designations.
4. Others.

The /o- and e-/ singular-plural prefix pair of Yala seems to bear a close resemblance to the class 3 /mo-/ and the class 4 /me-/ of proto-Bantu. Representative examples of the /o- and e-/ singular-plural prefix classifiers of Yala are:

<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
ochi	echi	'tree/stick/medicine'
ogba	egba	'root'
omu	emu	'a grass'
ojā	ejā	'thing'
oha	sha	'some'

MORPHEMES

olaā	slaā	'that'
ochwōle'	schwōle'	'king'
ogabō	egabō	'elder'
ogāmode	egāmode	'king's title'
olaje	elaje	'land owner'
onyā	enyā	'wife'
ochōbū	schōbū	'leader'
oyelihi	eyelihi	'follower'
ocha	echa	'language'
okpa'	ekpa'	'stream'

8.1.3. The third singular-plural prefix marking pair in Yala is /lɛ- and a-/. It is difficult to assign semantic parameters to the words in this class but it is useful to note that there are a number of Yala nominals marked by /lɛ-/ in the singular and /a-/ in the plural which are also found in proto-Bantu class 5 /le/ and class 6 /ma/ (cf. Meinhof, 1948 and Meeussen, 1967 and Welmers, 1973).

8.1.3.1. Representative examples of /lɛ- and a-/ singular-plural prefix classifiers of Yala are:

<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
lɛchō	achō	'stone'
lɛrī	arī	'palm tree'
lɛpī	apī	'penis'

MORPHEMES

lshu'	ahu'	'head'
lslā	alā	'word/action'

8.1.3.2. There are a number of other nominals in Yala in which the singular-plural classification has been neutralized which very possibly may have membership in this marking set also. The following examples are given for illustration and comparison:

lsmē	'half of a liquid measure'	amē	'breast'
lspō	'case'	apō	'quarrel'
legō	'ax'	lewū'	'war'
lengū	'nose'	lengmē'	'kola'

8.1.3.3. It may also be that the following examples:

limū	'flesh'	linu	'roof'
lipi	'vagina'	lipu'	'abdomen'

should be classified as attenuated members of the Yala /ls- and a-/ singular-plural prefix marking pair. If that is so we may account for the shift from /ls-/ to /li-/ as a morphophonemic change which is in process but not as yet complete (cf. lengū 'nose' and lewū 'war'). That is, the prefix /ls-/ has become /li-/ before a root with a high vowel /i or u/. From the distinctive feature point of view we can say that /s/ has retained its feature of non-backness but has been assimilated by the features of extreme and high in the high, extreme root

MORPHEMES

vowels /i and u/ in this structural environment.

8.1.3.4. The Yala prefix /li-/ as evidenced in the words:

līre' 'right' (re' 'eat')

līfyē 'left'

līgā 'big manism'

may well be a special sub-classifying marker of the Yala /le-/ class which marks 'abstractions to which a dualistic sense can be applied' (Meinhof, 1948).

8.1.4. The plural prefix /a-/ which was discussed above (8.1.3.) and seems to function in a way that parallels class 6 of proto-Bantu also seems to function as the plural marker for the singular /wɔ-/ class of Yala. This /wɔ- and a-/ singular-plural prefix pair marks the semantic parameters:

1. Paired body parts.
2. Abstractions.

Professor A. E. Meeussen has suggested in personal correspondence (11-2-71) that the /wɔ-/ prefix of Yala may reflect at least some of the semantic parameters of proto-Bantu class 14 /bu/.

8.1.4.1. Representative examples of the /wɔ- and a-/ singular-plural prefix classifiers of Yala are:

MORPHEMES

<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
wor̄o	ar̄o	'ear'
wob̄o	ab̄o	'arm'
wocha'	acha'	'wing'
wokpa'	akpa'	'skin'
wobi'	abi'	'bad'
wohi	ahi	'good'

8.1.4.2. Additional nominals which have probably neutralized their singular-plural distinction but still seem to fit into this semantic grouping are:

wodu	'riches'	
woga	'entertainment'	
wogba	'unmarried'	(gba 'to remove')
wohā	'swamp'	(hā 'to rain')
whu'	'power'	(hu' 'to cause')
woje	'sand'	(aje 'earth/ground')
womu	'prophecy'	

8.1.4.3. The /a-/ prefix also marks another class of Yala nominals for abstraction. The nominals involved here are the long set (cf. 8.2.1.4.5.1.), the reported set (cf. 8.2.1.4.5.2.) and the intensive set (cf. 8.2.1.4.5.3.) of Yala pronouns. They are:

MORPHEMES

<u>LONG</u>	<u>REPORTED</u>	<u>INTENSIVE</u>	
ami	am'olo	am'olojā	'speaker'
awo	aw'olo	aw'olojā	'hearer'
anu	an'olo	an'olojā	'topic'
alo	as'le	al'olejā	'speaker and others'
ala	ala'olo	ala'olejā	'hearers'
aa	aa'sle	aa'olejā	'topics'

8.1.5. Another singular-plural prefix-classifying pair in Yala has /u-/ singular and /i-/ plural. This Yala singular-plural prefix pair is probably historically related to class 11 /lo-/ (Welmers) or (Meeusen) class 11 /du-/ and class 10 /li-/ of proto-Bantu. The /u-/ singular and /i-/ plural prefix pair of Yala marks the semantic parameters:

1. Elongated objects.
2. Abstractions.

8.1.5.1. Representative examples of the /u- and i-/ singular-plural prefix classifiers of Yala are:

<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
ūkpō	īkpō	'fruit/seed'
urū	irū	'feather/body hair'
ūkū	īkū	'finger/toe nail'
'ublēnyī	'iblēnyī	'tongue'

MORPHEMES

ugblo ¹ ōbō	igbla ¹ ābō	'arm'
uta ¹ ākū	ita ¹ ākū	'thigh'
ugbo	igbo	'time'

8.1.5.2. Again, it is easy to spot nominals with either the /u-/ or /i-/ prefix that have very probably neutralized their singular-plural distinction but still seem to mark the semantic categories of elongation or abstraction. Representative examples of such nominals are:

uba	'drum'	inyi	'elephant'
uhū	'lizard'	itaku	'worm'
ufye	'broom'	iku	'alligator'
ufle	'flute'	ichiku ¹	'pigmy mouse'
ugaji	'spoon'	uji ¹	'jealousy'
ukpāā ¹	'machete'	uhu	'shadow/spirit'
iyē	'body'	uhu ¹	'inhuman'
ikpo ¹	'leg-foot'	ibū	'amazement'
itābō	'hand'	ichē	'faith'
inyēlshu ¹	'hair'	ichi ¹	'suffering'
igu	'corn'	ichō	'up'
ihī	'yam'	ita	'kind'
ihiko ¹	'pipe'	ihyo	'judgeship'
idu	'cobra'	ijija	'breeze'

MORPHEMES

shape of the prefix by recognizing the morphophonemic rule that /ye-/ becomes /ya-/ before a root that has a non-high vowel /ɛ, ɔ or a/. Conversely, it may be that /ya-/ is the basic prefix and that we can explain the shape of the prefix by recognizing the morphophonemic rule that /ya-/ becomes /ye-/ before a root that has a high vowel /i, u, e or o/.

8.1.6.3. The examples which follow are nominals which are marked by /ye-/ even though they are not liquids. This can best be explained by thinking in terms of a semantic extension of this class to include objects which, although not liquid as such, are directly connected with the usage of liquids. They are:

yēkpē	'bottle'
yēbū	'soup ladle'
yewuna	'dew drinking bird'

8.1.6.4. Six nominals in Yala are marked with the prefix /yē-/ which seem to mark these nominals as 'uncountable' or 'unending'. They may well form a sub-class that is, at least from the semantic point of view, closely related to the /ye-/ prefix. They are:

yēba	'uninvited guest'	(ba	'beg')
yēglāa	'time'	(glāa	'complete')
yēngla	'hopelessness'	(ngla	'liquefy')
yējē	'a fat fish'	(jē	'grow')

MORPHEMES

yēhī	'water pot'	(hī	'remain')
yēmē	'multitude'		

8.1.7. Another Yala prefix which does not mark a nominal as singular or plural but does indicate the good possibility that the nominal which is so marked signifies 'an animal' is /ye-/. The /ye-/ prefix of Yala is most probably relatable to proto-Bantu class 9 /ne/ or class 10 /li/.

8.1.7.1. Representative examples of the /ye-/ prefix classifier of Yala are:

yewū	'goat/sheep'	yehlōo	'chimpanzee'
yekā	'monkey'	yena	'cow'
yenū	'antelope'	yegwā	'snake'
yēē	'bushcow'	yējē	'nile perch'
yeruma	'bushpig'	yēba	'cat fish'
yeje	'leopard'		

8.1.7.2. A number of other nominals in Yala may well be marked with an atrophied form of the /ye-/ prefix. They are:

e ^h	'animal/meat'	emye	'mosquito'
edu	'frog'	eho	'ant'
ela ^h	'louse'	ega	'soldier ant'

8.1.7.3. Although we cannot say that it is true in every case

MORPHEMES

(cf. 8.1.7.1.) there also seems to be a tendency for the /ys-/ prefix to take the form /ya-/ before roots whose final vowel is extreme /a, i and u/. This seems to point to the existence of a morphophonemic change that is in the process of taking place and not as yet completed.

This situation is demonstrated in the following examples:

yapa	'lizard'
yapā	'genet'
yamā	'multimammate rat'
yabla	'red duiker'
yayi	'crowned duiker'
yarichəche	'bush-tailed porcupine'
yanyī	'giant rat'
yangū	'dwarf mongoose'
yatufɫa	'spotted grass mouse'
yablubla	'shaggy rat'

8.1.7.4. In the word: yoō 'dog', it seems that the /s/ in the prefix /ys-/ has been assimilated to /o/ before a root that has the high, non-extreme back vowel /o/.

8.1.7.5. Some additional nominals which are marked with the /ys-/ are:

yeta	'triplets'	yewu	'mountain'
yero	'farm'		

MORPHEMES

8.1.8. There are a number of examples in which the Yala prefix /le-/ marks roots, in already mentioned singular-plural classes, as abstractions. This /le-/ prefix of Yala may be related to class 11 /lo/ or class 5 /le/ of proto-Bantu. The following examples are given with the comparative forms from the other classes:

<u>ABSTRACT</u>	<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
lehi	wchi	shi	'charity/good'
lebi'	wobi'	abi'	'taboo/bad'
leya	oya	eya	'friendship/friend'
lesfye	ofye	afye	'blame/slave'
lenyā	onyā	anyā	'female/woman'
lenglōo	onglōo	anglōo	'male/man'
leba'	oba'	eba'	'husbanding/husband'
lenyāku'	onyāku'	anyāku'	'old age/old one'
lespē	ospē	aspē	'childhood/child'
lēgō	wōgō	āgō	'opening/hole'
lehu'	ohu'	ahu'	'head/point'
leshā	chā		'dedication/prayer'
legba		agba	'cry/vomit'
lemye		emye	'hunger/mosquito'

8.1.9. Languages regularly appropriate linguistic forms from other languages in order to signify new objects or concepts that are in-

MORPHEMES

vading the cultural domain that is associated with that particular language. Yala has, in the past, absorbed linguistic forms from a number of languages, including Efik, Igbo, Yoruba and English. Representative examples of the appropriated forms are:

<u>YALA</u>	<u>EFIK</u>	<u>MEANING</u>
obahe	abasi	'god'
ot̄in̄ikā	utuenikang	'lamp'
okp̄ok̄ol̄o	okp̄ok̄oro	'big table'
<u>YALA</u>	<u>IGBO</u>	<u>MEANING</u>
inyo	enyo	'window glass'
ikobo	kobo	'penny/copper'
itoro	toro	'three pence'
isisi	sisi	'six pence'
ihili	sili	'shilling'
<u>YALA</u>	<u>YORUBA</u>	<u>MEANING</u>
igarāwā	garāwā	'bucket'
<u>YALA</u>	<u>ENGLISH</u>	
imoto	motor	
imiti	meeting	
iboolu/ibooli	ball	
ikleemeehi	Christmas	
itelo	tailor	

MORPHEMES

ikoo <u>p</u> u	'cup'
ipoo <u>p</u> u	'pump'
ite <u>b</u> lū	'small table'
ika <u>b</u> ita/ok <u>o</u> bita	'carpenter'
ig <u>b</u> le <u>ch</u> i	'bench'

On the basis of the evidence it seems that the older pattern of borrowing as evidenced in the linguistic forms that Yala appropriated from Efik tended to prefix the acquired form with a prefix that fitted it into an already defined semantic class in Yala. However, the linguistic forms which have been appropriated more recently seem to be regularly marked as borrowed with a prefix /i-/.

In some cases this has meant a process of changing the already assigned and established prefixes. This process of changing prefixes seems to have taken place only when the form had not been fully assimilated previous to the advent of the newer method of prefixing acquired forms. This particular development is evidenced by two pronunciations for a number of words, including 'carpenter'. Some older Yala people say 'okobita'. The older and middle generation say 'ikabita' and recognize the pronunciation 'okobita' as valid although a bit deviant. The younger generation says 'ikabita' and looks upon the pronunciation 'okobita' as totally incorrect and inappropriate. Another evidence of this change in the method of prefixing acquired forms is the fact that Koelle (1854) transcribed the Yala word for 'bench' without the /i-/ prefix.

MORPHEMES

He recorded 'gburadshi' which may well have actually been [gburachi] (cf. 2.1.1.4.)

[gburachi]

It may well be that the new system of prefixing forms which have been acquired from other languages with the prefix /i-/ was made possible by the fact that the noun-marking prefixes were more and more losing or shifting their semantic significance (i.e. neutralizing the singular-plural distinction or keeping the two forms but using them to signal new semantic contrasts). This is evidenced by the fact that for some speakers:

	<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
1.	ochi ¹	schi ¹	'stick'
2.	omu	emu	'a grass'
3.	ūkū	īkū	'finger/toe nail'
4.	wokpa ¹	akpa ¹	'skin'
5.	lspī	apī	'penis'

are no longer singular-plural pairs but have contrastive meaning as follows:

1.	ochi ¹	'stick'	schi ¹	'juju'
2.	omu	'dry grass'	emu	'fresh grass'
3.	ūkū	'finger/toe nail'	īkū	'caw'
4.	wokpa ¹	'hide'	akpa ¹	'human skin'
5.	lspī	'penis'	apī	'venereal disease'

MORPHEMES

It is also evidenced by the fact that for some Yala speakers:

<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
1. 'ublə̄enyī	'iblə̄enyī	'tongue'
2. 'ukpochi	'ikpochi	'small hill'

are being neutralized for the singular-plural distinction with most Eastern Yala speakers choosing the singular forms /'ublə̄enyī and 'ukpochi/ to cover the whole range of meaning and most Western Yala speakers choosing the plural forms /'iblə̄enyī and 'ikpochi/ to cover the whole range of meaning.

Some have suggested that the present day /i-/ prefix of Yala which marks acquired forms may be relatable to the class 7 /ke-/ (Welmers) or /ki-/ (Meinhof and Meeussen) of proto-Bantu. In any case it is interesting to note that somewhere along the way after the time of Koelle the name of the Yala language was recorded as Iyala (cf. ki Swahili 'the Swahili language'). In fact, it took me some time to convince the government authorities and map makers that the Yala people call their language Yala and not Iyala. Who knows, maybe at one time the Yala did speak of their language as Iyala. Until today the Ukele people just to the north of Yala call their language Kukale (the regular reflex of proto-Bantu class 7 /ke/).

8.1.10. We have spoken about the /i-/ prefixes of Yala above (cf. 8.1.5. and 8.1.9.). It also appears that Yala has an /i-/ prefix which

MORPHEMES

marks 'time words'.

8.1.10.1. Representative examples of the /i-/ prefix classifier of Yala are:

íche	'today'
ííchi	'tomorrow'
ííñē	'yesterday'
íklō	'the day before yesterday'
íchina	'later'
igbaa	'last time (same day)'
igbiche	'long ago'
íkiklō	'some days ago'
íchiche	'same day'
íchichsha	'one day (future)'
igbeñē	'then'

8.1.10.2. A number of additional Yala 'time words' have an /ī-/ prefix. They are:

īchīhō	'next tomorrow'
īchāha	'some day'
īcholo	'those long ago days'
īchāhachāha	'never'

Each of the forms in this group probably includes the Yala word ōchī 'day' but with the /i-/ prefix replacement to mark the 'time word'

MORPHEMES

class. That is: $\bar{i}ch\bar{i}h\bar{o}$ from $\bar{o}ch\bar{i}$ 'day' and $h\bar{o}$ 'remain, $\bar{i}ch\bar{a}h\bar{a}$ from $\bar{o}ch\bar{i}$ 'day' and cha 'some' and $\bar{i}ch\bar{o}l\bar{o}$ from $\bar{o}ch\bar{i}$ 'day' and $\bar{o}l\bar{o}$ 'spoken about'. If this is the case then we may infer that the original mid tone of the \bar{o} -/ prefix of $\bar{o}ch\bar{i}$ assimilates the high tone of the replacive prefixes / \bar{i} -/ to itself while being assimilated by the vowel quality of the replacive prefix / \bar{i} -/.

8.1.11. Prefixes and tone.

8.1.11.1. Ninety-three percent of all Yala prefixes on basic nominals carry:

1. A low tone (70%) as in:

$\bar{a}r\bar{u}$	'shirt'	$\bar{o}m\bar{a}$	'salt'
$\bar{l}i\bar{w}\bar{o}$	'rain'	$\bar{o}ngl\bar{o}\bar{o}$	'man'

2. A high tone (16%) which can be interpreted as a low tone which has been assimilated to high pitch before a root whose first vowel carries high tone as in:

$\bar{a}ch\bar{i}$	'bush'	$\bar{y}akl\bar{a}$	'cover'
$\bar{o}ch\bar{e}$	'servant'	$\bar{l}engm\bar{e}$	'kola'

3. A mid tone (7%) which can be interpreted as a low tone which has been assimilated to mid pitch before a root whose first vowel carries mid tone as in:

$\bar{i}kpl\bar{i}$	'eye'	$\bar{w}\bar{o}k\bar{a}$	'news'
$\bar{i}p\bar{u}$	'leaf'	$\bar{u}kp\bar{o}$	'seed/fruit'

MORPHEMES

8.1.11.2. The process of tonal assimilation is evidenced by the fact that a few forms have alternate pronunciations in the present speech of most Yala people. They are:

leyi ^ˈ	or	leyi ^{ˈˈ}	'year'
ibesēnē ^ˈ	or	ibesēnē ^{ˈˈ}	'then'
opa ^ˈ	or	opa ^ˈ	'cloth'

8.1.11.3. The remaining seven percent of the prefixes carry what we might call a basic high (6%) or mid (1%) tone. Some of these have been discussed in: 8.1.3.4., 8.1.6.4. and 8.1.10. above.

8.1.11.3.1. Virtually all cases of prefixes with basic mid tone except:

lēchi ^ˈ		'true'
ōche	-	āche
		'person'
ōnye	-	ānye
		'who'

have been explained in paragraph 8.1.3.4. and 8.1.6.4.. The root of lēchi^ˈ is probably related to the root of ōchi^ˈ - echi^ˈ 'medicine (including spiritual medicine)' with the prefix /lē-/ marking for abstractness. Ōnye - ānye 'who sg./pl.' quite evidently are semantically related to onye - anye 'one/ones' but it is difficult to see any semantic correlation between ōche - āche 'person/persons' and ache 'gizzard'. At the present historic moment the form oche carries no semantic load in Yala.

MORPHEMES

8.1.11.3.2. The significance of a number of basic high tone prefixes is discussed in section 8.1.10.1. It is interesting to note that, at least in a number of cases, a high and a low tone prefix with the same vowel quality are prefixed to the same root with a slight shift in meaning which can easily be defined as in a single or at least closely related semantic parameter. The illustrative examples are:

	<u>gba</u>	'to remove'		
wogba	'unmarried one'		wogba	'a tree which stands alone'
agba	'to vomit'		agba	'saliva'
	<u>cha</u>	'to return'		
acha	'dead'		acha	'retort'
	<u>chee</u>	'' 'small/part of the whole'		
oche	'king'		oche	'servant'
			ache	'servants'
	<u>bu</u>	'to originate/to bore a hole'		
obū	'boring beetle'		obū	'before'
	<u>gū</u>	'to close'		
ugū	'fowl'		ugū	'inheritance'
wobō	'hand-arm'		wobō	'branch'
abō	'hands-arms'		abō	'branches'
atā	'gong'		atā	'gong shaped pepper'

MORPHEMES

akwa 'bridge' 'akwa 'flat metal'

8.1.12. The diminutive is a semantic category that many Niger-Congo languages regularly mark through affixing. Proto-Bantu classes 7 and 8 /ki and bi/, classes 12 and 13 /ka and tu/ and class 19 /pi/ have been noted in the literature as markers of the diminutive. Yala also marks the diminutive but not in a way that is consistent with its other noun class marking prefixes which are of the V or CV shape. Rather, it attaches the VC(V) /'ikp(v)/ to the front of the form to be diminutivized. Although the quality of the final vowel is never realized in the oral presentation the high tone that it carries always shows up on the first vowel of the root form that is being diminutivized.

8.1.12.1. Representative examples of the 'ikp(v) classifiers of Yala are:

'ikpayā	'small knife'	'ayā	'knife'
'ikpōbā	'small mat'	'ōbā	'mat'
'ikpogo	'small half calabash'	'ogo	'half calabash'
'ikpapu	'small towel'	'apu	'towel'
'ikpiīpū	'small book'	'īpū	'book'
'ikpōōnyā	'small woman'	'ōnyā	'woman'
'ikpaāchō	'gravel'	'achō	'stones'
'ikpōpā	'small cloth'	'ōpā	'cloth'

MORPHEMES

'ikpogla	'small playground'	'ogla	'playground'
'ikpoori	'small calabash'	ori	'calabash'
'ikpochi	'small hill'	'ochi	'hill'
'ikpoopi	'small male goat'	opi	'male goat'

8.1.12.2. In the final three cases above the diminutive form is also marked for the singular-plural distinction in the speech of a few Yala speakers:

<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
'ukpoori	'ikpoori	'small calabash'
'ukpochi	'ikpochi	'small hill'
'ukpoopi	'ikpoopi	'small male goat'

Today most Yala speakers do not make the singular-plural distinction but consider the choice of /u/ or /i/ at the beginning of these nominals as a marker of the dialect area from which the speaker originates. That is, /u/ for Eastern Yala and /i/ for Western Yala.

It may be that the 'ukp(v) and 'ikp(v) are abstract forms of ukpo and ikpo 'seed/fruit' which are now functioning as a marker of the diminutive (cf. 8.1.5.1. and 8.1.11.3.2.).

8.1.12.3. Another example which is particularly interesting in this case is:

<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
ukpwu	ikpwu	'female goat'

MORPHEMES

from *ywū* 'goat/sheep'. Here we seem to have the semantic parameters: female and diminutive, grouped together. This example is particularly instructive since the collocation of *ukp(v)* with *ywū* is sequential rather than associative (cf. 8.2.2.5.1.). If it were associative we would get: *ukpēwū/ikpēwū*.

8.1.12.4. The diminutive is also signaled by compounding *áché* 'servants', *oyí* 'child', *ayí* 'children', *ūkpō* 'seed/fruit' or *īkpō* 'seeds/fruits' with a following noun which is to be diminutivized.

The following examples are instructive:

<i>áchaānyā</i>	'maiden'	<i>anyā</i>	'women'		
<i>áchewu</i>	'tiny firewood'	<i>ewu</i>	'firewood'		
<i>oyukwōbō</i>	'finger'	<i>kū</i>	'squat'	<i>wōbō</i>	'hand'
<i>ayikābō</i>	'fingers'	<i>kū</i>	'squat'	<i>abō</i>	'hands'
<i>ayiije</i>	'nail'	<i>oje</i>	'iron'		
<i>ayiiju</i>	'caterpillar'	<i>ijū</i>	'fly'		
<i>ūkpohe</i>	'single'	<i>ōhe</i>	'one'		
<i>īkpīimi</i>	'small nostril'	<i>imi</i>	'nostril'		

8.1.13. The nominal marking prefixes of Yala could be summarized in several different ways. I will do it by classifying the singular-plural pairs together first, followed by the classifiers which are not paired on a singular-plural axis.

MORPHEMES

<u>SINGULAR - PLURAL</u>	<u>MEANING PARAMETER</u>
o- a-	Personal
o- e-	Plant and Plant Products
	Abstractions
	Group Dependent Designation
	Others
le- a-	Proto-Bantu 5 and 6
wə- a-	Paired Body Parts
	Abstractions
u- i-	Elongated Objects
	Abstractions

OTHERS

ye	Liquid Mass
yē	Uncountable/Unending
ye	Animals
le	Abstracts
lī	Dualistic Abstracts
i	Borrowings
i	Time Words
x	Contrastives
i ikp(v)	Diminutive

The second last prefix which is marked with x represents any pre-

MORPHEMES

fix which carries high tone and in that way signals a meaning which is in contrast with the same nominal root with a similar prefix with low tone (cf. 8.1.11.3.2.).

The final prefix /ikp(v̄)/ has been included since it never has an independent status and since its presence before an independent nominal always signals the diminutive. In a sense, ikp(v̄) might best be thought of as a special kind of prefix which is always affixed to a full nominal including its prefix. That is, as a kind of pre-prefix prefix.

8.1.14. The /o-/ prefix of Yala has the variants [o-] and [o-] and the /e-/ prefix of Yala has the variants [e-] and [e-]. The [o-] and [e-] variants function before nominals whose first vowel is high /i, u, e and o/ and the [o-] and [e-] variants function before nominals whose first vowel is non-high /o, e and a/ (cf. 2.2.8.). The [o-] and [e-] variants have been illustrated in sections 8.1.1. and 8.1.2. above. The following examples illustrate the [o-] and [e-] variants:

<u>SINGULAR</u>	<u>PLURAL</u>	<u>MEANING</u>
onūma	enūma	'this (one)'
obījo	ebījo	'cane rat'
oklobya	eklobya	'young man'
otlihi	etlihi	'tail'
ochipwōnū	echipwōnū	'elder's title'

MORPHEMES

oliho alihyo 'judge'

8.1.15. There are a number of CV nominal prefixes which are pronounced without the C by some Yala speakers. The recorded examples are the following:

<u>SHORT</u>	<u>LONG</u>	<u>MEANING</u>
apliija	yapliija	'spiritual power'
omu	womu	'prophecy'
ēkpe	yēkpe	'bottle'
oyi	woyi	'a vine'
slā	lslā	'word/action'

8.1.16. A type of concord or agreement is shown in Yala in that the nominals:

oha	'some'
onūma	'this one'
olāā	'that one (general)'
olama	'that one (nearer)'
olanū	'that one (further)'
olo	'reported one'
oloma	'reported one (specific)'
ona	'which'

which follow nuclear nominals in the Yala noun phrase are also marked for number. The following examples are illustrative.

MORPHEMES

Oha 'some' will be used throughout in the examples although any of the other nominals listed above can be substituted in every instance. The concurring prefixes are underlined for easy reference.

<u>ə</u> chs gha ¹	'some person'	<u>ə</u> chs gla ¹	'some persons'
<u>ə</u> ja gha ¹	'some thing'	<u>ə</u> ja gla ¹	'some things'
<u>l</u> sch gha ¹	'some stone'	<u>l</u> sch gla ¹	'some stones'
<u>w</u> orō gha ¹	'some ear'	<u>w</u> orō gla ¹	'some ears'
<u>ū</u> kpō gha ¹	'some fruit'	<u>ū</u> kpō gla ¹	'some fruits'

8.1.17. These nominals which are always marked as singular or plural and also function in attributive position are used to indicate the singular or plural nature of Yala nominals which through the course of time have leveled out their singular-plural distinctiveness or in some cases possibly never had such a distinction as in:

uba <u>ə</u> laā ¹	'that drum'	uba glaā ¹	'those drums'
yēkpē <u>ə</u> laā ¹	'that bottle'	yēkpē glaā ¹	'those bottles'
sbe <u>ə</u> laā ¹	'that animal'	sbe glaā ¹	'those animals'
imoto <u>ə</u> laā ¹	'that motor'	imoto glaā ¹	'those motors'

Again, not only əlaā¹, but all of the nominals mentioned above (cf. 8.1.16.) function in this way.

8.2. While the prefix morphemes of Yala are used as noun classifiers and nominal markers, the root morphemes are used to symbolize the basic meaning of the forms. Root morphemes in Yala are either: pre-

MORPHEMES

fixed (cf. 8.2.1.), non-prefixed (cf. 8.2.2.) or other (cf. 8.2.3.).

8.2.1. The prefixed root morphemes of Yala are either simple (cf. 8.2.1.1.), complex (cf. 8.2.1.2.) or reduplicated (cf. 8.2.1.3.).

8.2.1.1. The simple prefixed Yala root morpheme is normally of the CV shape although approximately five percent of the time the simple prefixed Yala root has a longer pattern or a number of CV syllables combined.

8.2.1.1.1. The simple CV prefixed root has no restrictions as to the internal distribution of consonants and vowels. The following examples are representative:

<u>oma</u>	'salt'	y <u>enyi</u>	'water'
a <u>mi</u>	'speaker (I)'	s <u>ta</u>	'three'
e <u>ra</u>	'white'	a <u>mu</u>	'here'
o <u>ku</u>	'big'	a <u>ba</u>	'where'
o <u>laa</u>	'that'	o <u>ha</u>	'some'
a <u>is</u>	'earth/ground'	o <u>cha</u>	'person'
y <u>wu</u>	'goat/sheep'	o <u>le</u>	'reported one'
e <u>je</u>	'beans'	o <u>kpo</u>	'money'

8.2.1.1.2. The longer pattern of a number of CV syllables in a simple prefixed root has no restriction as to the internal distribution of consonants and vowels other than the vowel harmony restriction that:

MORPHEMES

+HIGH and -EXTREME vowels (E and O)
never occur in the same simple root as
the -HIGH and -EXTREME vowels (E and OO).

The following examples are representative:

<u>achālā</u>	'trick'
ahuhu	'wind/storm'
<u>ūbleēnvi</u>	'tongue'
<u>aplimāmā</u>	'spider'
<u>ichakurs</u>	'squirrel'
<u>ichawilā</u>	'yellow fever'
<u>adaamoglagū</u>	'lieutenant chief'
<u>apōchōrō</u>	'swallow (bird)'

8.2.1.2. Approximately ten percent of the prefixed root morphemes in an average text are complex. That is, they are:

1. Nominalizations of regularly non-prefixed forms or sequences of forms.
2. Composed of a combination of basic morphemes.

These complex prefixed roots are composed of CV as well as V syllable patterns. They have no internal distribution restrictions on the collocation of consonants and vowels other than the tendency to regularize toward the vowel harmony constraint that was mentioned above (cf. 8.2.1.1.2.).

MORPHEMES

8.2.1.2.1. The regular nominalizing prefix of Yalá (cf. 8.2.1.2.1.1.) function in relation to five structural types of nominalized complex prefix morphemes (cf. 8.2.1.2.1.2.).

8.2.1.2.1.1. The regular nominalizing prefixes of Yala are:

/o-/	'singular nominalizer'
/e-/	'plural nominalizer'
/i-/	'negative nominalizer'
/i-/	'neutral nominalizer'

8.2.1.2.1.1.1. The following representative examples illustrate Yala complex prefixed morphemes which have been nominalized by the singular nominalizer /o-/ or the plural nominalizer /e-/:

ogwā	'rainy season'
from:	o gwā one-wash
okūemī	'anus'
from:	a kū emī one-squat-feces
olihyo	'judge'
from:	o le ihyo one-possess-judgement
etliihi	'tails'
from:	e ta la ihi ones-push out-from-back/behind

MORPHEMES

olepinyē	'small one'
from:	o le pinyē one-possess-smallness
onēshshi	'good one'
from:	o nī shshi one-that-contrastively good

The /o-/ prefixes in the second and third examples above and the /e-/ prefix in the fourth example above are accounted for by the fact that the nominalizing prefix /o-/ has the variant [o-] and the nominalizing prefix /e-/ has the variant [e-] when the following vowel is +HIGH (i, u, e or o). That is, we can say that:

$$[-\text{EXTREME}] \longrightarrow [+HIGH] / \left[\begin{array}{c} \text{---} \\ \text{Nominalized} \end{array} \right] [\text{Con.}] [+HIGH] \text{ sequences}$$

8.2.1.2.1.1.2. The following representative examples illustrate Yala complex prefix morphemes which have been nominalized by the negative nominalizer /i-/:

i'jadāni	'a masculine name'
from:	i je adā ni negative-know-father-factive (negative)
iwānima	'not coming'
from:	i wā ni mā negative-came-factive-(negative)-exactitive

MORPHEMES

'ikameni'	'unspeakable'				
from:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 15%;">i</td> <td style="text-align: center; width: 25%;">ka</td> <td style="text-align: center; width: 25%;">me</td> <td style="text-align: center; width: 35%;">ni</td> </tr> </table> negative-speak-ability-factive (negative)	i	ka	me	ni
i	ka	me	ni		

8.2.1.2.1.1.3. The following representative examples illustrate Yala complex prefix morphemes which have been nominalized by the neutral nominalizer /i/:

'ikwīihi'	'back'			
from:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 15%;">i</td> <td style="text-align: center; width: 25%;">kū</td> <td style="text-align: center; width: 60%;">ihi</td> </tr> </table> one-squat-behind	i	kū	ihi
i	kū	ihi		
'iyeeche'	'parlor/sitting room'			
from:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 15%;">i</td> <td style="text-align: center; width: 25%;">ya</td> <td style="text-align: center; width: 60%;">yeeche</td> </tr> </table> one-make-outside/open	i	ya	yeeche
i	ya	yeeche		
'Imaji'	'a female name'			
from:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 15%;">i</td> <td style="text-align: center; width: 25%;">ma</td> <td style="text-align: center; width: 60%;">ji</td> </tr> </table> one-born-implicationless/for nothing	i	ma	ji
i	ma	ji		
'itekpa'	'a town name'			
from:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 15%;">i</td> <td style="text-align: center; width: 25%;">ta</td> <td style="text-align: center; width: 60%;">ekpa</td> </tr> </table> one-push out-scabies	i	ta	ekpa
i	ta	ekpa		
'itābō'	'palm (hand)'			
from:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 15%;">i</td> <td style="text-align: center; width: 25%;">tū</td> <td style="text-align: center; width: 60%;">abō</td> </tr> </table> one-enter-hand	i	tū	abō
i	tū	abō		

8.2.1.2.1.1.4. In addition to the normal nominalizing prefixes /o-/, /s-/, /i/ and /i-/ which are productive in the Yala language at this point in history it is clear that most, if not all of the other,

MORPHEMES

prefixes (cf. 8.1.13.) are related to some basic non-prefixed roots as nominalizers (cf. 8.1.) although they do not seem to be creatively used by Yala speakers to produce new nominalized forms today.

8.2.1.2.1.2. The nominalized complex prefix morphemes of Yala fall into five structural types. They are:

1. Verb root nominalization.
2. Verb plus its complement nominalization.
3. *Le* plus its complement nominalization.
4. *N̄i* plus its complement nominalization.
5. Relative phrase nominalization.

Nominalized forms are normally used in either the head or attributive position of a phrase. A nominalized form with the plural prefix /e-/ is never, however, used in attributive position.

8.2.1.2.1.2.1. Basic verbal roots and reduplicated verbal roots are regularly nominalized by prefixing the verbal root in either basic (cf. 8.2.2.1.1.) or reduplicated (cf. 8.2.2.1.3.) form. The prefixed root form signals:

1. 'The one who _____'.
2. The gerundive form of the verb.

The reduplicated form signals the addition of the feature: 'contrast' to the significance of the basic prefixed verbal root. The following

MORPHEMES

examples are illustrative:

<u>oya</u>	'the one who does/doing'	(ya 'do')
<u>oyo^oya</u>	'the doer in contrast to others/ doing in contrast to other actions'	
<u>owa</u>	'the one who comes/coming'	(wa 'come')
<u>owo^owa</u>	'the comer in contrast to others/ coming in contrast to other actions'	
<u>ema</u>	'the ones who mold'	(ma 'mold')
<u>emo^oma</u>	'the molders in contrast to others'	

The relevant nominalized forms are underlined in the following illustrative example utterances:

Aje <u>omoma</u> le ichichi.	'Mud <u>molding</u> is hard.'
<u>Eyo^oya</u> ho ma ne.	' <u>The doers</u> are here.'
<u>Owa</u> la sbe yi u le igbigbo.	' <u>Coming</u> to my place is far.'
N kpo oja yi <u>okpookpo</u> .	'It was <u>only packing</u> of things that I did.'

8.2.1.2.1.2.2. The second type of nominalization is accomplished by nominalizing a verb-complement sequence as in:

<u>ogwola</u>	'sleeper/sleeping thing'
from:	o gbo wola one-lay-sleep

MORPHEMES

ongmōōche	'killer'
from:	o ngmō ōche one-kill-person
enyōjā	'planters'
from:	e nyi ojā ones-bury-thing
ikamēni	'unspeakable'
from:	i ka me ni negative-speak-ability-factive (negative)
etliihi	'tails'
from:	e ta la ihi one-push out-from-back/behind

This type of nominalization is illustrated in the following example utterances with the nominalized words underlined:

Ó ka lēlā <u>ikamēni</u> .	'He spoke/is speaking <u>unspeakable</u> words.'
N hē ebs <u>otliihi</u> .	'I cut/am cutting the animal's <u>tail</u> .'
<u>Enyōjā</u> ya 'uklō gbāa.	'The <u>planters</u> worked hard.'
Ó de ugū <u>ogwōlā</u> ngmō.	'He killed the <u>sleeping</u> fowl.'

8.2.1.2.1.2.3. The third type of nominalization which is the most productive in Yala today is accomplished by prefixing:

ols	'one possessing'
from:	o ls one-possess

MORPHEMES

ele 'ones possessing'
 from: e le
 ones-possess

to both prefixed and non-prefixed roots to form new nominals as in:

elaje	'landowners'	(ele plus aje 'ground')
olepinyē	'small one'	(ole plus pinyē 'smallness')
olihyo	'judge'	(ole plus ihyo 'judgement')
elechacha	'well ones'	(ele plus chacha 'whole')

This type of nominalization is illustrated in the following examples with the nominalized forms underlined:

Ojā <u>olwonye</u> hi um otū.	'I like <u>sweet</u> things.'
Āche <u>olepinyē</u> rē enya.	'The <u>small</u> people ran.'
Ó ma <u>elwodu</u> .	'He saw <u>the rich ones</u> .'
<u>Elechacha</u> glāa eyī.	' <u>The sound ones</u> gathered.'

8.2.1.2.1.2.4. The fourth type of nominalization is accomplished by prefixing:

onīi 'one that'
 from: o nīi
 one-that

 enīi 'ones that'
 from: e nīi
 ones-that

MORPHEMES

to quality/quantity (ipīpē 'new', ēchē 'old', shahi 'good', ichiche 'small' and ōkōkū 'fat') and color (cf. 8.2.1.4.2.) terms as in:

onēchē	'old one'
from:	o nīi ēchē ones-that-old
enōkōkū	'big/respected ones'
from:	e nīi ōkōkū ones-that-fat
onēre	'white one'
from:	o nīi ere one-that-white
enōboōbi	'totally black ones/only the black ones'
from:	e nīi oboōbi ones-that-contrastively black

The quality and color terms may be used in either the head or attributive position. The nominalized examples are underlined in the following illustrative utterances:

Ō le wole <u>onipipē</u> .	'He has a <u>new</u> house.'
<u>Enēshahi</u> wā ichē.	' <u>The good ones</u> came today.'

8.2.1.2.1.2.5. The fifth type of nominalization is accomplished by prefixing a relative phrase which opens with nīi 'that' with the /o-/ singular or /e-/ plural prefix as in:

MORPHEMES

onāalōle	'the one that you possess'
from:	o nīi a lōle one-that-you-contrastive possessing
enīigenāa	'the ones that I should take'
from:	e nīi n ge nāa ones-that-I-should-take

The nominalized relative phrase only functions in the head position of a phrase. The nominalized phrases are underlined in the following illustrative utterances:

Chuchuu, che abō fu um yī onīigenāa ma.

'Please, show me which ones I should take.'

Enāalōle ma le yēmēmē.

'The ones that you have are many.'

8.2.1.2.2. The complex prefix morphemes which are composed of a combination of basic morphemes are illustrated by the following examples:

wolēsche	'satellite town'
from:	wolē yī ysche house-associated-outside
amolōjā	'myself'
from:	ami o le ojā I-one-possess-thing

MORPHEMES

$\bar{E}n\bar{e}y\bar{i}/\bar{s}n\bar{e}y\bar{i}$	'a female name'
from:	$\bar{s}n\bar{e}$ $iy\bar{i}$ madam-what
$ony\bar{a}r\bar{o}$	'ewe'
from:	$ony\bar{a}$ $y\bar{i}$ $yer\bar{o}$ woman-associated-farm
$\bar{a}ch\bar{e}sche$	'human beings'
from:	$\bar{a}che$ $y\bar{i}$ $yeche$ persons-associated-world

8.2.1.3. Theoretically every simple and complex prefixed root morpheme of Yala can be reduplicated.

Since in the case of many semantic parameters the contrastive meanings are not culturally relevant not all prefixed simple or complex morphemes have a manifested reduplicated counterpart. When it is generated by the imaginative speaker in a meaningful context, it is immediately recognized as proper and given the appropriate significance.

8.2.1.3.1. Reduplication, which always involves a total reduplication of the form including the prefix and the root, is of two types.

8.2.1.3.1.1. The first type of reduplication is used to symbolize an exclusive form of the basic meaning. In this first type the length and final vowel quality of the root final vowel elides in medial position. The tone quality, however, is retained (i.e. $ab\bar{a} + ab\bar{a} \longrightarrow ab\bar{a}b\bar{a}$). The following examples are illustrative:

MORPHEMES

<u>abā</u>	'master'	<u>abābā</u>	'only the master'
<u>ɛpa</u>	'two'	<u>ɛpaɛpa</u>	'only two'

8.2.1.3.1.2. The second type of reduplication is used to symbolize a diminutive or distributive form of the basic meaning. In this reduplication the length of the final root vowel is retained in medial position. It is assimilated by the vowel quality of the following prefixed vowel but its tone quality is retained and spread over the resultant double vowel. This phenomenon is demonstrated in:

<u>abā</u>	'master'	<u>abāābā</u>	'apprentice'
<u>ɛpa</u>	'two'	<u>ɛpaɛpa</u>	'each two'

8.2.1.4. The prefixed morphemes of Yala, from a functional (semantic) point of view, in general, symbolize what the: nouns, adjectives, numbers, color words, question words, time words, pronouns, demonstratives and locationals of English symbolize (cf. examples in 8.2.1.1.1.).

8.2.1.4.1. The numbers of Yala have a cardinal (count) (cf. 8.2.1.4.1.1.) and an ordinal form (cf. 8.2.1.4.1.2.) as well as two sets of time forms (cf. 8.2.1.4.1.3.).

8.2.1.4.1.1. The basic independent Yala words for counting (cardinal forms) are:

'ohe	'one'
------	-------

MORPHEMES

spa	'two'
sta'	'three'
ene	'four'
erwō	'five'
igwo'	'ten'
ohu	'twenty'

The count forms from six to nine are built on erwō 'five'. They are:

erīyī	'six'	(five associated with face/front)
arāapa	'seven'	(five associated with two)
arāata'	'eight'	(five associated with three)
arāane	'nine'	(five associated with four)

The word unō 'four hundred' is also a basic cardinal number today but is probably a late innovation in the system since until today the word ohu 'twenty' has the secondary meaning of completeness (cf. 8.2.1.4.1.3.). The Igbo word nny stands for 'four hundred'.

The twelve basic forms, thus far mentioned, are used to form all the other cardinal numbers by being combined in the following ways. Combining is always from right to left.

- A. Forms in direct sequence signal that the right-most form is multiplied by the left partner as in:

MORPHEMES

ohu spa	(20x2)	'forty'
'uno igwo'	(400x10)	'four thousand'

When there are three forms in direct sequence the right-most two are multiplied first and their product then is multiplied by the left-most partner as in:

'uno ohu spa		'sixteen thousand'
400 20 x 2		
400 x 40		
16,000		

B. Forms joined by la 'on' or che 'ride on' signal that the forms on either side of the la or che are to be added to each other.

1. The la 'on' is only used for constructing the forms from igwo 'ten' to ohu 'twenty' which are:

igwolohe	'eleven'
igwolepa	'twelve'
igwolsta	'thirteen'
igwolene	'fourteen'
igwolerwō/igwoerwō	'fifteen'
igwolerīiyī/igwoerīiyī	'sixteen'
igwolarāapa/igwoarāapa	'seventeen'
igwolarāata/igwoarāata	'eighteen'
igwolarāans/igwoarāans	'nineteen'

MORPHEMES

1. The che 'ride on' is only used for constructing forms above ohu 'twenty' as in:

ohu-chspa 'twenty-two'

20 - 2

ohu-chigwolepa 'thirty-two'

20 - 12

ohu spa-chspa 'forty-two'

20 x 2 - 2

ohu spa-chigwolepa 'fifty-two'

20 x 2 - 12

'uno spa-chohu spa-chigwolepa (852)

400 x 2 - 20 x 2 - 12

'eight hundred fifty-two'

'uno ohu igwoarāans-chohu igwoarāans-chigwoarāans

400 x 20 x 19 - 20 x 19 - 19 (152,399)

'one hundred fifty-two thousand three hundred ninety-nine'

Normally ohu ohu and uno uno are ruled out by the system and so the final example above is the highest possible number that Yala allows.

When Yala speakers attempt to translate Yala numbers into the English system older Yala speakers normally identify ohu 'twenty' with the English one hundred and younger speakers normally identify uno

MORPHEMES

'four hundred' with the English one hundred. The result is utter confusion and in practical situations either the English system or the Yala system is used throughout. Translation is only attempted as a last resort in a situation where it is impossible to find someone that you can trust who knows the other system.

The cardinal numbers described above are also used in attributive position after nominals as in:

ihī epa	'two yams'
āche ene	'four persons'

In the case of ¹one 'one' the attributive form is ¹ūkpōhe 'single' as in:

ihī ¹ ūkpōhe	'a single/one yam'
āche ¹ ūkpōhe	'a single/one person'

8.2.1.4.1.2. The Yala ordinal numbers are formed by placing ¹ome 'one finish' before the normal cardinal forms as in:

¹ omohe	'first one'
omēpa	'second one'
omigwo ¹	'tenth one'

The ordinals may also be used in the attributive position as in:

āche ¹ omohe	'the first person'
āche omohu	'the twentieth person'

MORPHEME

8.2.1.4.1.3. The 'time' numbers of Yala are formed by placing *ugbo* - *igbo* or *owe* 'one exist' before the normal cardinal forms as in:

<i>ugbohe</i>	'once/one time'
<i>owohe</i>	'once/one time'
<i>igbeta</i>	'thrice/three times'
<i>oweta</i>	'thrice/three times'
<i>igbigwo</i>	'ten times'
<i>owigwo</i>	'ten times'

The *owe* forms above are pronounced *uwe* by some younger speakers of the central Yala dialect.

It is also interesting to note that *igbohu*, which we would expect to mean 'twenty times' normally means 'every time' as in:

N ē wā la uklo igbohu.

'I came to work every time.'

In order to get the unambiguous meaning 'twenty times' the Yala speaker will say:

N ē wā la uklo owohu.

'I came to work twenty times.'

8.2.1.4.2. The basic color words of Yala are three in number.

They are:

ere 'whiteness'

MORPHEMES

obi	'whiteness'
owa	'redness'

In their basic form the color words of Yala function as nuclear nominals and as predicate complements. The following examples are illustrative:

Obi i hō ni.	'Blackness is not here.'
Owa hi um otū a ne.	'It is redness that pleases me.'
Ō le ere gbaa.	'She is very white.'

The reduplicated forms of the basic color words are: *ersere*, *obōbi* and *owōwa*. They function only in predicate complement position and signal an exclusivized or contrastive form of the basic meaning as in:

Yanō le owōwa.	'Oil in contrast is red.'
Wokpa yi u le sresere.	'My shoes in contrast are white.'

The more normal nominal forms of the color words are:

onere	'white one'
onobi	'black one'
onowa	'red one'

These forms are used in nuclear and attributive position in the noun phrase. The following examples are illustrative:

Onobi hi wahi.	'The black one is good.'
----------------	--------------------------

MORPHEMES

Wokpa¹ onēre¹ hi wahi. 'White shoes are good.'

The reduplicated forms of the normal nominal color words are: onērsēre¹, onōboōbi¹ and onōwōwā¹. They function in nuclear and attributive position in the noun phrase, and as is so often the case with reduplicated forms, signal a contrastive or exclusivized form of the basic meaning. The following examples are illustrative:

Ode mā¹ wonya onōboōbi¹. 'Ode in contrast saw only the black horse.'

Onērsēre¹ hi wahi. 'The white one is best.'

In addition to the three basic color words Yala may further specify part of the ōwā¹ 'red' color spectrum as: igigo 'brown' or nyoo 'bright red'. It may also further specify part of the obi¹ 'black' color spectrum as idīgboīdīgbo¹ 'green/blue'. Some younger speakers also further specify part of the idīgboīdīgbo¹ 'green/blue' color spectrum as bluūbluū 'blue'.

The word igigo is associated with a reduplicated form of the Yala word ligo 'brownish, chalky body rub'. The basic meaning of nyoo is 'ripe' as of fruit. The word idīgboīdīgbo¹ is the reduplicated form of the Yala word idīgbo¹ 'unripe' as of fruit. The word bluūbluū is the reduplicated form of the borrowed English word 'blue'.

Each of these words is used as a predicate complement in its basic form and in the nuclear or attributive position of a noun phrase when it is compounded with ois 'one possessing'. The following examples

MORPHEMES

are illustrative:

Ó le igigo.	'It is brown.'
N ma' aru' olenyee.	'I saw a bright red shirt.'
Olidigbo'idigbo' n̄i n le' a ne.	'It is a green one that I have.'

8.2.1.4.3. In this section we are basically concerned with prefixed question words. For the sake of a complete presentation we will also mention a number of other question forms or constructions.

8.2.1.4.3.1. The six basic Yala prefixed question words are:

aba'	'where'
iyi'	'what'
oji'	'what thing'
̄nye	'who'
ona'	'what'
emlaa'	'how much/many'

The first four: aba', iyi', oji' and ̄nye function in the head position of a nominal phrase as in:

Ode ma' ̄nye.	'Ode saw whom?'
A ya' oji'.	'You have done what?'
Ok̄o le aba'.	'Ok̄o is where?'

Each of these forms can also function in initial or emphatic position in utterances like:

MORPHEMES

Onye nīi Ode ma ma.	'Whom did Ode see?'
Iyi nīi a ya ma.	'What did you do?'
Aba nīi Oko ls ma.	'Where is Oko?'

The final two examples *ona* and *emlaa* function either in the head position of a nominal phrase or in the attributive position after a nominal head. The following examples are illustrative:

Emlaa ne.	'How much/many is it?'
Oko de okpo emlaa.	'How much money did Oko give?'
Yeglaa ona nīi e wa anne.	'When did they come?'

Ona 'which' and *onye* 'who' are also marked for the singular-plural contrast as in:

Anye ne.	'Who (plural) is it?'
Ache ena wa me.	'Which persons have come?'

8.2.1.4.3.2. The question words *ichina* 'which day' which etymologically comes from *ochi* 'day' plus *ona* 'which' and *kana* 'how' which etymologically comes from *ka* 'say' and *ona* 'which' function only in the head position of a nominal phrase as in:

Ichina ne.	'Which day?'
A ya kana.	'How are you doing?'

8.2.1.4.3.3. The question words *bee* 'what about' and *ko* 'what about specific' which may also be classified as utterance closing mor-

MORPHEMES

phemes are used as follows:

Okpo bēs.	'What about the money?'
Ode kōō.	'What about Ode in particular?'

8.2.1.4.3.4. The question concept 'why' is signaled in Yala by the sequence wuchē oji ne 'it is because of what' as in:

Wuchē oji ne a rē enya.	'Why did you run?'
-------------------------	--------------------

8.2.1.4.4. The basic prefixed time words of Yala which are marked with an /i/ prefix are listed in section 8.1.10. In addition to these forms Yala has the following seven prefixed time words:

obū	'before'
uuma	'a short time ago'
umaama	'now'
leohe	'two years ago'
leelanū	'last year'
leēnē	'this year'
lesha	'next year'

The Yala time words are underlined in the following representative Yala example utterances:

Ode wā <u>icha</u> .	'Ode came <u>today</u> .'
N wā <u>iklōō</u> la <u>ikoobahe</u> .	'I came <u>two days ago</u> on Sunday.'
N ge ē wā <u>ichina</u> .	'I will come <u>later</u> .'

MORPHEMES

N wā <u>umaama</u> .	'I will come <u>right now</u> .'
N ge' ē cha <u>obū</u> .	'I will return <u>before that</u> .'
'Edla' hō amu <u>lānē</u> .	'Edla was here <u>this year</u> .'
'Edla' ge' ē cha <u>lāsha</u> .	'Edla will return <u>next year</u> .'

The Yala time words can also be emphasized by being put in utterance initial position as in:

<u>Ichē</u> , Ode wā.	' <u>Today</u> , Ode came.'
<u>Ikloo</u> , a i wā ni.	' <u>Last time</u> , you didn't come.'
<u>Lānē</u> , irechi ge' ē hi wōhi.	' <u>This year</u> the rice will be good.'

8.2.1.4.5. The prefixed Yala independent pronouns are in three sets.

8.2.1.4.5.1. In addition to signaling three persons singular and plural the long set of direct speech Yala pronouns signals contrastive or emphatic meaning as over against the short set of direct speech Yala pronouns (cf. 8.2.3.1.). The long set of Yala direct speech prefixed pronouns which can be used in all pronominal positions are:

ami	'speaker'
awo	'hearer'
' anu	'topic'
alo	'speaker and others'
' ala	'hearers'

MORPHEMES

'
aa 'topics'

The long Yala pronouns together with their translation are underlined in the following illustrative examples:

Ami ya a ne. 'It is I in contrast to others that did it.'
 0 ma anu. 'He saw the one previously referred to and not someone else.'

8.2.1.4.5.2. The second set of Yala prefixed pronouns signal reported speech as well as the three persons singular and plural. They are:

POSITIONS

<u>SUBJECT</u>	<u>NON-SUBJECT</u>	
' amolo	' amolo	'speaker'
' aolo	' aolo	'hearer'
' anolo	' anu	'topic'
' aele	' aele	'speaker and others'
'' alaolo	' ala	'hearers'
' aale	' aa	'topics'

The reported speech pronouns together with their translation are underlined in the following illustrative examples:

A ka amolo ge gāla aolo.
 'You said that I should look for you.'

MORPHEMES

Ó ka okpo yí aéle 'ólo pyāabi.

'He said that our money is lost.'

8.2.1.4.5.3. The third or intensive set of Yala prefixed pronouns signals three persons singular and plural. They are:

amolojá	'speaker himself'
awolojá	'hearer himself'
anolojá	'topic himself'
aloelejá	'speaker and others themselves'
alaelejá	'hearers themselves'
aaelejá	'topics themselves'

The intensive pronouns of Yala are underlined together with their translations in the following example Yala utterances:

Amolojá ya 'a ne. 'I did/am doing (it) myself.'

Ó ya 'ukló la abó yí anolojá. 'He worked/is working by himself.'

8.2.1.4.6. The Yala language has the following seven demonstratives:

olaá	'that one (general)'
olamá	'that one (nearer)'
olamáá	'that one (a bit further)'
olanú	'that one (far)'
olanúú	'that one (farthest)'

MORPHEMES

'olo	'reported one'
'oloma	'reported one (specific)'

The Yala demonstratives function in either head or attributive phrase position as in the following examples:

N ma' ugū 'oloma.	'I saw <u>that</u> fowl <u>that they are talking about.</u> '
'olaā hi wchi.	' <u>That one</u> is good.'

The 'olaā 'that' group of demonstratives offers the Yala speaker a five-way semantic distinction. That is, he can cover the whole field generally with 'olaā 'that' or signal a four-way contrastive distance distinction from the speaker's point of view with the forms: olamā, olamāā, olanū and olanūū (cf. 8.2.1.4.7.3.) as in:

Nāa ihī 'olaā.	'Take <u>that</u> yam.'
Nāa ihī 'olamā.	'Take <u>that nearer</u> yam.'
Nāa ihī 'olamāā.	'Take that yam <u>a bit further from here.</u> '
Nāa ihī 'olanū.	'Take <u>that yam far from here.</u> '
Nāa ihī 'olanūū.	'Take <u>that yam very far from here.</u> '

8.2.1.4.7. There are two sets of basic locationals in Yala. One set is made up of four forms which feature the general-specific dimension in location. The second set of three forms features the near-far dimension in location. The sets are used separately and also together to provide the Yala speaker with a much finer semantic grid than is a-

MORPHEMES

available without circumlocutions in English.

8.2.1.4.7.1. We begin with the general-specific set. Although ma¹ 'specific here' is not a prefixed root it is included here for completeness. The four basic locationals of this set are:

amu	'here'
ma ¹	'specific here'
aboo ¹	'there'
aa ¹	'specific there'

The specific locationals - ma¹ and aa¹ - are used to show location in either:

1. Present time over against non-present time.
2. Seen situations over against non-seen situations.
3. Exact placement over against non-exact placement.

This set of basic locationals together with their translation is underlined in the following illustrative examples:

Okpo hō <u>amu</u> .	'The money is/was <u>here</u> .'
Okpo hō <u>ma</u> ¹ .	'The money is <u>right here now</u> .'
Okpo hō <u>aboo</u> ¹ .	'The money is/was <u>there</u> .'
Okpo hō <u>aa</u> ¹ .	'The money is <u>there (I know the exact place)</u> .'

8.2.1.4.7.2. The second set of basic locationals features the near-far semantic axis and has the following members:

MORPHEMES

' uma	'here near'
' amā	'there not far'
' anū	'there far'

This second set of basic locationals together with their translations are underlined in the following illustrative examples:

' <u>Uma</u> nīi n hō ' a ns.	'It is <u>near here</u> that I live.'
' <u>Amā</u> nīi o hō ' a ns.	'It is <u>not far from here</u> that he lives.'
' <u>Anū</u> nīi e hō ' a ns.	'It is <u>far from here</u> that they live.'

8.2.4.7.3. In a comparative situation the final vowel of amā and anū may be lengthened to signal more distance and in that way the following four-way comparative contrast is achieved. Again the locationals and their translations are underlined for easy comparison.

Oyi hō <u>amā</u> .	'The child lives <u>not far from here</u> .'
Onyā hō <u>amaā</u> .	'The woman lives <u>a bit far from here</u> .'
Ochwōle hō <u>anū</u> .	'The king lives <u>far from here</u> .'
Ōchoga hō <u>anuū</u> .	'The stranger lives <u>very far from here</u> .'

8.2.1.4.7.4. The general-specific and the near-far sets of locationals may be used together to signal ten additional nuances of meaning. That is, uma may be used after amu or ma and amā, amaā, anū and anuū may be used after either aboo or aa. The following examples are illustrative:

MORPHEMES

ò hō <u>amu</u> .	'It is/was <u>here</u> .'
ò hō <u>ma uma</u> .	'It is <u>near here</u> .'
ò hō <u>aboo amā</u> .	'It is/was <u>not too far from here</u> .'
ò hō aa <u>anuū</u> .	'It is <u>there at a specific location very far from here</u> .'

8.2.1.4.7.5. The Yala locational forms: uma, amā, anuū, amu and aboo may be reduplicated to signal contrastive or exclusivized meaning as in:

ò ma sbs <u>abanū</u> .	'He <u>only</u> saw the animal from <u>far away</u> .'
ò hō <u>amamu</u> .	'He stays <u>here and no other place</u> .'
Okō ya 'uklō <u>ababoo</u> anuū.	'Okō <u>only</u> worked (at a place that is) <u>very far away</u> .'

8.2.1.4.8. Before closing this section on prefixed roots we must mention the very frequently used Yala prefixed adverbs:

òkòkū	'too much'
opòopē	'at once/immediately'

They are unique in that they do not function in the nominal phrase where we would expect them but rather find their place in the predicate complement position.

The usage of these two prefixed adverbs is demonstrated in the following representative Yala example utterances. They are underlined together with their English translations for easy reference.

MORPHEMES

Ó ys eys gblugblu ókókū.

'He walked/is walking too recklessly.'

Ó ls pinyē ókókū.

'He is too small.'

Ó ya uklo ókókū.

'He worked/is working too much.'

Ó re ókókū.

'He ate/is eating too much.'

Ó ta hō la ajs beeke opōopē.

'He immediately sat on the ground lightly.'

Ó nyā blē opōopē.

'He turned aside at once.'

Ó re opōopē.

'He ate immediately.'

8.2.1.5. From the eliding boundary point of view (cf. 9.) the prefixed morphemes (nominals) of Yala are divided into two classes. That is, those with:

1. Assimilating prefix tone.
2. Non-assimilating prefix tone.

The nominals with non-assimilating prefix tone are the:

MORPHEMES

1. Independent pronouns (cf. 8.2.1.4.5.).
2. Demonstrative (cf. 8.2.1.4.6.).
3. Locationals (cf. 8.2.1.4.7.).
4. Adverbs (cf. 8.2.1.4.8.).
5. Utterance closing morphemes (cf. 8.2.3.4.1.).

All other nominals have assimilating prefix tones.

8.2.2. The non-prefixed root morphemes of Yala are: verbal (cf. 8.2.2.1.), auxiliary (cf. 8.2.2.2.), adverbial (cf. 8.2.2.3.), adjectival (cf. 8.2.2.4.), conjunctive (cf. 8.2.2.5.), descriptive (cf. 8.2.2.6.) or ideophonic (cf. 8.2.2.6.3.).

8.2.2.1. The verbal roots are either simple (cf. 8.2.2.1.1.) or complex (cf. 8.2.2.1.2.).

8.2.2.1.1. The simple Yala verbal roots which are approximately one hundred fifty in number are either basic (cf. 8.2.2.1.1.1.) or modified (cf. 8.2.2.1.1.2.).

8.2.2.1.1.1. The basic simple Yala verbal roots are composed of a consonant followed by a vowel with no internal restrictions as to the distribution of consonants, vowels and tone. There are no tonal glides on basic verbal roots and lateralized and palatalized consonants do not function in basic simple Yala verbal roots. There are approximately one hundred basic simple Yala verbal roots. The following examples are representative:

MORPHEMES

cha	'to return'	la'	'to seek'
de	'to give'	ma'	'to see'
ga	'to pass'	nū	'to be swollen'
go'	'to sew'	ngū	'to teach/learn'
gū	'to close'	pe'	'to flow'
he	'to cook'	ra'	'to buy'
kpo'	'to pack'	ya'	'to do/make'

8.2.2.1.1.2. The modified simple Yala verbal roots are approximately fifty in number and are composed of a lateralized or palatalized consonant followed by a vowel. In ninety-four percent of the modified simple Yala verbal roots the vowel is /a/. The vowel /e/ appears in *fye'* 'to sweep', *pys* 'to pick up' and *mls* 'to swallow'. Two-thirds of the modified simple Yala verbal roots carry tonal glides. The modified simple verbal roots differ from the basic simple Yala verbal roots in that they do not participate in the phenomenon of eliding boundaries (cf. 9.7.1.). The modified simple Yala verbal roots are illustrated by the following examples:

byāa	'to spoil'	dlā'	'to hit'
chya	'to break'	glā'	'to deceive'
dya	'to weaken'	gblāa	'to repair'
hya'	'to tear'	hlā'	'to desire'
jyāa	'to bend'	hlāa	'to help bring down'

MORPHEMES

pyāa	'to leave/move'	klā'	'to cover'
wyāa	'to stir'	mlē	'to swallow'

8.2.2.1.2. Complex Yala verbal roots are longer forms made up of a series of CV syllables. There are no internal restrictions on the distribution of vowels, consonants or tone in the complex verbal root. Complex verbal root syllables regularly carry tonal glides and are not affected by any vowel harmony constraints. They do not participate in the phenomenon of eliding boundaries (cf. 9.7.1.). Approximately one hundred twenty-five complex Yala verbal roots have been recorded. Most, if not all, complex verbal roots are compounds whose etymological history is known but a few defy even the most thorough-going analysis.

The following examples of complex verbal roots are illustrative:

darōlshu'	'to be thick-headed'	joōkū'	'to know'
dlēegba	'to cry'	kōleyī	'to hurry'
gwāajīrikū	'to lament'	kuchē'	'to come back'
heeyīwōnō	'to be sad'	myāanya	'to be scattered'
hsku'	'to faint'	ngmōtuchē'	'to be mixed together'
hōkō	'to be different'	pyāanyi'	'to quench'

8.2.2.1.3. While the simple verbal roots of Yala can be reduplicated the complex verbal roots are not reduplicatable. When verbal roots are reduplicated they signal contrastive or exclusivized meaning. The reduplicated roots are underlined in the following examples:

MORPHEMES

Okō ma Ode.	'Okō saw/is seeing Ode.'
Okō <u>mōōma</u> .	'He saw/is seeing, in contrast to all other actions.'
Okō ma Ode yī <u>omōōma</u> .	'Okō saw/is seeing Ode, in contrast to all other actions.'
Ó gwā.	'It is long.'
Ó <u>gwōgwā</u> .	'It was long/It is/was long in contrast to anything else.'
Ōyī nūma <u>gōgu</u> .	'This child crept/is creeping, in contrast to other actions.'

Yala verbal roots are reduplicated as follows:

ma	'to see'	mōōma
he	'to cut'	hōōhe
ngmo	'to kill'	ngmōōngmo
bī	'to hold'	bōōbī
kō	'to dash'	kōōkō
he	'to cook'	hōōhe
nu	'to fight'	nōōnu

We can say then that the Yala verbal root is reduplicated by prefixing the initial consonant plus the vowel /o/ to the root. The /o/ has the variant [o] when the following vowel is +HIGH (i, u, e or o). That is, we can formulaically say that:

$$[-\text{EXTREME}] \longrightarrow [+HIGH] / [\text{---}] [\text{cons}] [+HIGH]$$

reduplicated verbal root

MORPHEMES

The tone on the vowel of the reduplicating prefix is governed by the following rule. If the root tone is:

1. High ('), the reduplicated vowel will carry a high-mid (' -) tonal glide.
2. Mid (-) or low () the reduplicated vowel will carry a mid (-) tone.

In order to get at the underlying features of the Yala tonal system we can say that:

- | | |
|--|-------------|
| A. High tone (') is: | HIGH |
| B. Mid tone (-) and low tone () are: | NON-HIGH |
| C. High tone (') and low tone () are: | EXTREME |
| D. Mid tone (-) is: | NON-EXTREME |

or charted for easy overview that:

	HIGH	EXTREME
High tone (')	+	+
Mid tone (-)	-	-
Low tone ()	-	+

From this point of view we can say formulaically that the tone placement on the verb root reduplication is:

$$[\text{Tone}] \longrightarrow \left\{ \begin{array}{l} [+HIGH] \quad [-EXTREME] \\ \quad \quad \quad [-EXTREME] \end{array} \right\} / \left[\text{---} \right] [\text{con}] \left\{ \begin{array}{l} [+HIGH] \\ [-HIGH] \end{array} \right\}$$

reduplicated verb root

MORPHEMES

8.2.2.1.4. The verbal roots of Yala can also be classified as: transitive (cf. 8.2.2.1.4.1.), intransitive (cf. 8.2.2.1.4.2.) or movement roots (cf. 8.2.2.1.4.3.).

8.2.2.1.4.1. Approximately seventy-five percent of all Yala verbal roots are transitive. That is, the verbal roots are preceded and followed by a named participant.

8.2.2.1.4.1.1. Approximately two-thirds of these transitive roots are of the action-goal type. That is, the participant in the nominal phrase preceding the verbal root is always the actor and the participant in the nominal phrase following the verbal root is always the goal. The following action-goal transitive verbal roots of Yala are illustrative:

ba	'to beg'	mu	'to fill'
dē	'to fetch'	na	'to wash'
gwa ¹	'to drink'	nu	'to fight'
ji	'to join'	nyi	'to bury'
ku ¹	'to catch'	po ¹	'to hear'
lā	'to hit'	rā	'to chew'
ma	'to mold'	ta ¹	'to write'

The action-goal type of transitive Yala verbal roots is illustrated in the following example utterances:

Ode gwa¹ smwō. 'Ode drank/is drinking wine.'

MORPHEMES

Okō ma wol's. 'Okō molded/is molding a house.'
 'Ádā ma 'alo. 'Father saw/is seeing us.'

8.2.2.1.4.1.2. Approximately twenty-four percent of the Yala transitive verbal roots are of the reflexive type. That is, while they function like the action-goal verbal roots described in section 8.2.2.1.4.1.1. above they also may place the goal before the verbal root and follow the verbal root with the reflexive phrase: la abō ī nū 'by it-self/himself'. The following transitive verbal roots are of the reflexive type:

bu	'to dig'	jē	'to dance'
gla	'to take out'	ma	'to see'
he	'to cut completely'	nā	'to straighten'
hi	'to farm'	tu	'to move'
he	'to cook'	wī	'to loosen'

The transitive reflexive Yala verbal roots are illustrated in the following examples:

'Édla he 'ochi. 'Édla felled/is felling a tree.'
 'Ochi fu la abō ī nū. 'A tree fell by itself.'
 'Ó wī orī. 'He loosed/is loosening a rope.'
 'Orī wī la abō ī nū. 'The rope loosened itself.'

8.2.2.1.4.1.3. Approximately ten percent of the Yala transitive verbal roots are of the passive type. That is, they have all the ver-

MORPHEMES

sativity of the reflexive verbal roots described in section 8.2.2.1.4. 1.2. above plus the fact that the la phrase after the verbal root may be changed from reflexive to passive by switching from \bar{i} 'close association' to $y\bar{i}$ 'distant association' as in:

- \acute{O} gū opu. 'He closed/is closing the door.'
 ɔpu gū la abō \bar{i} nū. 'The door closed/is closing itself.'
 ɔpu gū la abō $y\bar{i}$ nū. 'The door was/is being closed by him.'

These transitive passive Yala verbal roots which can only be used with a stated actor as well as a stated goal can also specify the actor as in:

- ɔpu gū la abō $y\bar{i}$ Ode.
 'The door was/is being closed by Ode.'
 ɔpu gū la abō $y\bar{i}$ onyā.
 'The door was/is being closed by a woman.'
 ɔpu gū la abō $y\bar{i}$ yoō.
 'The door was/is being closed by a dog.'

The following verbal roots illustrate the transitive passive type:

$b\bar{i}$	'to hold'	$ny\bar{i}$	'to quench'
$hw\bar{o}$	'to break off'	pu	'to bend'
mu	'to spray'	ta	'to shoot'

8.2.2.1.4.1.4. There are a few Yala verbal roots that, in addi-

MORPHEMES

tion to having the versatility of the transitive passive type (cf. 8.2.2.1.4.1.3.), are accompanied by a homophonous form that is intransitive (i.e. preceded by a named participant but not followed by one) and stative. More is said about their stative usage in section 8.2.2.1.4.2.2.. Representative examples of this type are:

<u>EXAMPLE</u>	<u>TRANSITIVE</u>	<u>STATIVE</u>
byāa	'to spoil'	'to be spoiled'
bla	'to remind'	'to be reminded'
chya	'to break'	'to be broken'
ngmo	'to kill'	'to be killed/dry'
re	'to eat'	'to be eaten/worn out'
ta	'to push out'	'to be pushed out'
tu	'to move'	'to be moved'
tū	'to enter'	'to be inside'
ya	'to do'	'to be done'

The usage of these roots in both their transitive and stative forms is illustrated in the following utterances:

Agī byāa Wōnā. (Transitive)

'Agi spoiled/is spoiling Wona.'

Wōnā byāa la abō ī nū. (Transitive - Reflexive)

'Wona spoiled/is spoiling himself.'

MORPHEMES

Wónā byāa la abō yī Agī. (Transitive - Passive)

'Wona is/was spoiled by/with Agi.'

Wónā byāa. (Stative)

'Wona is spoiled.'

8.2.2.1.4.1.5. A few Yala transitive verbs in certain situations seem to be neutral. That is, these verbal roots have a participant in the phrase before them and another participant in the phrase after them but the position of these participants can be switched to show which is most important in the conversational environment. Most of these have to do with the semantic domain of 'sickness'. The following examples are illustrative:

Ó kú iyē.	'He is sick (He caught body).'
Iyē kú ó.	'His body caught him (He is sick).'
Ó wyā smwō.	'He is drunk (He is merry with wine).'
Smwō wyā ó.	'Wine made him merry (He is drunk).'
Ode kū ipluu.	'Ode has a boil (Ode squatted on boil).'
Ipluu kū Ode.	'A boil squatted on Ode (Ode has a boil).'

Normally the utterances with iyē 'body', smwō 'wine' and ipluu 'boil' in first position are responses to the question: Ojī ya ó ma. 'What happened?' and the other three utterances in which the three nominals mentioned above follow the verbal root are used as declarative statements.

MORPHEMES

8.2.2.1.4.1.6. Many transitive roots have a general area of meaning which is made specific by the nominal participant that follows it in object position. In a sense we might say that the verbal root and the nominal object work together in signaling the verbal meaning. The following utterances show some of the combinations that are available with the verbal root *ta* 'to push out':

Ó ta are kla ami. he-push out-saliva-cover-me	'He spit/is spitting on me.'
Ugū ē ta aji. fowl-continuous-push out-egg	'Fowls always lay eggs.'
Ó ta iru. he-push out-deep sound	'He murmured/is murmuring.'
Ode ta oko ī u. Ode-push out-voice-associated-me	'Ode refused/is refusing me.'
N i ta okoo ni. I-negative-push out-mouth-not	'I did not intervene/am not intervening.'
Okō ta ona. Oko-push out-shout	'Oko shouted/is shouting.'
Agbo ta ipū. Agbo-push out-paper	'Agbo wrote/is writing.'
Ē ta olcobahe. they-push out-fire of Abasi	'They shoot/are shooting.'
N ta lipu. I-push out-insides	'I purged/am purging.'

MORPHEMES

Ó ta ahu. 'He argued/is arguing.'
 he-push out-point

8.2.2.1.4.1.7. Another group of Yala transitive verbal roots have a nominal participant in object position which is basically a nominalized form of the verbal root. The following are examples of the verbal root and its nominalized partner:

<u>VERBAL ROOT</u>	<u>NOMINALIZATION</u>
cha' 'to abuse'	scha' 'abuse'
chā 'to tell (folktale)'	wōchā 'folktale'
hs 'to laugh'	she 'laughter'
jē 'to dance'	eje 'a dance'
kā 'to tell (news)'	wōkā 'news/gossip'
kō 'to cough'	wōkō 'a cough'
nu 'to fight'	unu 'a fight'

The verbal root and the following nominalized partner might almost be considered together as a crystallized verbal form except for the fact that the verbal and nominal portion can be separated when the nominal is given first position in an exclusivizing utterance. These closely related verbal root-nominalization partners are underlined in the following illustrative utterances:

Āgū bala Ōchwōle <u>nu unu.</u>	'Agu and Ōchwōle fought/are fighting.'
<u>Unu</u> nīi é <u>nu</u> a ne.	'It is fight and nothing else that they fought/are fighting.'

MORPHEMES

Ode he she t̄aa Ok̄o. 'Ode laughed/is laughing at Oko.'

She n̄ii Ode he t̄aa Ok̄o a ne. 'It is laughter and nothing else that Ode laughed/is laughing at Oko.'

8.2.2.1.4.1.8. A few Yala transitive verbal roots have two forms. The basic form signifies a momentaneous view of the action or state and the longer form shows a movement toward or a continuation of the basic action or state. The following forms have been catalogued to date:

MOMENTANEOUS

CONTINUING

h̄o	'sit'	hyāh̄o	'move into a sitting state'
k̄u	'squat'	pyēk̄u	'move into squatting state'
ma	'see'	myēma	'moving into a seeing state'
re	'stand'	yare	'move into a standing state'
ye	'walk'	yeyē	'move into a walking state'

Historically, the continuing or long form of the first and third examples (h̄o and ma) above look like a crystallized form of the momentaneous or short form followed by a y initial nominalization of the momentaneous or short form with the vowel quality of the momentaneous verbal root eided. The fourth and fifth examples (re and ye) are probably examples of the same process with a further consonant assimilation of the consonant of the verbal root (cf. 9.8.1.2.). The continuing or long form of the second example may have a different etymological history. It probably is a collapsed form of pyāa 'leave/move' plus yēk̄u 'squatting' although it is just possible that it actually is a col-

MORPHEMES

lapsed form of $k\bar{u} y\bar{e}k\bar{u}$ which reduces to $kwyeku$ which in turn is further reduced by preserving the voiceless feature of k and the roundness (labialization) of w to become $py\bar{e}k\bar{u}$. One other example with a different formal structure but with a similar semantic contrast is: cha 'to return' and $kuch\bar{e}$ 'to move toward a returning state'. The 'movement toward a state' verbal roots are underlined in the following illustrative utterances:

<u>Hyāhō</u> ge.	'Sit down now.'
Ó hō amu.	'He sat/is sitting here.'
Ó <u>hyāhō</u> .	'He sat/is sitting down.'
N mā sbe.	'I saw/am seeing the animal.'
Ó i ē <u>myema</u> ni.	'He doesn't do the action of seeing (He is blind).'

8.2.2.1.4.2. Approximately twenty-five percent of all Yala verbal roots are intransitive. That is, the verbal root is preceded but not followed by a named participant. Intransitive verbal roots are classified as:

1. Active.
2. Stative.

8.2.2.1.4.2.1. Approximately half of the intransitive roots are active. That is, they are preceded by an obligatory actor-participant in the subject phrase. Some active intransitive roots may be followed by the reflexive $la ab\bar{o} \bar{i} n\bar{u}$ 'by itself/himself' but no active in-

MORPHEMES

transitive root is ever followed by the passive *la abō yī nū* 'with/by him'. The active intransitive verbal roots are underlined in the following illustrative utterances:

' <i>Ágī</i> <u><i>hwa</i></u> <i>kp̄s̄s̄</i> <i>ji</i> .	'Agi boasted/is boasting very much.'
<i>Okō</i> <u><i>pō</i></u> <i>m̄e</i> .	'Okō has understood.'
' <i>Ó</i> <u><i>jī</i></u> <i>kp̄s̄s̄</i> <i>ji</i> .	'He stayed/is staying very long.'
' <i>Ó</i> <u><i>jōjī</i></u> .	'He stayed/is staying in contrast to other actions.'

The following verbal roots illustrate the active intransitive types:

<i>hwa</i>	'to boast'	<i>pla</i>	'to hang down'
<i>gu</i>	'to creep'	<i>pi</i>	'to crawl'
<i>jī</i>	'to stay long'	<i>pe</i>	'to flow'

8.2.2.1.4.2.2. Approximately half of the intransitive roots are stative. That is, they are preceded by an obligatory goal-participant in the subject phrase. The intransitive stative roots are underlined in the following illustrative utterances:

' <i>Adā</i> <u><i>wi</i></u> .	'Father is alive.'
' <i>Adā</i> <u><i>wōwi</i></u> .	'Father is alive/Father is or was alive in contrast to other conditions.'
' <i>Ǿpa</i> <u><i>chā</i></u> .	'The cloth is faded.'
' <i>Ǿpa</i> <u><i>chōchā</i></u> .	'The cloth is faded/The cloth is or was faded in contrast to other conditions.'
' <i>Ochi</i> <u><i>gwā</i></u> .	'The stick is long.'

MORPHEMES

Ochi gwōkwā.

'The stick is long/The stick is or was long
in contrast to other conditions.'

The intransitive stative verbal roots are illustrated in section
8.2.2.1.4.1.4. and by the following illustrative examples:

chā	'to be faded'	ngmō	'to be dry'
gwā	'to be long'	ngmā	'to be clean'
glāa	'to be complete'	wi	'to be alive'
nū	'to be swollen'	wa	'to be rotten'

8.2.2.1.4.2.3. Many, but not all, of the intransitive Yala verbal roots can also be classed as 'natural action roots'. They are distinct from the other intransitive verbal roots in that the basic form symbolizes different time (tense). That is:

1. 'Natural action roots' basically signify present time while other basic Yala roots signify past time (movement roots cf. 8.2.2.1.4.3.) or past-present time (all others).
2. Reduplicated 'natural action roots' basically signify past time as well as the contrastive or exclusivized form of the root meaning in past or present time in the appropriate contexts while other reduplicated verbal roots signify only a contrastive or exclusivized form of the root meaning.

The following 'natural action roots' of Yala are illustrative:

chā	'to be faded'	pla	'to hang down'
-----	---------------	-----	----------------

MORPHEMES

dya	'to be weak'	plaa	'to slip down'
glāa	'to be correct'	re	'to be worn out'
gwā	'to be long'	rū	'to leaf out'
hu	'to be glittery'	wa	'to bear fruit'
nū	'to be swollen'	wa	'to be rotten'
ngma	'to be clean'	we	'to exist'
ngmo	'to be dry'	wi	'to be alive'
pe	'to flow'	wu	'to boil'

The 'natural action' verbs of Yala never take objects and when followed by *la abō yī nū* 'with/by him' the *la* phrase shows who is being held responsible for the action. If the phrase with *la abō ī nū* 'by itself' follows the 'natural action' verbal root a reflexive meaning is signaled.

The underlined 'natural action roots' are illustrated in the following utterances:

Ebe nūma <u>wa</u> .	'This meat is rotted.'
Ebe nūma <u>wōwa</u> .	'This meat rotted.'
<u>Qwōwa</u> nīi ebe nūma <u>wa</u> a ne.	'This meat is/was rotted and nothing else.'
Ebe nūma yaboo ē <u>wa</u> .	'This meat is rotting.'
Ebe nūma yaboo ē <u>wōwa</u> .	'This meat was rotting.'
Ebe nūma <u>wōwa</u> la abō ī nū.	'This meat rotted by itself.'
Ebe nūma <u>wōwa</u> la abō yī nū.	'The meat rotted with him.'

MORPHEMES

8.2.2.1.4.3. The 'movement roots' are distinct from the 'natural action roots' (cf. 8.2.2.1.4.2.3.) and from the other Yala verbal roots in that the basic form symbolizes different time. That is:

1. 'Movement roots' signify past time while 'natural action roots' signify present time (cf. 8.2.2.1.4.2.3.) and the other Yala verbal roots signify past-present time. When a 'movement root' is to function in present time the presence of a present auxiliary (cf. 8.2.2.2.2.) is obligatory.
2. Reduplicated 'movement roots' with the vast majority of other roots, in contradistinction to the 'natural action roots' (cf. 8.2.2.1.4.2.3.), signify a contrastive or exclusivized form of the root meaning.

The seven 'movement roots' of Yala are:

ga	'to pass'	gānyō	'to go there specifically'
gā	'to wander'	pyāa	'to leave/move'
gāa	'to go there'	wā	'to come'
ga	'to go to'		

The 'movement roots' of Yala are normally intransitive. The final 'movement root' ga 'to go to' which is homophonous with ga 'to pass' is transitive, however. The underlined 'movement roots' are illustrated in the following utterances:

Āgū pyāa. 'Agu left.'

MORPHEMES

Āgū <u>pāpvāa</u> .	'Agu left in contrast to all else.'
Āgū <u>pvāa</u> me.	'Agu has left completely.'
Āgū yamu ē <u>pvāa</u> .	'Agu is leaving.'
Āgū ye ē <u>pvāa</u> .	'Agu is continuing to leave.'
Wōnā <u>ga</u> yērō.	'Wōna went to the farm.'

8.2.2.2. The auxiliaries of Yala are classed according to their ability (cf. 8.2.2.2.1.) or inability (cf. 8.2.2.2.2.) to be assimilated.

8.2.2.2.1. There are three single vowel auxiliaries which at times function in non-assimilating environments but most often function in an assimilating environment. Their vowel quality but not their tone quality is assimilated each time that they are placed into an assimilating environment. They are:

i	'negative'
ē	'continuous'
ā	'hortative'

When ē and ā are assimilated the difference in meaning is normally understood by the context of the speech situation although in certain situations ambiguity occurs.

These three auxiliaries are underlined in the following illustrative examples:

Ode <u>i</u> wā ni.	'Ode didn't come.'
---------------------	--------------------

MORPHEMES

Ode <u>ā</u> he she.	'Ode always laughs.'
Alō <u>ā</u> pyāa.	'Let's go.'

8.2.2.2.2. There are twenty auxiliaries whose vowel quality is not assimilable. They are:

bī	'continuous (exclusive)'
chī/kē	'contrastive/additive'
de	'perfective'
'' eee	'interrupted'
' ge	'subjunctive/conditional'
' gbaa/hāa	'repetitive'
' kaa	'uncertain'
' ke	'past'
' ku	'simulfactive'
' ta	'actitive'
' utu	'fundamental'
ye	'present'
yamu	'present (here location)'
' yaboo	'present (there location)'
' yema	'present (here specific location)'
' yaa	'present (there specific location)'
' yabamā	'present (there near location)'
' yabanū	'present (there far location)'

MORPHEMES

yaamā	'present (there near specific location)'
yaanū	'present (there far specific location)'

The auxiliaries of this type are underlined in the following illustrative utterances:

Ó bi ya.

'He continued walking (while someone stayed behind).'

A chi re.

'But you ate (contrary to expectation).'

Ó de okpo de.

'He gives all the money (perfectly).'

N eee ya.

'I still did (it)(although interrupted).'

Ó ge rē enya.

'He should run/be running.'

Ó kaama o.

'Perhaps/maybe he saw it.'

Orī ku dya.

'All at once the rope weakened.'

Ó yamu ē ya uklo.

'He is (here) working.'

MORPHEMES

8.2.2.3. The Yala adverbials are distinguished from the Yala descriptives (cf. 8.2.2.6.) in that they cannot be reduplicated. The Yala adverbials can be divided into two classes. These two classes are the post-verbal auxiliaries (cf. 8.2.2.3.1.) and the 'other adverbials' (cf. 8.2.2.3.2.).

8.2.2.3.1. The post-verbal auxiliaries are a class of adverbials that specify the distinctive manner and the psychological atmosphere in which the verbal situation is to be understood. The twelve post-verbal auxiliaries are:

ge	'completive (past-present with positive contrast)'
' me	'completive (non-present with no contrast)'
' we	'completive (non-present with negative contrast)'
ne	'factive (positive)'
' ni	'factive (negative)'
' gbe	'predictive'
k̄e	'dubitative'
' je	'past'
ji	'implicationless (nothing more)'
' ma	'exactitive'
ne	'ability'
' a	'contrastive'

The post-verbal auxiliaries are underlined in the following illus-

MORPHEMES

trative examples:

ò ya gá.

'He has done/is doing (more than was/is expected of him).'

ò ya má.

'He has done (what was expected of him).'

ò ya wé.

'He has done (what wasn't expected of him).'

Ode hō má né.

'This is Ode.'

Ode i hō má ní.

'This is not Ode.'

ò ya gbe.

'I think/believe he did (it).'

ò ge ē wōwā kás.

'I doubt if he will come.'

ò ya íé.

'He did (it) before.'

ò má jí.

'He looked/is looking (and nothing more).'

MORPHEMES

Oji nīi a ya ma.

'What (exactly) are you doing.'

Ó ya me.

'He can/was able to do (it).'

Ode wā a nē.

'It is Ode (in contrast to others) that came.'

8.2.2.3.2. The 'other adverbials' also cannot be reduplicated and each of them can be used in utterances in which post-verbal auxiliaries also function. The nine 'other adverbials' are listed as follows:

gbaa	''	'much/very'
kpsss	''	'very much'
kpse	'	'more (than expected)'
fye	'	'comparatively'
goo	''	'strongly'
keke	''	'sparingly'
kpoo	''	'unadvisedly'
waa	''	'all/everything'
yēmēmē	''	'many'

The 'other adverbials' are underlined together with their translations in the following illustrative examples:

MORPHEMES

ɔ̃gá rɛ́ gbáá.

'ɔ̃gá ate/is eating much.'

ò hi wòhi gbáá.

'It is/was very good.'

ɔ̃gá rɛ́ kpɛɛɛ.

'ɔ̃gá ate/is eating very much.'

ɔ̃gá rɛ́ kpɛɛ.

'ɔ̃gá ate/is eating more than expected.'

ɔ̃gá rɛ́ kpɛɛɛ jí.

'ɔ̃gá ate/is eating an unspeakable amount.'

ò hi wòhi fye.

'It is better than the other.'

ò hé eyí wónó gòó.

'He is very sad.'

ɔ̃gá rɛ́ kéke.

'ɔ̃gá ate/is eating sparingly.'

ɔ̃gá rɛ́ kpòò.

'ɔ̃gá ate/is eating against better advice.'

ɔ̃gá rɛ́ wáá.

'ɔ̃gá ate/is eating everything.'

MORPHEMES

Ōga re yāmēmē.

'Ōga ate/is eating many.'

8.2.2.4. The pure adjectivals of Yala are very few and far between. In fact, there are only six basic adjectives in Yala. The rest of the limiting, qualifying and specifying semantic load is carried by attributive nominals or predicate descriptives. The adjective of Yala is specified as a non-prefixed form that follows and modifies the head nominal in a noun phrase. The six Yala adjectives are listed as follows:

''	'exclusive'
kee	
-'	'this'
nūma	
'	'specific'
ma	
' '	'small'
pinye	
''	'all'
waa	
yāmēmē	'plenty/many'

The Yala adjectives are underlined in the following illustrative examples:

Lelā kee hō ma ne.

'This is only (exclusively) trouble.'

Ō pyāa bala ōche nūma.

'He left with this person.'

MORPHEMES

ʒche ma pyāa.

'A specific person left.'

Owutu pinva pyāa onōkōkū.

'Small beginnings lead to great endings.'

Āche vaa wā amu.

'All the people came.'

Ō ma sbe ysmeme.

'He saw/is seeing many animals.'

8.2.2.5. There are a number of basic conjunctive relationships and their associated markers in Yala. These varying conjunctive relationships are also signaled in a number of different ways. This section deals with:

1. These different types of syntactic relationships and the markers that Yala uses to signal them.
2. The different types of syntactic structures that are conjunctively related.
3. The different environments in which these relationships occur.

We begin by recognizing that Yala conjunctions are of two types.

That is:

1. The unassimilable type (cf. 8.2.2.5.1.).

MORPHEMES

2. The assimilable type (cf. 8.2.2.5.2.).

8.2.2.5.1. The type 1 (unassimilable) conjunctions of Yala are:

kanakana	'but/however'
kēē	'or'
ma	'when/if/and'

When we say that these conjunctions are unassimilable we mean that their vowel and tone quality are never assimilated by a following vowel or tone quality nor does their vowel and tone quality assimilate the vowel and tone quality of a following syllable.

The usage of these unassimilable Yala conjunctions in various environments is illustrated in the following Yala utterances:

Ode da ɔ ure kanakana o i de ni.

'Ode spoke to him about the debt but/however he didn't pay (it) back.'

N gbo eyi kanakana o i wā ni.

'I waited but/however he didn't come.'

Ode kēē Edla ge ē wā.

'Ode or Edla will come.'

N ge ē bi ihī sta kēē ugū epa wā.

'I will bring three yams or two fowls.'

MORPHEMES

N ā wā kēē n ā wā ni?

'Should I come or shouldn't I?'

Ó i chikpó ni kēē a gē ē ku ó la wóhú.

'He doesn't want to or will you force him.'

N wā mā a ga yeró mē.

'When I came, you had gone to the farm.'

Ó gē wā mā nē n gē ē ga yeró mē.

'If he had come I would have gone to the farm.'

N gbó eyí mā ó wā.

'I waited and he came./When I waited he came.'

8.2.2.5.2. The type 2 conjunctions of Yala are assimilable.

When we say that these conjunctions are assimilable, we mean that either the consonant, vowel or tone quality, or all three, of their final syllable are assimilated by the consonant, vowel or tone quality of a syllable on the other side of an elidable boundary.

Just as the assimilable conjunctions of Yala are many in number so the relationships that they signal are also many. The peculiar environments in which assimilable conjunctions operate are between:

1. Collocated nominals (cf. 8.2.2.5.2.1.).
2. Collocated verbal phrases (cf. 8.2.2.5.2.2.).
3. A nominal and a following attributive clause (relativiza-

MORPHEMES

tion) (cf. 8.2.2.5.2.3.).

4. A verbal phrase and a following nominal phrase (cf. 8.2.2.5.2.4.).
5. A verbal phrase and a following clausal complement (cf. 8.2.2.5.2.5.).

8.2.2.5.2.1. Collocated nominals in Yala are either joined sequentially (cf. 8.2.2.5.2.1.1.) or non-sequentially (cf. 8.2.2.5.2.1.2.).

8.2.2.5.2.1.f. The sequential relationship between two Yala nominals is not overtly marked. That is, it is marked by the absence of any Yala conjunctive morpheme between the two nominals. Sequential nominal joining is exemplified and underlined in the following illustrative Yala utterances:

Oya ami wā iche.
friend-specific speaker-came-today
'My specific friend came today.'

N ma anya āche epa.
I-saw/am seeing-women-persons-two
'I saw/am seeing two women.'

Okpo onōkōkū hō mā ā ne.
money-big one-remain-here-contrastive-factive
'The big money is here.'

Lengma olapinve olāā hi wahi.
kola nut-small one-that-good-good
'That small kola nut is fine.'

MORPHEMES

8.2.2.5.2.1.2. The non-sequential joining of Yala nominals is of three types. These types are:

1. Associative (cf. 8.2.2.5.2.1.2.1.).
2. Coordinative (cf. 8.2.2.5.2.1.2.2.).
3. Comparative (cf. 8.2.2.5.2.1.2.3.).

8.2.2.5.2.1.2.1. Associative joining is marked by the presence of:

1. \bar{i} 'close association'
2. $y\bar{i}$ 'distant association'

between the two related nominals. Close association is normally used with inalienable nominals such as:

$\bar{a}d\bar{a}$	'father'	$\bar{e}n\bar{e}$	'mother'
$\bar{o}y\bar{i}$	'child'	$\bar{i}k\bar{p}\bar{o}$	'leg-foot'
$\bar{a}b\bar{o}$	'hand-arm'		many others

Distant association, on the other hand, is normally used with alienable possessions such as:

$\bar{o}c\bar{h}\bar{i}$	'stick/tree/medicine'	$\bar{o}p\bar{a}$	'cloth'
$\bar{y}\bar{e}h\bar{i}$	'pot'	$\bar{o}p\bar{u}$	'door'
$\bar{e}b\bar{e}$	'place'		many others

However, it is possible to use either 'close' or 'distant' association in the same basic construction in order to bring out a semantic contrast. The following Yala utterance pairs give us a taste of the

MORPHEMES

Contrastive usage of the 'close' and 'distant' types of association:

Ádā ī u ku me. [ádāīi]
father-close association-me-die-completive

'My (kind and dear) father (who treated me well) has died.'

Ádā yī u ku me. [ádāyūu]
father-distant association-me-die-completive

'My (unkind and harsh) father (who didn't love me) has died.'

Íkpó ī u ns. [íkpoīi]
leg-close association-me-factive

'It is my (on the body) leg.'

Íkpó yī u ns. [íkpoīyūu]
leg-distant association-me-factive

'It is my (separated from the body) leg.'

Ōnye nāa okpo ī u. [okpoīi]
who-took-money-close association-me

'Who took my (very own) money?'

Ōnye nāa okpo yī u. [okpoīyūu]
who-took-money-distant association-me

'Who took the money that was with me but not my very own.'

The yī 'distant association' is also used in a good number of other environments. The yī and its appropriate meaning in English are underlined for easy reference in the following example utterances:

Abada - o jā yī wote ns.
spiked spear-thing-associated-hunt-factive

'A spiked spear is used for hunting.'

MORPHEMES

N ka ácha de Ode yí oje yí nū nīi n de byāa má.
I-spoke-insult-give-Ode-assoc.-bike-assoc.-him-that-I-got-spoil-
specific

'I insulted Ode in connection with his bicycle that I spoiled.'

Ádāamoglagū - omepa yí ochwōle ne.
lieutenant governor-second-assoc.-king-factive

'The lieutenant governor is second to the king.'

Ádōkū - onyākū yí okōkū í alo ne.
father of ancients-old ones-assoc.-grandfather-assoc.-us-factive

'The ancient fathers are older than our (close and dear) grandfa-
thers.'

Ásja yí unū yí Ode wu olā chacha.
made things-assoc.-house-assoc.-Ode-join-fire-completely

'Everything in the house of Ode burned up completely.'

Wu áchā yí arī olāā de um.
pull-bunch-assoc.-palm tree-that-give-me

'Pull some palmfruit from that palmtree for me.'

Olejī yí yerō yí u ga aba.
boundary possessor-assoc.-farm-assoc.-me-pass-where

'Where has the person having a boundary with my farm gone?'

8.2.2.5.2.1.2.2. Coordinative joining is marked by the presence
of:

ábalá 'and' (coordinative)

between two related nominals. The usage of the coordinative conjunc-
tion bala is illustrated in the following Yala example utterances. The
conjunction and the translation are underlined for easy reference.

MORPHEMES

Ode bāla Edla ge ē wā.

'Ode and Edla will come.'

N ma onyā olāā bāla ayi sne.

'I saw/am seeing that woman and four children.'

8.2.2.5.2.1.2.3. Comparative joining is marked by the presence of:

bāā 'like' (comparative)

between two related nominals. The comparative conjunction bāā and its translation are underlined in the following Yala illustrative utterances:

Onyā oha bāā sne ma ma um.

'A woman like mother saw/is seeing me.'

Onglōo bāā olāā mā hi wchi.

'A man like that is good.'

8.2.2.5.2.2. Yala verbal phrases may be conjoined by either:

ge 'and' (coordinative)

geē 'in order to' (purposive)

ku 'at one time' (simulfactive)

These three Yala verbal conjunctions and their translation are underlined in the following Yala illustrative examples:

Ō pyāa ge gbo wolā.

'He went and slept.'

MORPHEMES

Ó pyāa geē gbo wolā.

'He went in order to sleep.'

Ó chē ku chē.

'He came right back.

N ge ē wā ge ka lslā de wo.

'I will come and talk to you.'

8.2.2.5.2.3. In Yala a nominal is conjoined with a following attributive clause by placing the form *nīi* 'that' after the nominal and the adjective *mā* 'this (specific)' after the attributive clause. The conjoiner *nīi* and its translation are underlined in the following Yala example utterances:

Óyi nīi le ōkū mā wā.

'The child that is fat came.'

N mā ōchi nīi gwā mā.

'I saw/am seeing the stick that is long.'

Lehi nīi Ogeyi ya mā le pinye.

'The charity that Ogeyi did is small.'

8.2.2.5.2.4. The conjoining of a verbal phrase with a following nominal phrase in many languages is spoken of as a prepositional relationship. In Yala also we think of this kind of conjoining as a prepositional relationship. In Yala this relationship is marked by the pres-

MORPHEMES

ence of a prepositional marker. The basic prepositional markers of Yala are la (cf. 8.2.2.5.2.4.1.) and bāa (cf. 8.2.2.5.2.4.2.). Some independent verbal roots (cf. 8.2.2.5.2.4.3.) and the associative marker yī (cf. 8.2.2.5.2.1.2.1.) are also used as prepositional markers. Although these secondary prepositional roots normally function alone in marking the prepositional relationship, three of them (ba 'to join', ga 'to pass' and tū 'to enter') join with la to form compound prepositions (cf. 8.2.2.5.2.4.4.). Finally, it is noted that the two forms wuchē and yī function together to signal the prepositional relationship 'because of' (cf. 8.2.2.5.2.4.5.).

8.2.2.5.2.4.1. The most used prepositional marker of Yala is la. It signals at least the: 'with', 'on', 'in', 'to', 'from', 'at', 'for', 'into' and 'by' relationships between a verbal phrase in the following nominal phrase in Yala.

8.2.2.5.2.4.1.1. It is evident from looking at the following illustrative Yala utterances that the significance of the underlined la which is translated by the underlined English meaning is actually a product of the semantic environment into which la is fitted and that the semantic features of the preceding verbal phrase and the following nominal phrase dictate the semantic shape of the relationship while la basically signals the fact that some type of prepositional relationship exists. The example utterances are:

MORPHEMES

N he la ukpāā.

'I cut/am cutting with a machete.'

N gbo la aje.

'I slept/am sleeping on the ground.'

N gbo la wole.

'I slept/am sleeping in the house.'

N wā la wole.

'I came to the house.'

Agba ē bū la okoo.

'Saliva comes from the mouth.'

N mā 'o la ebe yī Ōga.

'I saw it at Ōga's place.'

N ye eye la inaaba erwō.

'I walked for five miles.'

Ijē he tū um la abō.

'A thorn stuck into my hand.'

Ōdama hō la opu.

'Ōdama sat/is sitting by the door.'

8.2.2.5.2.4.1.2. A number of la phrases may follow each other as

in:

MORPHEMES

Ó byāa la ami la opōpū la ōchī.

'It spoiled with me on the road in the morning.'

8.2.2.5.2.4.2. The other basic preposition of Yala is bāa 'like/as'. It is always followed by a nominal phrase in which ma 'this (specific)' is present. The Yala preposition bāa and its translation are underlined in the following Yala illustrative examples:

Ó jē bāa ami ma.

'He grew/grows like me.'

Ó le ōbi bāa ibi ma.

'He is black as charcoal.'

8.2.2.5.2.4.3. The secondary prepositions of Yala are:

bla ¹	'near to'
dé	'for/to'
ga	'more than/to/through'
glāa	'over to'
hē	'more than'
hī	'from'
ku ¹	'about'
ku	'with'
tāa	'to/at/with/about'
tatū	'into'
tū	'because of/together with'

MORPHEMES

yī 'toward/for/because of/from'

These prepositions and their meaning are underlined in the following illustrative examples:

Ogeyī hō blaa Idiku.

'Ogeyi stayed/stays near to Idiku.'

Ó yá 'uklò de abā.

'He worked/is working for a master.'

Ó ka okoo de Āgū.

'He reported/is reporting to Agu.'

Ó yá 'uklò ga Ódo.

'He worked/is working more than Odo.'

Ó rē enya ga ogla.

'He ran/is running to the playground.'

Ó rē enya ga amu.

'He ran/is running through here.'

Ó de ochi glāa ami.

'He brought a stick over to me.'

Ó yá 'uklò hg Ódo.

'He worked/is working more than Odo.'

MORPHEMES

A nāa okpo hī 'o.

'You took/are taking money from him.'

'E ka lēlā ku 'o.

'They talked/are talking about him.'

'O chē ku Okō.

'He agreed/agrees with Oko.'

'O ka lēlā tāa Okō.

'He talked/is talking to/at/with Oko.'

'O tū uhwi ge' gbo e'lyā tāa 'o.

'She trembled to think about it.'

'O tā lēchō tātū yenyi.

'He threw a stone into the water.'

'O ga Ogojā tū Okō.

'He went to Ogoja because of Oko.'

'O pyāa yī wole.

'He moved/left toward home.'

'E ye eys yī okpo mē.

'They came for/because of money.'

Gogo' yī eys.

'Welcome from the journey.'

MORPHEMES

N ge ē ma aje vi omōma.

'I will do only the action of molding.'

As mentioned before in 8.2.2.5.2.4. a number of these secondary prepositions also function as independent verbal roots. The following examples are illustrative:

Ogeyī blaa Ode.

'Ogeyi married Ode.'

Okō de okpo.

'Okō gave money.'

Ó ga Ogojā ichs.

'He went to Ogoja today.'

Ó glāa.

'It is correct/complete.'

N ha ochi olāā.

'I cut that tree.'

Ode hī āchs yēmēmē sra.

'Ode called many people.'

Alo ku uwī inīnē.

'We caught a thief yesterday.'

N de ochi ku la aje.

'I fixed a stick in the ground.'

MORPHEMES

N tāa Abakpa.

'I joined the Abakpa society.'

Yenyi tatū um la ikplī.

'Water sprang into my eye.'

Ó tū la unu.

'He stayed in the house.'

8.2.2.5.2.4.4. The 'compound prepositions' are:

bala 'with (voluntarily joining)'

gala 'with (involuntarily joining)'

tūla 'with (same time but separately)'

The usage of the 'compound prepositions' of Yala are demonstrated in the following illustrative utterances:

ɔga pyāa bala Ōdō.

'ɔga left with Odo (ɔga joined Odo).'

ɔga pyāa bala Ōdō la Ōdō.

'ɔga left with Odo (Odo joined ɔga).'

ɔga pyāa gala Ōdō la Ōdō.

'ɔga left with Odo (took Odo without consulting him).'

ɔga pyāa tūla Ōdō la Ōdō.

'ɔga left with Odo (ɔga and Odo left at the same time but not together).'

MORPHEMES

8.2.2.5.2.4.5. The prepositional idea 'because of' is also signaled by wuchē yī which is underlined in the following illustrative examples:

N ya wuchē yī Ode.

'I did/am doing (it) because of Ode.'

Ó ga Ogojá wuchē yī nū.

'He went to Ogoja because of him.'

In this connection it is interesting to note that wuchē does not signify 'reason' in Yala. Rather 'reason' is signified by ohu (cf. 8.1. SET I).

8.2.2.5.2.5. The conjunctive relationship between a verbal phrase and the following clausal complement is signaled by the basic marker (nīi) (cf. 8.2.2.5.2.1.) or by several complex markers that are compounded with nīi (cf. 8.2.2.5.2.5.2.).

8.2.2.5.2.5.1. The basic marker nīi 'so that' and its translation are underlined in the following Yala illustrative examples:

Ó ka gbōō nīi n po.
he-talk-loud-so that-I-hear

'He talked/is talking loudly so that I heard/am hearing.'

Ó ya nīi n ge ē wu otū.
he-do-so that-I-subjunctive-cont.(fact.)-pull-heart

'He did/is doing (it) so that I will be/become annoyed.'

MORPHEMES

8.2.2.5.2.5.2. The compound conjunctions of this type are:

bōojānī	'as if'
bōokonī	'just as'
hēebenī	'in order that'
lebsnī	'so that'
lokoni	'as'
wuchēlokoni	'because'

These compound conjunctions and their translations are underlined in the following Yala example utterances:

Ó ya bōojānī o pyāaku mā.
 he-do-as if-he-die-exactitive
 'He acted/acts as if he died/is dying.'

Ó le bōokoni a ka mā.
 he-possess-just as-you-talk-exactitive
 'He is just as you said/are saying.'

Ó ya hēebenī n ge ē wū stū.
 he-do-in order that-I-subjunctive-cont.(fact.)-pull-mind
 'He did/is doing (it) in order that I will be/become annoyed.'

Ka de o lebsnī o ā ge pō.
 talk-to-him-so that-he-hortative-subjunction-hear
 'Talk to him so that he may hear.'

N ya lokoni a ka mā.
 I-do-as-you-talk-exactitive
 'I did/am doing as you said.'

MORPHEMES

Ó wu ótū wuchēlokonī n i ga yerō ní má.
he-pull-mind-because-I-not-go to-farm-negative-exactitive
'He became/is annoyed because I didn't go to the farm.'

8.2.2.6. There are a large number of descriptive words in Yala. These descriptive words function as predicate adverbs or adjectives.

The following utterances are demonstrative:

Ó ka lelā gbōō. 'He spoke/is speaking loudly.'
Óchi le gōō. 'The stick is long and thin.'

The Yala descriptives can be divided into three classes. They are:

1. Reduplicating (cf. 8.2.2.6.1.).
2. Non-reduplicating (cf. 8.2.2.6.2.).
3. Ideophones (cf. 8.2.2.6.3.).

8.2.2.6.1. There are approximately one hundred descriptives in Yala that may be reduplicated to signal unitized or individuated meaning.

8.2.2.6.1.1. The reduplicating Yala descriptives are underlined together with their translation in the following paired representative Yala example utterances:

Óbēyēenyi olāā plāā dlōō.
'That fish is slippery/sticky.'
Óbēyēenyi elāā plāā dlōō dlōō.
'Each fish is slippery/sticky.'

MORPHEMES

Op̄op̄u le plelele.

'The road is narrow.'

Op̄op̄u le plelele plelele.

'Each road is narrow.'

Ode ka lelā gbōō.

'Ode spoke/is speaking loudly.'

Ode ka lelā gbōō gbōō.

'Ode spoke/is speaking loudly (everytime).'

Imangolo pyāa nyōō.

'The mango is ripe/soft.'

Imangolo pyāa nyōō nyōō.

'Each mango is ripe/soft.'

8.2.2.6.1.2. Some of the reduplicating descriptives of Yala also have a third companion form. In these cases the:

- A. Basic form signals stative meaning.
- B. Reduplicated forms signal continuous active meaning.
- C. The triple reduplication with a HIGH-LOW-HIGH tonal pattern signals repetition of the meaning.

The extended reduplicating descriptives and their translation are underlined in the following triplicated representative Yala example ut-

MORPHEMES

terances:

Ó nyā blé.

'He turned/is turning curvingly.'

Ó tá bleble de okpo nāa.

'He continued walking around and took the money.'

Ó nyā blebleble.

'He turned/is turning (curving) back and forth.'

N lā ó abō gbāa.

'I slapped/am slapping him hard.'

Ó hē ihō gbagba.

'He refused/is refusing continuously/strongly.'

È lā ó abō gbagbagba.

'They slapped/are slapping him hard from every side.'

Ó ngmā tá gbo ó gbly.

'He fell into it recklessly.'

Ó ys gblugbly.

'He walked recklessly.'

Ó nu unu gbluebluebly.

'He fights everyone at once recklessly.'

8.2.2.6.1.3. A few reduplicated descriptives have the basic form

MORPHEMES

and the triple reduplication but no basic reduplicated form. These reduplicating Yala descriptives are underlined together with their translation in the following paired representative Yala example utterances:

Ode wā chuu.

'Ode came wrongly.'

Ode ya lēlā chuchuchū.

'Ode always does things wrongly everytime.'

Ō hē la okoo yī lēlā wē.

'He is still gossiping.'

Ō hē la okoo yī lēlā wewewē.

'He is always gossiping everywhere.'

Ō lē kloō.

'It was/is crooked.'

Ō lē klōklōklō.

'It is always crooked everytime.'

8.2.2.6.2. Although the non-reduplicating descriptives do not have two contrastive meaning signaling forms (i.e. basic and reduplicated), their basic shape in many cases is a reduplicated one (i.e. pata-pata 'flat and wide', hamāhamā 'worried mind' and chwōochwōo 'rough or lumpy').

MORPHEMES

8.2.2.6.2.1. An interesting feature of the non-reduplicating descriptives is the way that certain consonantal combinations signal a broad, so to speak, generic semantic parameter. Then, inside of that over-arching meaning range the varying vowel and tone qualities are used to signal the particular shade of the generic meaning that is desired. The following sets are illustrative:

SET I

hakahaka	'lazy/lazily'
'hakāhaka'	'unsteady'
hōkōhōkō	'watery/soft'
'hōkōhōkō'	'sloppy'
hekeheke	'small (of members in groups)'
hekeheke	'small particles (sand - sawdust)'
hikihiki	'slow/obtuse'
'hikīhiki'	'useless manner'
hukuhuku	'rough'
'hukūhuku'	'rough manner'

SET II

baūabada	'big and flat'
'badābada'	'broad manner'
bedsbede	'low'
bōdōbodo	'flabby'

MORPHEMES

bedebede 'soft/light'

bodobodo 'liquefied'

SET III

bagabaga 'big and flat'

'bagābaga' 'unfirm/shaky'

'begebege' 'flying loosely (feathers)'

bogobogo 'flappy'

'bogōbogo' 'hanging loosely'

bugubugu 'oversized/stupid'

'bugūbugu' 'confused'

SET IV

gbadagbada 'too wide/openly'

gbodogbodo 'thick (fluid)'

gbedegbede 'weak/soft'

gbedegbede 'feeble'

gbudugbudu 'crowdedly'

'gbudūgbudū' 'struggling fashion'

8.2.2.6.2.2. A second interesting feature of these descriptives is that in general, at least, we can say that there is a certain general range of meaning attached to each vowel quality. That is:

A signals an unrestricted, unencumbered or unconfined type of meaning.

MORPHEMES

O signals an intermediate type of meaning. That is a state between:

1. liquid and solid (thick).
2. totally unrestricted and totally confined (wide/open).
3. straight and circular (crooked).
4. clear and confused (unclear).

O signals superlative type meaning.

E signals diminutive type meaning often of the individuated or unitized variety.

E signals diminutive type meaning most often of the abstract variety.

I signals abnormal or unexpected type meaning most often of the action variety.

U signals abnormal or unexpected type meaning most often with negative connotations.

The meaning range attached to the vowel qualities in these descriptives are illustrated in the following example forms:

A

chakachaka	'unkempt'
dagadaga	'loose/loosely'
'gadāgada'	'scattered'

MORPHEMES

gbagbagba	'every way'
kwl̄aakw̄l̄aa	'rough/roughly'
kpakala	'uncovered/flat'
kpakpala	'unrestricted'
lat̄alata	'irregularity (of walk)'
pyal̄apyala	'listless manner'
waḡawaga	'uneven fashion'

ɔ

ch̄ok̄och̄ok̄o	'muddy/unclear'
dl̄oodl̄oo	'sticky/slippery'
glogbo	'wide/broad'
gbonogbono	'pliable'
kon̄ok̄ono	'crooked'
kokokoto	'boiling'
kp̄ot̄ok̄p̄ot̄o	'thick (liquid)'
monyomonyo	'pussy/yellow'
nȳoonȳoo	'gummy'
wogowogo	'thick (non-liquid)'

o

bogobogo	'flappy'
chodo	'high/bulky'
dl̄ol̄ol̄o	'long/tall'

MORPHEMES

godo	'high'
gogo	'strong/well'
gblogodo	'big/hard/long'
gbōdō	'bright/clear'
hyolohyolo	'long'
kotokoto	'wide'
nyongolo	'excessively tall'
<u>ɛ</u>	
bedsbeds	'low'
chskschks	'spotted'
chweschwɛɛ	'little by little'
degsdgs	'helpless'
jsḡsjgs	'small/unimportant'
ktsksts	'stamped down'
kwekele	'short and solid'
kpskps	'short/quiet'
lwalwe	'slowly/normally (of walk)'
menysenyɛ	'pressed down'
<u>E</u>	
chekele	'slender'
chwerichweri	'young/fresh'
fyee	'narrow'

MORPHEMES

fyefye	'light (loads)'
glegle	'light (liquid)'
gbegegbege	'weak'
gblegble	'thin'
pepe	'light'
teketeke	'not complete'
tete	'separately'

I

chikichiki	'excessively'
finyafinya	'ineffectively'
gidigidi	'briefly'
gligli	'frightenedly'
jigijigi	'diminuatively'
kwikwi	'happily/shamefully'
kpichikpichi	'slowly'
nginingini	'silently/quietly'
pliiplii	'quickly'
trididi	'perfectly'

U

bugubugu	'stupid'
chukuchuku	'bushy/thorny/rough'
chukuchuku	'unsystematic'

MORPHEMES

chukuru	'unexpected'
dugudugu	'unsteady'
gbluugbluu	'extraordinarily strong'
kunūkunu	'exceptionally big'
kutukutu	'violent'
jugūjugu	'stupid'
ngunungunu	'wasteful'

8.2.2.6.2.3. The non-reduplicated descriptives of Yala have seven distinctive tonal shapes. They are:

1. ALL LOW TONE (cf. 8.2.2.6.3.2.).
2. ALL MID TONE (cf. 8.2.2.6.3.3.).
3. ALL HIGH TONE (cf. 8.2.2.6.3.4.).
4. HIGH-LOW-HIGH-LOW TONE (cf. 8.2.2.6.3.5.).
5. HIGH-LOW-HIGH TONE (cf. 8.2.2.6.3.6.).
6. LOW-HIGH-LOW-HIGH TONE (cf. 8.2.2.6.3.7.).
7. HIGH-MID-LOW-HIGH TONE (cf. 8.2.2.6.3.8.).

These tonal shapes are illustrated by the following seven examples:

1. bedebede 'watery'
2. kwīkwī 'feeble'
3. chacha 'completely'
4. gbleegbles 'nicely'
5. chuchuchu 'foolishly'

MORPHEMES

6. jugujugu' 'splashy'
7. kitikiti' 'simultaneously'

Some speakers of Yala use a HIGH-MID-LOW-MID tonal pattern on all type 7 examples. That is, they will say kitikitī instead of kitikiti' for example 7 above and for all other descriptive words of that type.

8.2.2.6.2.3.1. The first five (1 - 5) tonal shapes above signal basic meaning parameters and the last two (6 - 7) tonal shapes are used to reshape the basic meaning in the following ways:

1. Tonal pattern 6 (LOW-HIGH-LOW-HIGH) (cf. 8.2.2.6.2.3.) adds the individuating or unitizing semantic feature to the basic meaning of a number of pattern 1 (ALL LOW TONE) words of the same segmental shape.
2. Tonal pattern 7 (HIGH-MID-LOW-HIGH) (cf. 8.2.2.6.2.3.) seems to extend and/or apply qualitatively the basic meaning of a number of pattern 1 (ALL LOW TONE) words of the same segmental shape.

These varied tonal patterns on the same segmental descriptives are underlined together with their translation in the following triplicated representative Yala example utterances:

Aspē elaā le iggisigg.

'Those children are small.'

MORPHEMES

Aep̄e elāā le is̄gis̄ḡs̄.

'Each of those children is small.'

Aep̄e elāā de ya is̄ḡis̄ḡs̄.

'Those children are younger/smaller.'

Wona clāā le reger̄eḡs̄.

'That fufu is soft.'

Wona clāā le reger̄er̄eḡs̄.

'That fufu is altogether soft.'

Ūkp̄ochi le reger̄er̄eḡs̄.

'The fruit is spoiled.'

8.2.2.6.2.3.2. Approximately one hundred non-reduplicated descriptives that carry tonal pattern 1 (ALL LOW TONE) have been recorded. The descriptives of this type and their translation are underlined in the following representative Yala example utterances:

Arō ī inyi le bagabaga.

'An elephant's ears are floppy.'

Ode gō iwu badabada.

'Ode made heaps flat and big.'

Achi le chukuchuku.

'The bush is tangled and thick.'

MORPHEMES

Orī olāā de ya dogodogo.

'That rope is loose and shaky.'

Ūklō yī u le fekefeke.

'My work is easy.'

8.2.2.6.2.3.3. Approximately twenty non-reduplicated descriptives that carry tonal pattern 2 (ALL MID TONE) have been recorded. The descriptives of this type and their translation are underlined in the following Yala example utterances:

Īgblū olāā le blūblū.

'That biscuit is dry and hard.'

Èbe yī ikpāchō ē le kūrākūrā.

'A place of gravel is rough.'

Ibiīyē ī Okō de ya kplūkplū.

'Okō's body is lean and dry.'

8.2.2.6.2.3.4. Approximately seventy-five non-reduplicated descriptives that carry tonal pattern 3 (ALL HIGH TONE) have been recorded. Descriptives of this type and their translation are underlined in the following representative Yala example utterances:

Lengū ī Ōga le ileile.

'Ōga's nose is pointed.'

MORPHEMES

Okpo olāā ēēē le gloglō wē.

'That money is still very new.'

Oklika ē ye sye hlehle.

'A crab always runs crooked.'

Opōpū olāā le hlohlo.

'That road is crooked.'

Edla de uklo yī nū ya chacha.

'Edla got his work completely finished.'

8.2.2.6.2.3.5. Approximately twenty-five non-reduplicated descriptives that carry tonal pattern 4 (HIGH-LOW-HIGH-LOW TONE) have been recorded. The descriptives of this type and their translation are underlined in the following representative Yala example utterances:

Ochi slāā de ya lweelwee.

'Those sticks are very thin.'

Ibiīyē ī Ode le chwoochwo.

'Ode's body is very rough.'

Ō kla āchi yī yerō chwaachwaa.

'He cut/is cutting the grass of his farm roughly.'

Ehya nīi a he mā le chliichlii la okoo.

'The beanseed that you cooked is not slippery in the mouth.'

MORPHEMES

Ǿchi nūma lə myeemye.

'This stick is weak.'

8.2.2.6.2.3.6. Approximately fifty non-reduplicated descriptives that carry tonal pattern 5 (HIGH-LOW-HIGH TONE) have been recorded. The descriptives of this type and their translation are underlined in the following representative Yala example utterances:

N pyāa anu blibliibli.

'I turned it here and there.'

Okō lə chuchuchu.

'Okō is confused.'

È la Ǿ abō gbagbagba.

'They slapped him from every side.'

Ode pi Ǿgu hlehlehle.

'Ode drew a zigzagged line.'

È rē enya la achi blublublu.

'They ran in the bush with abandon.'

8.2.2.6.2.3.7. Approximately twenty-five non-reduplicated descriptives that carry tonal pattern 6 (LOW-HIGH-LOW-HIGH TONE) have been recorded. The descriptives of this type and their translation are underlined in the following representative Yala example utterances:

MORPHEMES

Ikpli ī wā le isgēisgē.

'Their eyes are all small.'

Ōpa yī nū de ya ragrēgē.

'Her cloth has become soft.'

N de uklo ya teriteri mē.

'I have gotten the work done smoothly.'

Wona olāā le ragaraga.

'That fufu is very soft.'

Ode ē ta ipū iigijigi.

'Ode always writes small.'

8.2.2.6.2.3.8. Approximately seventy-five non-reduplicated descriptives that carry tonal pattern 7 (HIGH-MID-LOW-HIGH TONE) have been recorded. Descriptives of this type and their translation are underlined in the following representative Yala example utterances:

Odo le dogōdogo gbaa.

'Odo is very tall and slender.'

Ō ya hakāhaka la obā.

'He climbed the gutter very lazily.'

Ōgu nūma le kenēkensē.

'This line is crooked.'

MORPHEMES

Okō lə hyelēhyele.

'Okō is weak and thin.'

Ikakī nūma de ya bogōbogo.

'This khaki is oversized.'

8.2.2.6.3. The Yala ideophones are a set of forms that Yala speakers use adverbially to represent sound. Yala speakers think of them as imitative of the particular sound being referred to. Non-native speakers and other outsiders often have trouble seeing the imitative connection with the actual sound. Like most West African languages Yala has a rich heritage of imitative ideophones. The descriptives of this type and their translation are underlined in the following representative Yala example utterances:

Ogeyī de swū mlá la aje gbi.

'Ogeyi threw her firewood on the ground (sound of heavy object falling).

Ōdō yaboo ē bū lēgō ki.

'Odo is digging a hole (sound of digging).'

Ō ta are pu.

'He spit/is spitting (sound of spitting).

Ode ta lechō ge dlá la aje to.

'Ode threw a stone and hit the ground (sound of a small falling object).'

MORPHEMES

Wogo wu fakafaka.

'The hawk flew/is flying (sound of bird flying).

È rē snya kitikiti ga amu.

'They ran (sound of normal movement) through here.'

Ihī yaboo ē wu kotokota.

'The yam is boiling (sound of boiling).'

Orō yī Ogeyī yaboo ē wu kutukutu.

'Ogeyi's soup is boiling (sound of boiling over).'

Owo hā liwō kpatakpata.

'It rained (sound of rhythmic beating).'

Èdla tā lechō tatū yenyi taba.

'Edla threw a big stone into the water (sound of a big thing falling into the water).'

Èdla tā lechō tatū yenyi tabataba.

'Edla threw many big stones into the water (sound of many big things falling into the water).'

Ochi olāā myaa ga aje myāā.

'That tree fell to the ground (sound of a slowly falling object).'

Ochi chē ārē bla.

'The stick broke in two (sound of breaking).'

MORPHEMES

Ari gwō wā la aje kpōtkpōtō.

'The palmnuts fell down (sound of individual things falling).'

Ó ys s̄ys la ipū ongmoōngmō mā, e ya wyavva.

'When he walked on dry leaves, they made (sound of dry things breaking).'

Yoō yaboo ē myē onyā chekscheka.

'A dog is copulating (sound of copulation).'

N hē ebs̄ hōkōhōkō la ikpayā.

'I cut/am cutting meat (sound of cutting) with a knife.'

Ode ya la yenyi juguiugu.

'Ode caused/is causing the water to make (sound of splashing).'

È rē enya fuufufuu ga amu.

'They ran/are running (sound of fast movement) through here.'

8.2.3. The morphemes in Yala that have been classified as 'other' are a number of homogeneous classes that include some forms that are prefixed and others that are not. They include the short set of Yala pronouns (cf. 8.2.3.1.), emotive words (cf. 8.2.3.2.), clause openers (cf. 8.2.3.3.) and utterance closing morphemes (cf. 8.2.3.4.).

8.2.3.1. The short or dependent Yala pronouns, although classed as nominals, are not nouns. They are not nouns because they can never be modified by a following adjective (cf. 8.2.2.4.) or nominal (cf. 8.

MORPHEMES

2.2.5.2.1.1.). This set of Yala pronouns signals three persons singular and plural. It is used in normal direct speech in contrast to the long set (cf. 8.2.1.4.5.1.) which signal contrastive or emphatic meaning. The dependent set of Yala direct speech pronouns is listed as follows:

<u>SUBJECT</u>	<u>OBJECT</u>	<u>ATTRIBUTIVE</u>	
n	um	u	'speaker'
a	wo	wo	'hearer'
'o	'o	nū	'topic'
alo	alo	alo	'speaker and others'
ala'	ala'	ala'	'hearers'
'e	'wa	wā	'topics'

The short Yala pronouns, together with their translation, are underlined in the following illustrative examples:

'Ō hi wohi.	' <u>It/she/he</u> is good.'
N ma 'o 'iniinē.	' <u>I</u> saw <u>him/her/it</u> yesterday.'
<u>Alo</u> re 'ojōre yī nū.	' <u>We</u> ate/are eating <u>his</u> food.'

8.2.3.2. The Yala emotive words might be thought of as a type of ideophone (cf. 8.2.2.6.3.). They are often spoken alone as full utterances such as:

'Fyeskwa.	'A cry of surprise.'
-----------	----------------------

MORPHEMES

¹
Chii. 'A shout of abuse.'

The following are the most common emotive words in Yala:

¹ adā [̄] mē [̄]	'cry of personal trouble'
chā [̄] a	'shout of authority over others'
¹ chahō [̄] hoo	'cry of a wonderful event'
¹ chii	'shout of abuse on (others)'
[̄] ee	'call of guilt on (others)'
¹ eyē	'cry of sympathy (self or others)'
¹ fyē [̄] /fyē [̄] skwa	'cry of surprise'
¹ hyē [̄]	'sound of humiliation on (others)'
¹ hō [̄]	'sound of an abnormal event'
idi [̄] ibi [̄]	'sound of another's insignificance'
[̄] iiyō	'cry of sympathy for a helpless one'
iyō [̄]	'sound of happiness'
¹ iwoo	'shout of condemnation on (others)'
¹ nnnn/ ¹ mmmm	'cry of sharp pain (self)'
¹ nn/ ¹ ee	'sound of attention and question to another'
[̄] nn	'sound of a just event'
nh [̄] nn/ [̄] ahā [̄]	'sound of concurrence with another'
¹ oo	'sound of an abnormal event'
[̄] oo	'cry of a mistake (self or others)'
¹ owee	'cry of non-involvement'

MORPHEMES

Kēē onā nīi n ge ē nāa ma.

'Or which one will I take.'

Nēni a i wi uwī ni?

'It is a fact isn't it, didn't you steal?'

Ōhāni ē ge ē wā.

'Perhaps/potentially they will come.'

8.2.3.4. The utterance closing morphemes of Yala are divided into two classes. That is, they are:

1. Nominal (cf. 8.2.3.4.1.).
2. Non-nominal (cf. 8.2.3.4.2.).

8.2.3.4.1. The nominal closing morphemes of Yala are:

'ēēdā/ēē	'moderation marker'
o	'consideration marker'
oo	'intensification marker'

8.2.3.4.2. The non-nominal utterance closing morphemes of Yala are:

'bee	'calling marker'
'kōō	'affection/attention marker'
'bss	'what about'
'kōō	'what about (specific)'

8.2.3.4.3. The utterance closing morphemes of Yala are underlined

MORPHEMES

together with their translations in the following Yala illustrative utterances:

Ode <u>bee</u> .	'Ode, I'm calling you.'
Nāa obe <u>koō</u> .	'Take affectionate greetings.'
Okpo <u>bee</u> .	' <u>What about</u> the money?'
Ode <u>koō</u> .	' <u>What about</u> Ode <u>in particular</u> ?'
Ala pyāa wā wē <u>ēēdā</u> .	'You all come <u>anyway please</u> .'
N i pō ni <u>o</u> .	'I never heard (<u>tell me more</u>)'
Nāa obe <u>oo</u> .	'Take <u>full</u> greetings.'
N i jōōkū ni <u>oo</u> .	'I <u>absolutely</u> don't know.'

The intensification marker: oo may be further lengthened to add greater intensity. That is:

Nāa obe <u>oooo</u> .	'Take <u>fullest</u> greetings.'
-----------------------	----------------------------------

is a warmer and fuller greeting than:

Nāa obe <u>ooo</u> .	'Take <u>fuller</u> greetings.'
----------------------	---------------------------------

which in turn is a warmer and fuller greeting than:

Nāa obe <u>oo</u> .	'Take <u>full</u> greetings.'
---------------------	-------------------------------

More than approximately quadruple length would be considered excessive and signal the connotative feature of ridiculousness.

III. ELIDING BOUNDARIES

9. When boundaries elide in Yala the syllables on each side of the elidable boundary are collapsed into each other. In this process of joining regular processes of assimilation (cf. 9.1.), coalescence (cf. 9.2.), secondary feature placement (cf. 9.3.), absorption (cf. 9.4.), elision (cf. 9.5.) and syllable joining (cf. 9.6.) take place. This section will describe the conditions and environments (cf. 9.7.) in which boundary elision occurs and the rules (cf. 9.8.) that account for this phenomenon.

9.1. Assimilation is a process in which the quality of a phonological unit is modified to make it conform to the quality of another phonological unit. In Yala, assimilation occurs with consonants, tones or vowels and is either progressive or regressive.

9.1.1. Progressive assimilation is marked by the fact that the consonant, tone or vowel quality of the syllable preceding the elidable boundary assimilates the consonant, tone or vowel quality of the syllable following the elidable boundary.

9.1.2. Regressive assimilation is marked by the fact that the consonant, tone or vowel quality of the syllable following the elidable boundary assimilates the consonant, tone or vowel quality of the syllable

ELIDING BOUNDARIES

ble following the elidable boundary.

9.2. Coalescence is a process in which the qualities of two differing phonological units are modified so that each is conformed to a quality which includes some, but not all, of the phonological features of each of the original units. In Yala, coalescence occurs only with vowels.

9.3. Secondary feature placement is a process in which the quality of a phonological unit is modified to add an additional component (e.g. labialization, dentalization, lateralization or palatalization). In Yala, secondary feature placement occurs with consonants.

9.4. Absorption is a process in which the quality of one phonological unit absorbs the quality of a preceding, following or added phonological component.

9.5. Elision is a process in which a phonological unit is deleted. In Yala, elision occurs with consonants, tones, vowels and elidable boundaries.

9.6. Syllable joining is a process in which the syllables on either side of an elidable boundary collapse into one another and become one syllable as the intervening juncture feature is eliminated.

9.7. In naturally spoken Yala utterances boundaries regularly elide in a number of environments. The elidable boundary environments

ELIDING BOUNDARIES

of Yala are:

1. A basic simple verbal root and a following nominal.
2. A nominal and a following nominal.
3. A conjunction and a following nominal.
4. The utterance opening aa and a following nominal.
5. A single vowel auxiliary and a following nominal.
6. Any morpheme and an utterance closing nominal morpheme.
7. A conjunction and a following non-prefixed single vowel morpheme.
8. An auxiliary and a following non-prefixed single vowel morpheme.
9. A dependent pronoun and a following non-prefixed single vowel morpheme.
10. A nominal and a following non-prefixed single vowel morpheme.
11. A verbal root and a following non-prefixed single vowel morpheme.
12. A verbal root and a following verbal conjunction.

The following examples illustrate each of the environments listed above. The relevant boundary with the affected syllable on either side is underlined. The bracketed form on the right illustrates the conjoined form after the ordered set of derivational rules connected with

ELIDING BOUNDARIES

boundary elision in Yala has been applied.

- | | |
|--|--|
| 1. $\overset{1}{\underset{1}{\text{Ó de okpo.}}}$
'He gave/is giving money.' | $[\overset{1}{\underset{1}{\text{dɔkpo}}}]$ |
| 2. $\overset{2}{\underset{2}{\text{È ma wɔlɛ ɔnɔ̀kɔ̀kɔ̀.}}}$
'They built/are building a large house.' | $[\overset{2}{\underset{2}{\text{wɔlɔ̀ɔ̀nɔ̀kɔ̀kɔ̀}}}]$ |
| 3. $\overset{3}{\underset{3}{\text{Wɔlɛ yí Okò lɛ ɔ̀kɔ̀.}}}$
'Oko's house is big.' | $[\overset{3}{\underset{3}{\text{yɔ̀kɔ̀}}}]$ |
| 4. $\overset{4}{\underset{4}{\text{Àa Ọ̀dò pò.}}}$
'Surely Odo heard (didn't he).' | $[\overset{4}{\underset{4}{\text{Ọ̀dò}}}]$ |
| 5. $\overset{5}{\underset{5}{\text{Ènɛ́ í nù bɛɛ.}}}$
'What about his mother?' | $[\overset{5}{\underset{5}{\text{Ènɛɛ}}}]$ |
| 6. $\overset{6}{\underset{6}{\text{Ó í hi wɔ́hí nì ọ̀ọ.}}}$
'It is certainly no good.' | $[\overset{6}{\underset{6}{\text{nòọ}}}]$ |
| 7. $\overset{7}{\underset{7}{\text{Ọ̀chɛ nìí í yá ọ̀kɔ̀ nì má wá.}}}$
'The person that didn't work came.' | $[\overset{7}{\underset{7}{\text{nì}}}]$ |
| 8. $\overset{8}{\underset{8}{\text{Ó ẹ́ de ẹ́ yá.}}}$
'He always did/does (it) perfectly.' | $[\overset{8}{\underset{8}{\text{de}}}]$ |
| 9. $\overset{9}{\underset{9}{\text{A í wá nì.}}}$
'You didn't come.' | $[\overset{9}{\underset{9}{\text{a}}}]$ |

ELIDING BOUNDARIES

- | | |
|---|---|
| <p>10. <u>ʒ</u>ch[̄]y[̄]s[̄]ch[̄]e i w[̄]a n[̄]i.
10
'No one came.'</p> | <p>[ʒch[̄]y[̄]s[̄]ch[̄]eʔ]
10</p> |
| <p>11. 0 <u>y[̄]s[̄]</u> e y[̄]a u[̄]k[̄]l[̄]o.
11
'He is/was working.'</p> | <p>[y[̄]s[̄]]
11</p> |
| <p>12. 0 <u>w[̄]a</u> g[̄]e ma.
12
'He came and looked.'</p> | <p>[w[̄]aʔ]
12</p> |

9.8. In this section the processes that have been described in sections 9.1. - 9.6. will be applied in the various environments of section 9.7..

When illustrative Yala example utterances are given:

1. Underlining has been placed under:
 - A. The consonant with the secondary feature which is added to it.
 - B. The secondary feature and the consonant that absorbs it.
 - C. The syllable on either side of the elidable boundary in which assimilation or coalescence occurs together with that elidable boundary.
 - D. The consonant, tone-vowel or juncture to be elided.
2. A subscript which points out the relevant eliding boundary environment (cf. 9.7.) has been placed under each underlined item.

ELIDING BOUNDARIES

3. Bracketed forms will follow the example to show the phonological change that occurs as a result of the derivational rule which is being applied.
4. A second bracketed form, when relevant, will follow the first bracketed form to show the shape of the constituent structure just before the derivational rule was applied.

9.8.1. Consonant change includes:

1. Consonant assimilation.
2. Secondary feature placement.
3. Absorption.

9.8.1.1. Yala consonant assimilation is rare. The following cases have been recorded:

ch and k	(<u>chē</u> ku chē)
m and y	(<u>mā</u> yama)
n and l	(<u>nī</u> lela)
r and l	(<u>re</u> lya)
r and y	(<u>re</u> vare)
y and l	(<u>ya</u> lhi)
y and w	(<u>yī</u> wole)
w and g	(<u>wā</u> ge)
l and w	(<u>la</u> wole)
l and y	(<u>la</u> yhe)

ELIDING BOUNDARIES

9.8.1.2. Yala consonant assimilation can be either progressive or regressive. In all known cases of consonant assimilation there are at least two choices. That is, either:

1. Consonant Assimilation
2. No Consonant Assimilation.

In one case (yá lshí 'to do charity') there are three choices.

That is, either:

1. Regressive Consonant Assimilation [l^ʰeshi]
2. Progressive Consonant Assimilation. [y^ʰeshi]
3. No Consonant Assimilation. [yl^ʰeshi]

9.8.1.2.1. Progressive consonant assimilation (cf. 9.9.1.1.1.) operates only in environments: 1 and 12 (cf. 9.7.). The following representative Yala utterances illustrate progressive consonant assimilation:

Alə <u>rē</u> <u>leya</u> .	[rē <u>raya</u>]
1	1
'We participate/participated in friendship.'	
Ó <u>yá</u> <u>lshí</u> .	[yá <u>vshí</u>]
1	1
'He did/is doing charity.'	
Ó <u>chē</u> <u>kú</u> chē.	[chē <u>chú</u>]
12	12
'He came/is coming right back.'	

ELIDING BOUNDARIES

0 <u>wā</u> <u>ge</u> ma. 12	[wā ge] 12
---------------------------------	---------------

'He came and looked.'

0 <u>wā</u> <u>geē</u> ma. 12	[wā geē] 12
----------------------------------	----------------

'He came in order to look.'

9.8.1.2.2. Regressive consonant assimilation (cf. 9.9.1.1.2.)

operates only in environments: 1 and 3 (cf. 9.7.). The following representative Yala utterances illustrate regressive consonant assimilation:

0 <u>ya</u> lshi. 1	[la lshi] 1
------------------------	----------------

'He did/is doing charity.'

Abā <u>nī</u> <u>lelā</u> ya ma. 3	[lī lelā] 3
---------------------------------------	----------------

'Where did trouble happen?'

N bū <u>la</u> <u>vshē</u> . 3	[va vshē] 3
-----------------------------------	----------------

'I lived/am living at Yehē.'

0 hō abōō <u>la</u> <u>wōlē</u> . 3	[wa wōlē] 3
--	----------------

'He was/is there at home.'

Lelā <u>yī</u> <u>wōlē</u> ne. 3	[wī wōlē] 3
-------------------------------------	----------------

'It is home trouble.'

N je oja <u>yī</u> <u>lelā</u> . 3	[lī lelā] 3
---------------------------------------	----------------

'I know/knew a troublesome thing.'

ELIDING BOUNDARIES

Ode <u>ru</u> ōchi. 1	[<u>ru</u> ōchi] 1
--------------------------	------------------------

'Ode gripped/is gripping the stick.'

Lip <u>u</u> ōnōkōkū i hi wōhi ni. 2	[lip <u>u</u> ōnōkōkū] 2
---	-----------------------------

'A big stomach is/was not good.'

9.8.2.2. Lateralization (cf. 9.9.1.2.2.) of the consonant in the syllable preceding the elidable boundary occurs when the syllables on both sides of the elidable boundary have an initial consonant and the consonant of the syllable following the elidable boundary is the lateral approximant /l/.
al approximant /l/.

The following representative Yala utterances illustrate the place of the secondary feature of lateralization:

Ō <u>po</u> lslā. 1	[<u>pl</u> o lslā] 1
------------------------	--------------------------

'He understood/understands.'

Ē <u>ku</u> lemye. 1	[<u>kl</u> u lemye] 1
-------------------------	---------------------------

'They hungered/are hungry.'

Ō <u>ya</u> lshi. 1	[<u>yl</u> a lshi] 1
------------------------	--------------------------

'He did/is doing charity.'

9.8.2.3. Palatalization (cf. 9.9.1.2.3.) of the consonant in the syllable preceding the elidable boundary occurs when either of the following conditions holds:

1. That consonant is labial /p, b, m or f/ and followed by the

ELIDING BOUNDARIES

high-extreme non-back vowel /i/.

2. The syllables on both sides of the elidable boundary have an initial consonant and the consonant of the syllable following the elidable boundary is the palatal approximant /y/.

The following representative Yala utterances illustrate the placement of the secondary feature of palatalization:

Ode <u>mi</u> 'ábaa. 1	[m ₁ y ₁ 'ábaa]
'Ode's jaw swelled/is swelling.'	
Ó <u>bī</u> 'ochi. 1	[b ₁ y ₁ 'ochi]
'He held/is holding a stick.'	
N <u>ma</u> 'yshī. 1	[m ₁ y ₁ 'yshī]
'I saw/am seeing a pot.'	
N bū <u>la</u> 'Yehē. 3	[l ₃ y ₃ 'Yehē]
'I live/am living at Yehē.'	

9.8.2.4. Dentalization (cf. 9.9.1.3.) of the consonant in the syllable preceding the elidable boundary may optionally occur whenever the velar approximant /h/ is labialized (cf. 2.1.2.2.). A labialized, dentalized velar approximant is symbolized as [fhw]. In terms of eliding boundary rules, the rule of dentalization (cf. 9.9.1.3.) must follow the labialization (cf. 9.9.1.2.1.) rule.

The following representative Yala utterances illustrate the place-

ELIDING BOUNDARIES

ment of the secondary feature of dentalization:

<p>ò <u>h</u>e wóná.</p> <p>'She cooked/is cooking fufu.'</p>	<p>[<u>fh</u>wé wóná]</p> <p style="text-align: center;">1</p>
<p>ò <u>h</u>i wógbò.</p> <p>'He farmed/is farming plantain.'</p>	<p>[<u>fh</u>wi wógbò]</p> <p style="text-align: center;">1</p>
<p>ò <u>h</u>u orí.</p> <p>'He pulled/is pulling a rope.'</p>	<p>[<u>fh</u>wu orí]</p> <p style="text-align: center;">1</p>
<p>ò <u>h</u>u lèchò.</p> <p>'He pulled/is pulling a stone.'</p>	<p>[<u>fh</u>wu lèchò]</p> <p style="text-align: center;">1</p>

9.8.3. In Yala the process of absorption (cf. 9.9.1.4.) is obligatory unless otherwise stated in the rule and must follow the rules of consonant assimilation (cf. 9.9.1.1.) and secondary feature placement (cf. 9.9.1.2.).

When absorption takes place the secondary feature:

1. Labialization is absorbed:
 - A. Obligatorily by:
 - a. The labio-velar approximant /w/.
 - b. The alveolar stops /t or d/.
 - B. Optionally by the dentalized velar approximant /fh/.
2. Lateralization is absorbed by the alveolar approximants /r and l/.

ELIDING BOUNDARIES

3. Palatalization is absorbed by the palatal approximant /y/.

The following representative Yala utterances illustrate the process of absorption:

<p>ò wu wogbo.</p> <p>'He removed/is removing plantain.'</p>	<p>[<u>wu</u>]₁</p>	from:	<p>[<u>w^hwu</u>]₁</p>
<p>ò du arō.</p> <p>'He is/was deaf.'</p>	<p>[<u>du</u>]₁</p>	from:	<p>[<u>du</u>]₁</p>
<p>ò tū ' ' swa.</p> <p>'He joined/is joining an age company.'</p>	<p>[<u>tū</u>]₁</p>	from:	<p>[<u>t^hwu</u>]₁</p>
<p>ò he wōna.</p> <p>'She cooked/is cooking fufu.'</p>	<p>[<u>he</u>]₁</p>	from:	<p>[<u>hwe</u>]₁</p>
<p>ò re lsla.</p> <p>'He ate/is eating flying ants.'</p>	<p>[<u>re</u>]₁</p>	from:	<p>[<u>rle</u>]₁</p>
<p>ò ya yanō.</p> <p>'He made/is making oil.'</p>	<p>[<u>ya</u>]₁</p>	from:	<p>[<u>yva</u>]₁</p>

9.8.4. Vowel change includes:

1. Coalescence (cf. 9.8.4.1.).
2. Vowel assimilation (cf. 9.8.4.2.).

9.8.4.1. In Yala the process of coalescence (cf. 9.9.2.1.) which is very rare occurs with vowels in environments 2, 10 and 12 (cf. 9.7.).

ELIDING BOUNDARIES

9.8.4.1.1. The following Yala examples illustrate all the evidence for Yala vowel coalescence that has been recognized to date:

Omeegu	'a masculine name'	
from:	$\frac{\text{oma } \overset{1}{\text{igu}}}{2}$	$[\frac{\text{ome } \overset{1}{\text{egu}}}{2}]$
	one looking at-maize	
Ēneyi	'a feminine name'	
from:	$\frac{\text{ēnē } \overset{1}{\text{iyi}}}{2}$	$[\frac{\text{ēnē } \overset{1}{\text{eyi}}}{2}]$
	madam-what	
Oolāchō	'a town name'	
from:	$\frac{\text{ooe } \overset{1}{\text{qlāchō}}}{2}$	$[\frac{\text{ooe } \overset{1}{\text{qlāchō}}}{2}]$
	overside-one laid with stones	
chōochē	'to come right back'	
from:	$\frac{\text{chē } \overset{1}{\text{ku}} \text{ chē}}{12}$	$[\frac{\text{chō } \overset{1}{\text{ko}}}{12}]$
	come back-simultaneously-come back	

For an explanation of the loss of k in the example just above see section 9.8.1.

9.8.4.1.2. In order to systematize the patterns of Yala vowel coalescence in the data above we can say that:

1. a + i → e + e
2. e + i → e + e
3. e + o → o + o

ELIDING BOUNDARIES

9.8.4.1.3. The process of coalescence seems to be extended to a broader usage in the case of:

oyúkwōbō	'one finger'	
from:	<u>oyi</u> kū wōbō	[oyu]
	child-squat-hand	
obuunū	'her husband'	
from:	<u>oba</u> ī nū	[obu ū]
	10	10
	one joining-associated-her	

in which the wider environment of the back vowel /o/ in oba' and oyi' and the back vowel /u/ of nū and kū seems to have conditioned the /a/ of oba' and the /i/ of ī and oyi' to favor the feature of backness and coalesce to /u/. In this case one may be tempted to postulate the neutral status of /a/ when it comes to the vocalic feature of backness.

9.8.4.2. Yala vowel assimilation (cf. 9.9.2.2.) is the most widespread mark of boundary elision in Yala. Like Yala consonants and tones Yala vowels are affected by both progressive (cf. 9.9.2.2.1.) and regressive (cf. 9.9.2.2.2.) assimilation. Vowel assimilation is not affected by the presence of an initial consonant in the syllable following the eliding boundary.

9.8.4.2.1. The primary type of vowel assimilation is regressive assimilation (cf. 9.1.2.). Regressive vowel assimilation (cf. 9.9.2.2.2.) is illustrated in the following representative examples from envi-

ELIDING BOUNDARIES

Environment 1:

wī uwī	[wū uwī]	'to steal'
de 'smwō	[dɛ 'smwō]	'to give wine'
jē okoo	[jō okoo]	'to be sufficient'
gbā opa	[gbō opa]	'to iron clothes'
kō eje	[kē eje]	'to share beans'
kpo iho	[kpi iho]	'to carry a load'
du arō	[da arō]	'to be deaf'
de lɛngme	[dɛ lɛngme]	'to give a kola'
nā wōna	[nō wōna]	'to dream'
ma yema	[mɛ yema]	'to sight'

Regressive vowel assimilation operates in environments: 1, 2, 3, 4, 5 and 6 (cf. 9.7.). It is illustrated in the following representative Yala example utterances:

N <u>de</u> 'ukpaa.	[du 'ukpaa]
1	1
'I gave/am giving a machete.'	
Eje <u>onōbi</u> hō ma ' a ne.	[ejo onōbi]
2	2
'They are/were black beans (not something else).'	
'E <u>che</u> Okō ikpo.	[cho Okɪ ikpo]
1 2	1 2
'They asked/are asking Oko a question.'	

ELIDING BOUNDARIES

ola ē	[ola ā]	'fire always'
Ukpō ā	[Ukpō ɔ]	'let Ukpō'
ūkpō ī	[ūkpō ɔ]	'fruit of'
ugū i	[ugū u]	'fowl (did) not'

For an explanation of the homophony of ā 'hortative' and ē 'continuous' see section 8.2.2.2.1..

Progressive vowel assimilation operates in environments: 7, 8, 9, 10, 11 and 12 (cf. 9.7.). Progressive Yala vowel assimilation is illustrated in the following representative Yala example utterances:

Ōche nīi ē ya' uklō ma wā. [nīi ī]
7 7

'The person that always worked/works came.'

Ō ē bī ē ys. [bī ī]
8 8

'He always continued/s going (while someone else stayed/s behind)!'

Ē i wā ni. [Ē e]
9 9

'They didn't come.'

Ō byāa la abō ī nū. [abō ɔ]
10 10

'It spoiled by itself.'

A wā ī ma ni. [wā a]
11 11

'You came and didn't look.'

N wā gē ma iniīnē. [wā gā]
12 12

'I came and looked yesterday.'

ELIDING BOUNDARIES

9.8.5. The only change that Yala tone participates in is assimilation (cf. 9.1.). The chart which follows gives us a visual picture of all possible tonal combinations and just how the tonal patterns are affected by assimilation.

	<u>EXAMPLE</u>	<u>TONES</u>	<u>NEW TONE</u>	<u>CONJOINED</u>	<u>MEANING</u>
1.	ya' uklo'	H + H (H)	H	yuklo'	'do work'
2.	ma' aya'	H + H (M)	H	mayā'	'see knife'
3.	ma' apu'	H + H (L)	H	mapu'	'see towel'
4.	go' opa'	H + M (H)	H-M	goopa'	'sew cloth'
5.	ma' ada'	H + M (M)	H-M	maada'	'see lord'
6.	ma' ache'	H + M (L)	H-M	maache'	'see people'
7.	ma' ochi'	H + L (H)	H	mochi'	'see tree'
8.	ma' ihi'	H + L (M)	H-M	mihī'	'see yams'
9.	ma' okpo'	H + L (L)	H-L	mookpo'	'see money'
10.	wā' achi'	M + H (H)	H	wachi'	'tie grass'
11.	nā' ukpaa'	M + H (M)	H	nukpaa'	'straighten' machete'
12.	nū' iku'	M + H (L)	H	niku'	'drive crocodile'
13.	gbā' opa'	M + M (H)	M	gbopa'	'iron cloth'
14.	chē' ukpō'	M + M (M)	M	chukpō'	'break seed'
15.	wā' oche'	M + M (L)	M	wōche'	'tie person'
16.	chē' ochi'	M + L (H)	M	chōchi'	'break stick'
17.	chā' arī'	M + L (M)	M	chārī'	'thresh palm fruit'

ELIDING BOUNDARIES

	<u>EXAMPLE</u>	<u>TONES</u>	<u>NEW TONE</u>	<u>CONJOINED</u>	<u>MEANING</u>
18.	kō okpo	M + L (L)	M-L	kōokpo	'divide money'
19.	de ɔ̄ba	L + H (H)	H	dɔ̄ba	'give mat'
20.	de ukpāā	L + H (M)	H	dukpāā	'give machete'
21.	de apu	L + H (L)	H	dapu	'give towel'
22.	de ɔ̄pa	L + M (H)	M	dɔ̄pa	'give cloth'
23.	de āgbā	L + M (M)	M	dāgbā	'give burying cloth'
24.	ka āche	L + M (L)	M	kāche	'count people'
25.	de ɔ̄chi	L + L (H)	L	dɔ̄chi	'give medicine'
26.	de ihī	L + L (M)	L	dihī	'give yams'
27.	de okpo	L + L (L)	L	dokpo	'give money'

9.8.5.1. Yala tonal assimilation, like vowel and consonant assimilation, is also either progressive or regressive.

9.8.5.1.1. Progressive tonal assimilation (cf. 9.9.3.1.) requires that the low tonal quality of the syllable following the elidable boundary be assimilated upward (to either mid tone (̄) or high tone (')) by the tonal quality of the syllable preceding the elidable boundary but never to a tonal quality higher than that of the tonal quality of the syllable following it in the same morpheme.

Progressive tonal assimilation is illustrated in the following representative examples from environment 1 (cf. 9.7.):

ma ɔ̄chi

[ma ɔ̄chi]

'to see (a) tree'

ELIDING BOUNDARIES

ma ihī	[ma ihī]	'to see yams'
chē ochi'	[chē ochi']	'to break (a) stick'
chā arī	[chā arī]	'to thresh palm nuts'

Progressive tonal assimilation operates in environments: 1, 2 and 3 (cf. 9.7.). The following representative Yala example utterances illustrate progressive tonal assimilation:

N <u>re</u> wona.	[re wona]
1	1
'I ate/am eating fufu.'	
O <u>dla</u> Agbo iniinē.	[dla Agbo]
1	1
'It hit Agbo yesterday.'	
E ma wole <u>onokoku</u> .	[wole onokoku]
2	2
'They built/are building a large house.'	
Wole <u>vi</u> Oko le oku.	[vi Oko]
3	3
'Oko's house is big.'	

9.8.5.1.2. Regressive tonal assimilation (cf. 9.9.3.2.) requires that the tonal quality of the syllable preceding the elidable boundary be assimilated upward (to either mid (ˉ) or high (ˊ)) by the tonal quality of the syllable following the elidable boundary.

Regressive tonal assimilation is illustrated in the following representative examples from environment 1 (cf. 9.7.):

wā achi'	[wa achi']	'to tie grass'
----------	------------	----------------

ELIDABLE BOUNDARY

de 'ukpaa	[de 'ukpaa]	'to give (a) machete'
ka āchs	[kā āchs]	'to count people'

Regressive tonal assimilation operates in all environments except: 10, 11 and 12 (cf. 9.7.). Regressive tonal assimilation is illustrated in the following representative Yala example utterances:

Ó <u>de</u> ləngmə.	[<u>de</u> ləngmə]
1	1

'He gave/is giving kola.'

Ó ē yā lələ <u>bā</u> ɛdla mā.	[<u>bā</u> ɛdla]
3	3

'He always does things like ɛdla.'

<u>Aa</u> Ōdō nɛ.	[<u>Aa</u> Ōdō]
4	4

'Surely it is Odo (isn't it).'

Ōche <u>nī</u> i yā 'uklō nī mā wā.	[<u>nī</u> i]
7	7

'The person that didn't work came.'

Ó ē <u>de</u> ē yā.	[<u>de</u> ē]
8	8

'He always did (it) perfectly.'

<u>N</u> ē rē enya.	[<u>N</u> ē]
9	9

'I always run.'

9.8.6. Elision (cf. 9.5.) is the part of the overall process of eliding boundaries that occur after the processes of assimilation (cf. 9.1.), coalescence (cf. 9.2.), secondary feature placement (cf. 9.3.) and absorption (cf. 9.4.) have been completed. Consonants, tones and

ELIDING BOUNDARIES

vowels elide in all elidable environments (cf. 9.7.).

9.8.6.1. Consonant elision (cf. 9.9.4.1.) operates in the syllable directly after the elidable boundary. It eliminates every syllable initial consonant in that environment.

Consonant elision is illustrated in the following representative examples:

Alo <u>re</u> leya. 1	[re_eya] 1	from:	[re_reya] 1
--------------------------	---------------	-------	----------------

'We participate/participated in friendship.'

O <u>ya</u> lshi. 1	[ye_shi] 1	from:	[ye_vshi] 1
------------------------	---------------	-------	----------------

'He did/is doing charity.'

Aba <u>nī</u> lelā ya ma. 3	[lē_e_lā] 3	from:	[lē_lelā] 3
--------------------------------	----------------	-------	----------------

'Where did trouble happen?'

N bū la <u>Yehe</u> . 3	[ye_ehs] 3	from:	[ye_vshe] 3
----------------------------	---------------	-------	----------------

'I lived/am living at Yehe.'

Lelā <u>yī</u> wole ne. 3	[wō_ole] 3	from:	[wō_wole] 3
------------------------------	---------------	-------	----------------

'It is home trouble.'

O <u>chē</u> ku chē. 12	[chō_o] 12	from:	[chō_cho] 12
----------------------------	---------------	-------	-----------------

'He came/is coming back again.'

O <u>wā</u> ge ma. 12	[wā_a] 12	from:	[wā_wa] 12
--------------------------	--------------	-------	---------------

'He came and looked.'

ELIDING BOUNDARIES

9.8.6.2. Tone and vowel elision only takes place when there are identical phonological units in the syllables on either side of the elidable boundary.

From the point of view of elision, tones and vowels are considered together. That is, we can say that vowels have vocalic and tonal qualities and that a vowel cannot be elided unless it is identical in both vocalic and tonal qualities with the vowel in the syllable on the other side of the elidable boundary.

When the conditions for tone-vowel elision (cf. 9.9.4.2.) are fully met the like tone-vowel in the syllable preceding the elidable boundary is elided.

Tone-vowel elision is illustrated in the following representative examples:

<p>N <u>re</u> wona'. 1</p> <p>'I ate/am eating fufu.'</p>	<p>[<u>rw</u> wona'] 1</p>	<p>from: [rwo wona'] 1</p>
<p>ɔjā <u>onōbi</u> ns. 2</p> <p>'It is a black thing.'</p>	<p>[ɔj <u>onōbi</u>'] 2</p>	<p>from: [ɔjō <u>onōbi</u>'] 2</p>
<p>Aba <u>nii</u> lēlā ya ma'. 3</p> <p>'Where did trouble happen?'</p>	<p>[<u>l</u> lēlā] 3</p>	<p>from: [lē lēlā] 3</p>
<p>Āa <u>Ōdō</u> po'. 4</p> <p>'Surely Odo heard (didn't he).'</p>	<p>[<u>ō</u> Ōdō] 4</p>	<p>from: [ōō Ōdō] 4</p>

ELIDING BOUNDARIES

$\frac{\text{A} \text{ i} \text{ w} \bar{\text{a}} \text{ n} \text{ i}}{9}$ $\left[\frac{\text{A}}{9} \right]$ from: $\left[\frac{\text{A} \text{ a}}{9} \right]$
 'You didn't come.'

9.8.6.3. After all the normal processes of assimilation (cf. 9.1.), coalescence (cf. 9.2.), secondary feature placement (cf. 9.3.), absorption (cf. 9.4.) and consonant and tone-vowel elision (cf. 9.5.) are completed, elidable boundary elision (cf. 9.5.) takes place. This process is made up of juncture deletion (cf. 9.8.6.3.1.) and syllable joining (cf. 9.8.6.3.2.).

9.8.6.3.1. Juncture elimination is simply the process of removing the separating constraint between the forms on either side of an elidable boundary.

9.8.6.3.2. Syllable joining is a process in which the syllables on either side of an elidable boundary become one syllable as that border is eliminated.

When syllable joining occurs, the vowels on either side of the eliding boundary with the same vocalic quality, but with different tonal qualities, join and carry a tonal glide which begins at the pitch of the syllable nucleus preceding the elidable boundary and ends at the pitch of the syllable nucleus following the elidable boundary. The length of this composite vowel is that of a single vowel carrying a tonal glide (cf. 0.6.11.).

9.8.6.3.3. Boundary elision (cf. 9.9.4.3.) which includes: junc-

ELIDING BOUNDARIES

ture deletion and syllable joining is illustrated in the following representative examples. The first bracketed notation will show the effect of the boundary deletion process. Basically, this is a phonetic representation of the oral presentation that the Yala man speaks and hears. The second bracketed notation represents the earlier stage after all the processes of assimilation, coalescence, secondary feature placement, absorption and consonant and tone-vowel elision have been completed.

<p>N <u>re</u> <u>wona</u>. 1</p> <p>'I ate/am eating fufu.'</p>	<p>[<u>rwona</u>] 1</p>	<p>from: [<u>rwona</u>] 1</p>
<p>Aba <u>nii</u> <u>lela</u> ya ma. 3</p> <p>'Where did trouble happen?'</p>	<p>[<u>lela</u>] 3</p>	<p>from: [<u>lela</u>] 3</p>
<p><u>Aa</u> <u>odo</u> po. 4</p> <p>'Surely Odo heard (didn't he).'</p>	<p>[<u>odo</u>] 4</p>	<p>from: [<u>odo</u>] 4</p>
<p>N <u>ku</u> <u>ugu</u>. 1</p> <p>'I caught/am catching a fowl.'</p>	<p>[<u>kwugu</u>] 1</p>	<p>from: [<u>kwugu</u>] 1</p>
<p>N <u>wa</u> <u>ge</u> ma. 12</p> <p>'I came and looked.'</p>	<p>[<u>waa</u>] 12</p>	<p>from: [<u>wa a</u>] 12</p>
<p>Lela <u>yi</u> <u>Yshe</u> wa icha. 3</p> <p>'Yshe's trouble came today.'</p>	<p>[<u>y she</u>] 3</p>	<p>from: [<u>y she</u>] 3</p>

ELIDING BOUNDARIES

Dent	'dentalization'
N-B Vow	'non-back vowel'
B Vow	'back vowel'
H	'high (tone)'
E	'extreme (tone)'
∅	'zero'
X	'any segment or no segment'
Nom	'nominal'
N-Nom	'non-nominal'
V-R	'verbal root'
V-Conj	'verbal conjunction'
T2-Conj	'type 2 conjunction'

9.9.1. The rules of consonant change are ten in number. They include:

1. Four optional rules for consonant assimilation (cf. 9.9.1.1.).
2. Three obligatory rules for secondary feature placement (cf. 9.9.1.2.).
3. An optional rule for secondary feature placement (cf. 9.9.1.3.).
4. An obligatory rule for secondary feature absorption (cf. 9.9.1.4.1.).

ELIDING BOUNDARIES

5. An optional rule for secondary feature absorption (cf. 9.9.1.4.2.).

9.9.1.1. The optional consonant change rules of assimilation are progressive (cf. 9.9.1.1.1.) and regressive (cf. 9.9.1.1.2.).

9.9.1.1.1. The rules for progressive consonant assimilation (cf. 9.8.1.2.1.) are:

RULE 1

$$\left[\begin{array}{c} \text{l} \\ \text{ } \end{array} \right] \longrightarrow \left[\begin{array}{c} \text{r} \\ \text{y} \end{array} \right] / \left[\begin{array}{c} \text{r} \\ \text{y} \end{array} \right] \left[\text{Vow} \right] + \left[\text{---} \right] \left[\text{Vow} \right] \text{ X}$$

V-R Nom

RULE 2

$$\left[\begin{array}{c} \text{k} \\ \text{g} \end{array} \right] \longrightarrow \left[\begin{array}{c} \text{ch} \\ \text{w} \end{array} \right] / \left[\begin{array}{c} \text{ch} \\ \text{w} \end{array} \right] \left[\text{Vow} \right] + \left[\text{---} \right] \left[\text{Vow} \right] \text{ X}$$

V-R V-conj

9.9.1.1.2. The rules for regressive consonant assimilation (cf. 9.8.1.2.2.) are:

RULE 3

$$\left[\begin{array}{c} \text{y} \\ \text{r} \\ \text{m} \end{array} \right] \longrightarrow \left[\begin{array}{c} \text{l} \\ \text{y} \end{array} \right] / \left[\text{---} \right] \left[\text{Vow} \right] + \left[\begin{array}{c} \text{l} \\ \text{y} \end{array} \right] \left[\text{Vow} \right] \text{ X}$$

V-R Nom

ELIDING BOUNDARIES

RULE 4

$$\begin{bmatrix} n \\ \{1\} \\ y \end{bmatrix} \rightarrow \begin{bmatrix} 1 \\ y \\ w \end{bmatrix} / \underset{\text{T2-Conj}}{[-]} [\text{Vow}] + \underset{\text{Nom}}{\begin{bmatrix} 1 \\ y \\ w \end{bmatrix}} [\text{Vow}] \text{ X}$$

9.9.1.2. There are three obligatory consonant change rules which place the secondary features: labialization (cf. 9.9.1.2.1.), lateralization (cf. 9.9.1.2.2.) and palatalization (cf. 9.9.1.2.3.) onto the consonant.

9.9.1.2.1. The rule for the placement of labialization (cf. 9.8.2.1.) is:

RULE 5

$$[\text{Con}] \rightarrow [\text{Lab}] / \underset{\text{Vow}}{[-]} \begin{bmatrix} u \\ \text{Vow} \end{bmatrix} + \begin{bmatrix} \text{Syl} \\ w \end{bmatrix}$$

9.9.1.2.2. The rule for the placement of lateralization (cf. 9.8.2.2.) is:

RULE 6

$$[\text{Con}] \rightarrow [\text{Lat}] / \underset{\text{Vow}}{[-]} [\text{Vow}] + [1]$$

9.9.1.2.3. The rule for the placement of palatalization (cf. 9.8.2.3.) is:

ELIDING BOUNDARIES

RULE 7

$$[\text{Con}] \longrightarrow [\text{Pal}] / [\text{---}] \begin{bmatrix} \text{i} \\ \text{Vow} \end{bmatrix} + \begin{bmatrix} \text{Syl} \\ \text{y} \end{bmatrix}$$

9.9.1.3. There is an optional consonant change rule which places the secondary feature of dentalization onto a labialized consonant. The rule for the placement of dentalization (cf. 9.8.2.4.) is:

RULE 8

$$[\text{h Lab}] \longrightarrow [\text{Dent}] / [\text{---}] [\text{Vow}] + [\text{Syl}]$$

9.9.1.4. Absorption (cf. 9.8.3.) is a process in which the secondary features are absorbed by the consonant onto which they have been placed under certain favorable conditions.

9.9.1.4.1. The obligatory consonant change rule for secondary feature absorption is:

RULE 9

$$\begin{bmatrix} \text{X Lab} \\ \text{Z Lat} \\ \text{y Pal} \end{bmatrix} \longrightarrow \begin{bmatrix} \text{X} \\ \text{Z} \\ \text{y} \end{bmatrix} / [\text{---}] [\text{Vow}] + [\text{Syl}]$$

X = w, t, d
Z = r, l

9.9.1.4.2. The optional consonant change rule for secondary feature absorption is:

ELIDING BOUNDARIES

RULE 10

$$[h \text{ Dent-Lab}] \longrightarrow [h \text{ Dent}] / [\text{---}] [\text{Vow}] + [\text{Syl}]$$

9.9.2. The rules of vowel change are five in number. They are:

1. Three optional rules of vowel coalescence (cf. 9.9.2.1.).
2. Two obligatory rules of vowel assimilation (cf. 9.9.2.2.).

9.9.2.1. The optional rules of vowel coalescence (cf. 9.8.4.1.)

are:

RULE 11

$$[N\text{-B Vow}] \longrightarrow [e] / [\text{---}] + [\text{---}]$$

/a or ε/ /i/

RULE 12

$$[\text{Vow}] \longrightarrow [o] / [\text{---}] + ([\text{Con}]) [\text{---}]$$

/e/ /u or ə/

RULE 13

$$[\text{Vow}] \longrightarrow [u] / [B \text{ Vow}][\text{Con}][\text{---}] + ([\text{Vow}] +) [\text{Con}][B \text{ Vow}]$$

9.9.2.2. The obligatory rules of vowel assimilation are two in number. They are:

1. Progressive Vowel Assimilation (cf. 9.9.2.2.1.).
2. Regressive Vowel Assimilation (cf. 9.9.2.2.2.).

9.9.2.2.1. The rule for progressive vowel assimilation (cf. 9.8.4.2.2.) is:

ELIDING BOUNDARIES

RULE 14

$$[\text{Vow}] \longrightarrow [\alpha \text{Vow}] / [\alpha \text{Vow}] + ([\text{Con}]) [\text{---}] \text{X}$$

N-Nom

9.9.2.2.2. The rule for regressive vowel assimilation (cf. 9.8.4.2.1.) is:

RULE 15

$$[\text{Vow}] \longrightarrow [\alpha \text{Vow}] / [\text{---}] + ([\text{Con}]) [\alpha \text{Vow}] \text{X}$$

Nom

9.9.3. The obligatory rules of tone change are two in number. They are:

1. Progressive Tone Assimilation (cf. 9.9.3.1.).
2. Regressive Tone Assimilation (cf. 9.9.3.2.).

9.9.3.1. The rule for progressive tone assimilation (cf. 9.8.5.1.1.) is:

RULE 16

$$\begin{bmatrix} -\text{H} \\ +\text{E} \end{bmatrix} \longrightarrow \begin{bmatrix} +\text{H} \\ -\text{E} \end{bmatrix} / \begin{bmatrix} +\text{H} \\ +\text{H} \\ -\text{E} \end{bmatrix} + [\text{---}] [\text{Con}] \begin{bmatrix} +\text{H} \\ -\text{E} \\ \{ +\text{H} \} \\ -\text{E} \end{bmatrix} \text{X}$$

Nom

9.9.3.2. The rule for regressive tone assimilation (cf. 9.8.5.1.2.) is:

ELIDING BOUNDARIES

RULE 17

$$[-H] \longrightarrow \begin{bmatrix} +H \\ -E \end{bmatrix} / \begin{bmatrix} \text{---} \end{bmatrix} + [\text{Con}] \begin{bmatrix} +H \\ -E \end{bmatrix} \quad X$$

Y Z

Y = Not part of a $\begin{Bmatrix} \text{Nom} \\ \text{V-R} \end{Bmatrix}$ or Z = a Nom

9.9.4. The obligatory rules of elision are three in number.

They are:

1. Consonant Elision (cf. 9.9.4.1.).
2. Tone-Vowel Elision (cf. 9.9.4.2.).
3. Juncture Elision (cf. 9.9.4.3.).

9.9.4.1. The rule for Consonant Elision (cf. 9.8.6.1.) is:

RULE 18

$$[\text{Con}] \longrightarrow [\emptyset] / [\text{Syl}] + \begin{bmatrix} \text{---} \end{bmatrix} [\text{Vow}]$$

9.9.4.2. The rule for Tone-Vowel Elision (cf. 9.8.6.2.) is:

RULE 19

$$[\text{ Tone-Vow}] \longrightarrow [\emptyset] / \begin{bmatrix} \text{---} \end{bmatrix} + [\text{ Tone-Vow}]$$

9.9.4.3. The rule for Juncture Elision (cf. 9.8.6.3.) is:

RULE 20

$$[\text{Juncture}] \longrightarrow [\emptyset] / [\text{Syl}] \begin{bmatrix} \text{---} \end{bmatrix} [\text{Syl}]$$

9.10. The section which follows is a systematic application of

ELIDING BOUNDARIES

the twenty rules of eliding boundaries to fourteen selected Yala elidable boundaries.

9.10.1. For purposes of quick reference and convenience the twenty rules of eliding boundaries (cf. 9.9.) are outlined here as follows:

CONSONANT CHANGE

- | | | |
|----------|--|--------------|
| Rule 1: | Progressive Assimilation (V-R + Nom). | (Optional) |
| Rule 2: | Progressive Assimilation (V-R + V-Conj). | (Optional) |
| Rule 3: | Regressive Assimilation (V-R + Nom). | (Optional) |
| Rule 4: | Regressive Assimilation (T2-Conj + Nom). | (Optional) |
| Rule 5: | Labialization. | (Obligatory) |
| Rule 6: | Lateralization. | (Obligatory) |
| Rule 7: | Palatalization. | (Obligatory) |
| Rule 8: | Dentalization. | (Optional) |
| Rule 9: | Absorption. | (Obligatory) |
| Rule 10: | Absorption. | (Optional) |

VOWEL CHANGE

- | | | |
|----------|---------------------------|--------------|
| Rule 11: | Coalescence to /e/. | (Optional) |
| Rule 12: | Coalescence to /o/. | (Optional) |
| Rule 13: | Coalescence to /u/. | (Optional) |
| Rule 14: | Progressive Assimilation. | (Obligatory) |
| Rule 15: | Regressive Assimilation. | (Obligatory) |

ELIDING BOUNDARIES

TONE CHANGE

- Rule 16: Progressive Assimilation. (Obligatory)
Rule 17: Regressive Assimilation. (Obligatory)

ELISION

- Rule 18: Consonant Elision. (Obligatory)
Rule 19: Tone-Vowel Elision. (Obligatory)
Rule 20: Juncture Elision. (Obligatory)

9.10.2. The fourteen selected elidable boundaries are listed below in the fourteen Yala utterances of which they are a natural part. In each case the elidable boundary and the syllable on either side of it which is affected by the eliding boundary phenomenon are underlined for easy reference.

1. Alo re leya.

'We are participating/participated in friendship.'

2. O wā ge ma.

'He came and looked.'

3. O ya lehi.

'He did/is doing charity.'

4. Lela yī wōle ne.

'It is home trouble.'

ELIDING BOUNDARIES

5. Ode ru ochi.
'Ode gripped/is gripping a stick.'
6. Ó pó lglā.
'He understood/understands.'
7. Ó bī ochi.
'He held/is holding a stick.'
8. N ma vēhī.
'I saw/am seeing a pot.'
9. Ó he wona.
'She cooked/is cooking fufu.'
10. Ēnē iyi wā.
'Ēneyi came.'
11. Ó chē ku chē.
'He came/is coming right back.'
12. Oba ī nū le ōkū.
'Her husband is fat.'
13. Ni wā ni.
'I didn't come.'
14. Ó byāa la abō ī nū.
'It spoiled by itself.'

ELIDING BOUNDARIES

9.10.3. What follows here is the actual step by step application of the relevant ordered rules (cf. 9.10.1.) to each of the eliding boundary situations listed in section 9.10.2. above.

9.10.3.1.	Al ^o <u>re</u> <u>laya</u> .
Rule 1:	re <u>reya</u>
Rule 15:	r <u>g</u> reya
Rule 18:	re <u>_eya</u>
Rule 20:	reya
9.10.3.2.	O <u>wā</u> <u>ge</u> ma.
Rule 2:	wā <u>wē</u>
Rule 5:	w <u>wā</u> we
Rule 9:	w <u>a</u> we
Rule 14:	wā wa
Rule 18:	wā <u>_a</u>
Rule 20:	waa
9.10.3.3.	O <u>ya</u> <u>lehi</u> .
Rule 3:	l <u>a</u> lehi
Rule 6:	l <u>la</u> lehi
Rule 9:	l <u>a</u> lehi
Rule 15:	l <u>g</u> lehi
Rule 18:	le <u>_shi</u>
Rule 20:	lehi

ELIDING BOUNDARIES

9.10.3.4.	De ^l ā <u>vi</u> wole' ns.
Rule 4:	<u>wi</u> wole'
Rule 5:	<u>wwi</u> wole'
Rule 9:	w <u>i</u> wole'
Rule 15:	w <u>o</u> wole'
Rule 16:	w <u>o</u> <u>w</u> ole'
Rule 18:	w <u>o</u> <u>o</u> le'
Rule 19:	w <u>o</u> <u>o</u> le'
Rule 20:	w <u>o</u> le'
9.10.3.5.	Ode <u>ru</u> ochi'
Rule 5:	<u>rwu</u> ochi'
Rule 15:	<u>rwo</u> ochi'
Rule 19:	rw <u>o</u> ochi'
Rule 20:	rwochi'
9.10.3.6.	o' <u>po</u> le ^l ā
Rule 6:	<u>plo</u> le ^l ā
Rule 15:	<u>ple</u> le ^l ā
Rule 16:	pl <u>e</u> le ^l ā
Rule 18:	pl <u>e</u> <u>e</u> lā
Rule 20:	ple ^l ēlā

ELIDING BOUNDARIES

9.10.3.7.		0 <u>bi</u> ochi.
	Rule 7:	byi ochi.
	Rule 15:	byo ochi
	Rule 16:	byo ochi
	Rule 19:	by_ ochi
	Rule 20:	byochi
9.10.3.8.		N <u>ma</u> yehi.
	Rule 7:	mya yehi
	Rule 15:	mye yehi
	Rule 18:	mye _shi
	Rule 20:	myeshi
9.10.3.9.		0 <u>he</u> wona.
	Rule 5:	hwe wona
	Rule 8:	fhwe wona
	Rule 10:	fh_e wona
	Rule 15:	fh _o wona
	Rule 18:	fh _o _ona
	Rule 19:	fh_ ona
	Rule 20:	fhona

ELIDING BOUNDARIES

9.10.3.10.		$\bar{E}n\bar{e} \text{ } i' \text{ } w\bar{a}.$
	Rule 11:	$\bar{E}n\bar{e} \text{ } e'yi$
	Rule 16:	$\bar{E}n\bar{e} \text{ } \bar{e}'yi$
	Rule 19:	$\bar{E}n \text{ } \bar{e}'yi$
	Rule 20:	$\bar{E}neyi'$
9.10.3.11.		$\acute{O} \text{ } \underline{ch\bar{e}} \text{ } \underline{ku} \text{ } ch\bar{e}.$
	Rule 2:	$ch\bar{e} \text{ } \underline{ch}'u$
	Rule 12:	$ch\bar{o} \text{ } \underline{ch}'o$
	Rule 18:	$ch\bar{o} \text{ } \underline{\text{ } }o'$
	Rule 20:	$ch\bar{o}'o$
9.10.3.12.		$Oba \text{ } \underline{i}' \text{ } n\bar{u} \text{ } l\bar{e} \text{ } \bar{o}k\bar{u}.$
	Rule 13:	$Obu \text{ } \underline{u}'$
	Rule 20:	$Obu\bar{u}'$
9.10.3.13.		$\underline{N} \text{ } i' \text{ } w\bar{a} \text{ } n\bar{i}.$
	Rule 14:	$\underline{N} \text{ } \underline{n}'$
	Rule 17:	$\underline{N} \text{ } n'$
	Rule 19:	$\underline{\text{ } } n'$
	Rule 20:	\underline{N}'
9.10.3.14.		$\acute{O} \text{ } by\bar{m}\bar{a} \text{ } l\bar{a} \text{ } \underline{ab\bar{o}} \text{ } \underline{i}' \text{ } n\bar{u}.$
	Rule 14:	$ab\bar{o} \text{ } \underline{\bar{o}}'$
	Rule 19:	$ab \text{ } \bar{o}'$
	Rule 20:	$ab\bar{o}'$

ELIDING BOUNDARIES

9.11. In concluding this section on Yala eliding boundaries the following generalizations seem appropriate. In the overall phenomenon of eliding boundaries:

1. The vowel quality of a nominal prefix is never assimilated.
2. The final vowel quality of a nominal or verbal root is never assimilated unless followed by a nominal prefix.
3. The vowel quality of a non-prefixed single vowel morpheme is always assimilated.
4. Progressive vowel assimilation marks the fact that the constituent following the elidable boundary is a non-nominal (non-prefixed constituent).
5. Regressive vowel assimilation marks the fact that the constituent following the elidable boundary is a nominal (prefixed constituent).
6. Progressive tone assimilation marks the fact that the constituent following the elidable boundary is a nominal.
7. Regressive tone assimilation marks either one or the other of the following two conditions:
 - A. The constituent following the elidable boundary is a nominal.
 - B. The constituent preceding the elidable boundary is not a nominal or a verbal root.

BIBLIOGRAPHY

- Armstrong, Robert G. 1968. "Yala (Ikom) a Terraced-Level Language with Three Tones." *The Journal of West African Languages* 5:49-58.
- Bunkowske, Eugene W. 1972. "Eliding Boundaries in Ogoja Yala." *Research Notes from the Department of Linguistics and Nigerian Languages of Ibadan, Nigeria* 5:59-71.
- Greenberg, Joseph H. 1955. Studies in African Linguistic Classification. Branford, Connecticut: The Language and Communication Research Center, Columbia University and The Program of African Studies, Northwestern University.
- _____. 1966. The Languages of Africa. The Hague, Netherlands: Mouton and Company for Indiana University, Bloomington, Illinois.
- _____. 1966. Universals of Language. Cambridge, Massachusetts: The M.I.T. Press.
- Koelle, S. W. 1854. Polyglotta Africana. London: Church Missionary Society.
- Ladefoged, Peter. 1968. A Phonetic Study of West African Languages. London: The Cambridge University Press.
- _____. 1971. Preliminaries in Linguistic Phonetics. Chicago and London: The University of Chicago Press.
- McGettrick, Thomas. 1961. Catechism in Yala Dialect. Ibadan, Nigeria: Claverianum Press.
- Meeusen, A. E. 1967. Bantu Grammatical Reconstructions. Tervuren, Belgie: Koninklijk Museum Voor Midden-Afrika - Musee Royal De L'Afrique Centrale.
- Meinhof, Carl. 1948. Grundzüge einer vergleichenden Grammatik der Bantusprachen. Hamburg: Eckhardt and Messtorff.
- Nida, Eugene A. 1946. Morphology. Ann Arbor, Michigan: The University of Michigan Press.

BIBLIOGRAPHY

- Schachter, Paul M. 1961. "Phonetic similarity in tonemic analysis, with notes on the system of Akwapim Twi." *Language* 37:231-38.
- Smalley, William A. 1961. Manuel of Articulatory Phonetics. Ann Arbor, Michigan: Cushing-Malloy, Incorporated.
- Welmers, William E. 1973. African Language Structures. Berkley - Los Angeles - London: The University of California Press.
- _____. 1950. "Notes on two languages in the Senufo group: I. Senadi." *Language* 26:126-46.