

A DESCRIPTION OF DII
PHONOLOGY, GRAMMAR, and DISCOURSE

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LIST OF ABBREVIATIONS AND SYMBOLS

[]	phonetic brackets
/	or
/ /	phoneme indicator, or morpheme title indicator
// //	morphophoneme indicator (or simply a capital letter)
Ø	zero allomorph, morpheme; = systematic <u>absence</u> of a form
ˊ	high tone
ˋ	low tone
> or →	becomes, is realized as
-	1) joins two or more English words used to translate a single Dii word--or: 2) separates parts of Dii words to facilitate use of solid "position lines" (5.0.5.) or interlineary glosses, --or: 3) obligatory absence of a position
+	obligatory presence
±	optional
()	1) enclose separate elements to be treated together at all times or 2) enclose optional elements
°	indefinite vowel or consonant length
\$	word or syllable boundary
< >	enclose a morpheme representative of a certain specified small group of morphemes
*	non-existent form
(1B35) or (4-2)	references to my data notebooks
x ₁ , x ₂ , x ₃	(subscript) indicate contrastive types, classes
x _a , x _b , x _c	(subscript) indicate subclasses, non-contrastive types
x ⁿ	(superscript) indicates an indefinite number of repetitions
└─/─↑	indicates an optional position for some element
┌───┐	joins discontinuous elements of a single linguistic unit
┌───┐ c	concord or agreement between two elements

$\pm(\pm \dots \dagger \dots)$ or $\begin{array}{c} \text{---} \pm \text{---} \\ \pm \qquad \dagger \end{array}$ both elements are optional, but only one may occur in a single construction

$+(\pm \dots \pm \dots)$ or $\begin{array}{c} \text{---} + \text{---} \\ \pm \qquad \pm \end{array}$ both elements are optional, but at least one must occur

$\pm(+ \dots + \dots)$ both elements are optional, but they can only occur together

A	antecedent in logophoric reference
acc	accompaniment
adj	adjective
adjr	adjectivizer
adv	adverb
advr	adverbializer
aff	affirmative
AfrS	African Studies (and Bantu Studies)
aux	auxiliary
Ax	axis position
B	body of a tale
C	complement position in clauses; consonant
CA	'conclusion of the action' section in a tale
card	cardinal numeral
Cau	see Sb Cau
cent	centenary numeral
CG	complement-as-goal position
chge	change
Cl	clause
CM	clause marker position
cm	clause marker
CNRS	Centre National de la Recherche Scientifique
co	coordinate
Comp	(independent) comparison clause/see Sb Comp
comp	comparison
Con	see Sb Con
cp	compound
Cpd Sent	compound sentence
Cplx Sent	complex sentence
cs	centisecond(s)
d	dual
Dat	dative clause
dat	dative = 'psychological'
dble	double
dec	decade numeral
Dem	demonstrative position
dem	demonstrative root

Desc	descriptive clause
desc	descriptive
Desid	desiderative clause/see also Sb Desid
desid	desiderative
det	detail
di	ditransitive
dir	direct
Dir Quo	direct quotation
Dist	distributive position
dist	distributive
Ditr	ditransitive clause
EC	explanatory closing of a tale
EI	explanatory introduction of a tale
Emph/E	emphatic position/clause
emph	emphasis/emphatic
Eng.	English
Eq	equative clause
eq	equative
Excl	exclamative clause
excl	exclusive (pronoun)
EXCL	exclamative morpheme
Exp	expletive position
exp	expletive root
FACT/Fact	factative mood or marker
FC	formal closing of a tale
FI	formal introduction of a tale
F-I	FACTATIVE-IMPERFECTIVE
finemph	final emphatic
FOC	focus position
foc	focus root
ForLing	Forum Linguisticum
F-P	FACTATIVE-PERFECTIVE
Fr.	French
frac	fraction
Ful	Fulfulde (Fulani)
FUT	future
fut	future (in subscripts)
futemph	future emphatic (in subscripts)
gen	genitive (NP only)/general (not NP)
genan	animate genitive
H	head position; high tone
HYP/Hyp	hypothetical mood/see also Sb Hyp
hyp	hypothetical particle
Hyp Sent	hypothetical condition sentence
I	indirect object position
i	intransitive

IA	instrumental-accompaniment position
Ideo	ideophone position
ideo	ideophone
IdeoP	ideophone phrase
IMPF/Impf	imperfective aspect or marker
IMPV/Impv	imperative mood or marker
In	noun as indirect object
Inch	inchoative clause
inch	inchoative
incl	inclusive
indef	indefinite root
indir	indirect
Ind Ord	indirect order clause
Ind Quo	indirect quotation clause
Init	initial position in a sentence, serial clause, or phrase
Int	intentional clause
int	intentional
Intr	intransitive clause
Intro _{di}	ditransitive introducer clause
Intro _{tr}	transitive introducer clause
Ipr	personal pronoun as indirect object
īP	ī phrase
JALL	Journal of African Languages and Linguistics
JWAL	Journal of West African Languages
kin	kinship
kinab	absolute kinship
kinlog	reference (logophoric) kinship (possessive)
L	low tone
Lg	Language
LI	Linguistic Inquiry
Lim	limiter position
lim	limiter root
Lo	locative position
lo	locative morpheme
Loc	locative clause
LOG	logophoric
log	logophoric (subscript)
LoP	locative phrase
M	mid tone
m	motion
Man	manner position/see also Sb Man
man	manner (morpheme, expression)
Med	medial position in a serial verb construction
mil	millennial numeral
ML	mood-logophoricity position
Mod	modifier position

N	nasal consonant; nasal syllable nucleus
n	noun
NEG	negative polarity
neg	negative
nomr	nominalizer
nonfut	non-future
NP	noun phrase
npr	non-personal pronoun
nuc	nucleus
num	numeral
NumP	numeral phrase
O	direct object position
obj	object
Obj Comp	object complement clause
oc	object complement
On	noun as direct object
OP	object of a pre-/postposition in Sb Rel
Opr	personal pronoun as direct object
ord	ordinal numeral
P	predicate position
Perc	perception clause
perc	perception
PERF/Perf	perfective aspect or marker
Piv Sent	pivoting sentence
pl	plural; plural marker
ple	plural exclusive
pli	plural inclusive
PM	PN-ML(-T) position
PME	emphatic PN-ML-T position
PN	person-number position
pn	proper name
PN-ML	person-number-mood-logophoricity composite position
PN-ML-T	person-number-mood-logophoricity-tense composite position
PN-ML(-T)	PN-ML or PN-ML-T
PN-ML-TE	emphatic PN-ML-T position
PNP	proper name phrase
Poss	possessive position; target possessive in logophoric reference
poss	possessive root
possd	possessed
possr	possessor
Post-v	post-verb position
Pr	(coreferential) pronoun; target logophoric pronoun
pr	(personal) pronoun
Pre-v	pre-verb position

Prim	primary position in a sentence
PROPELCA	Projet de Recherche Opérationnelle pour l'Enseignement des langues au Cameroun
PrP	pronoun phrase
Pur	purpose clause/see Sb Pur
Q	interrogative morpheme/position/clause
q	interrogative
qual	qualifying adjective
QualP	qualifier phrase
Quant	quantifier position
R	rule
RAP	relator-axis phrase
Rcp	reciprocal clause
rcp	reciprocal
Rec	recall position
rec	recall adjective
redup	reduplication
ref	reference (in ref-matrix)
REF COND	reference condition
Rel	relator position/see also Sb Rel
rel	relator (not as subscript)/relative (subscript only)
repeti	intransitive repetitive
repettr	transitive repetitive
Res Sent	response sentence
S	subject position
s	singular (nouns, pronouns)/stem (nouns, verbs)
say ^{di}	ditransitive verb of saying
say ^{tr}	transitive verb of saying
Sb	subordinator position
sb	subordinator element
Sb Cau	subordinate cause clause
Sb Comp	subordinate comparison clause
Sb Con	subordinate concessive clause
Sb Desid	subordinate desiderative clause
Sb Hyp	subordinate hypothetical clause
Sb Lest	subordinate negative purpose clause 'lest'
Sb Man	subordinate manner clause
Sb Pur	subordinate purpose clause
Sb Rel	relative clause
Sb TeLoC	subordinate temporal-locative-conditional clause
Sb Until	subordinate 'until' clause
sbemph	subordinate emphatic
SbP	subordinating phrase
SELAF	Société pour l'Etude des Langues Africaines
Sent	sentence
Sim	simile position (on clause level); see also Comp

sim	simile
Spr	personal pronoun as subject
Stv	stative/passive clause
stv	stative/passive
subj	subject
SVO	subject-verb-object word order
T	tense position
TAM	tense, aspect, mood
Te	temporal position
te	temporal root
telo	temporal-locative root
teloc	temporal-locative-conditional
TeP	temporal phrase
Ter	terminal position in a sentence, serial clause, or phrase
TOP	topicalizer; topicalized; topicalized position
top	topicalizer morpheme
Tr	transitive clause
tr	transitive
uni	unit
V	vowel; short vowel
v	verb
V°	indefinitely long vowel
vd	voiced
vl	voiceless
VN	verbal noun mood, clause
vn	verbal noun/infinitive
VNP	verbal noun phrase
V ^{nuc}	vowel nucleus of a syllable
Voc	vocative position
voc	vocative
VP	verb phrase
VV	long vowel
VVV	overlong vowel
V-V	double vowel = V'V or VgV

INTRODUCTION

From September 1963 until my retirement in August 2001, I was engaged in the study of the Dii language and in training personnel at the Dii Literature Center in Mbé, assisting them in the production of literature, the creation of literacy materials and the running of several literacy campaigns. In-depth analysis of the phonological, grammatical, and discourse structures of the language was necessary, first for me to understand those structures on all levels, to use them in editing several editions of the primers and readers, and then to help the personnel understand them and use their knowledge to produce quality literature and translations in the language. An initial attempt at describing Dii structures was published in French: Bohnhoff 1971b.

My initial training in 1962 was structuralist, specifically Tagmemic, and my initial attempts at description leaned heavily on Kenneth Pike and Robert Longacre for the analytical tools and descriptive symbols needed in the task. My debt to these two linguists is obvious, especially for their uses of constructions, tagmemes, positions and fillers, their distinction between etic and emic, etc.; see appendix D for more specific comments. In my life as translator, counselor, and producer of literature in the Dii language, I gradually built up the description that is presented here in the current format. The restructuring of translated texts into fluent, flowing Dii obliged me to understand Dii surface structures to the maximum. The current work is my effort to make my understanding available to a wider audience.

As the years passed, I modified my writing style while remaining structuralist, hoping for a description that would be understandable to the contemporary reader, without presenting a 'too complicated' formal apparatus; whether I've succeeded in that goal, only the reader can judge. It will also be obvious to the seasoned reader that some sections were written under the influence of other theories; for health reasons, I have not made an attempt to uniformize the whole of this work. This is especially visible in portions of chapters 5 and 7.

The third edition of the Dii dictionary (Bohnhoff and Kadia 2002) is the companion volume to the current work, and was edited in French.

This volume is not a pedagogical grammar. For instruction in Dii, the reader is referred to Bohnhoff and Kadia 1990, Cours de Langue Dii, and the two tapes prepared for that course.

An effort has been made to avoid obliging the reader to jump from chapter to chapter in order to understand the presentation. If the reader wants to learn about Dii nouns, for example, then section 3.4 should be consulted to read about the different nominal types, their internal structures, and their external distribution. There are references to other chapters in the book, but they're always enclosed in parentheses, and are seldom obligatory to the understanding of the section being read.

The Dii language (Duru or Durru) is spoken in northern Cameroun by an estimated 50,000 people. The chief concentration of the Dii population, as illustrated on the map at the end of this introduction, is located in an area north and northeast of Ngaoundéré, and south and southeast of Garoua, although sizeable Dii populations have sprung up in Ngaoundéré, Garoua, Yaoundé, and Douala.

The Western dialect (mam be'), centered around Mbé, is the subject of this study; Kadia Mathieu and Asmaou Marthe are the principal informants; additional data came from Koulagna Jean Bosco and many other speakers of the language as well. Western dialect speakers on the plain (excluding those on the plateau, for which I have no exact figures) numbered 5,767 according to census figures from 1959-1961; they now number an estimated 10,000 persons, although the last 40 years have seen a commingling of speakers from the previously distinct dialect areas, especially along the main north-south road going through Mbé. The mam be' dialect of Dii was chosen for the production of literature in Dii by the Evangelical Lutheran Church of Cameroon because it's the prestige dialect, although not the majority dialect.

Joseph Greenberg (1970:9) placed Dii (his Durru) with Vere, Namshi, Kolbila, Pape, Sari, Sewe, Woko, Kotopo, and Kutin in the Adamawa group of the Adamawa-Eastern subfamily of the Niger-Congo family. The Linguistic Atlas of Cameroun (Dieu et al. 1983:43, 96, 352-9) classed Dii in its (zone 3) Kobo-Dii 'Vere-Duru' group (Kobo, Komandera, Gimnime, Gimme, Dooyayayɔ = northern subgroup; and Pɛɛɛɛ, Lɔŋtɔ, Duupa, Pa'nɔ, Dii = southern subgroup) in the Adamawa subfamily of the Adamawa-Oubanguien family. Boyd (1999:3-4) places it in a group called 'Adamaoua du Sud-Ouest'. Bohnhoff 1968, 1971a, 1971b, 1976, 1982, 1986, 1990, Bohnhoff and Kadia 2002, and Bohnhoff and Boyd 2003 are the chief published sources that precede this more complete treatment of Dii structures.

This work is far from a complete Reference Grammar, however, which had been my first intention. The most incomplete treatments are chapters 2, 4, 8 and 9. Other portions that need expansion are mentioned where they are concerned. My remaining strength at this time does not

allow for a thorough re-editing of the whole; I beg the reader's indulgence.

A few remarks on some formal details in the presentation follow.

1) Orthographic symbols used are those for Cameroon as contained in Tadadjeu and Sadembouo 1979. The letters used in materials published for use by the Dii population differ from those in this work in only one respect: in popular materials, both mid and low tones are unmarked, while in this work the low tone is marked (`), and the mid tone remains unmarked.

Examples:

<u>for the Dii</u>	<u>this book</u>	<u>meanings</u>
baa	bàà	he cultivates
nuṅ	nùṅ	he finds

2) References to my personal notebooks follow each example cited in chapters four to eight, and are enclosed in parentheses, as: (3-117).

3) Examples cited are first translated literally, then (if the literal translation is inadequate or misleading in English) also freely. The free translations are always enclosed in parentheses. Where ambiguity might result, a hyphen (-) joins two or more words used to translate a single Dii word.

Elsewhere, citations and glosses are enclosed in "...” because single quotes '...' or ‘...’ would be confused sometimes with the glottal stop in Dii words.

A complete list of abbreviations and symbols used in the text is found on the pages immediately preceding this introduction.

4) Boundaries of positions within clauses and sentences are clarified in the Dii examples by the use of a solid line over each distinct position. Occasionally a hyphen is inserted in the Dii text to facilitate the use of these solid lines.

5) The symbol Ø is used in the examples of Dii clauses where there is no overt third singular subject pronoun, since the absence of any other pronoun indicates the subject is third singular.

6) References to works cited take the form of the author's name plus the year of publication with or without a following page reference, as: Longacre (1964:7).



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The location of the Dii in Cameroon

map from: images.nationmaster.com/nm/motw/cameroon.html

CHAPTER 1

PHONEMES

1.0 INTRODUCTION

Bloomfield (1933:79) defined the phoneme as ‘a minimum unit of distinctive sound-feature,’ but a fuller and more general definition is that of Gleason (1961:9): ‘a minimum feature of the expression system of a spoken language by which one thing that may be said is distinguished from any other thing which might have been said.’ In other terms, different phonemes sound ‘different’ (as opposed to ‘same’) to the native speakers of a language. Hockett (1978:99) has summarized it as follows: ‘[it] is the assumption that every utterance in some single language is composed wholly of an ordered arrangement of phonological elements drawn from a strictly finite stock, which are the only ones of relevance for the language in question.’

One type of subphonemic analysis for Dii is described in appendix A. These components and the various ways of describing them are interesting, but the main concern of my work in Dii has been the production of literature, using phonemes as the smallest written units.

The Dii language uses some 55 distinct elements in its sound system: 34 consonants, consonant length, 10 basic vowels, vowel length, vowel doubling, vowel nasalization, 3 tonal levels, an emphatic stress (accent), and 3 types of juncture in utterances. Some phonemes are written with two or even three letters orthographically, but are of course single units and cannot be subdivided, e.g.: mb, mgb, kp, w.

Some phonemes have phonetic variants (allophones) that occur in different positions in syllables or words. A good example is the phoneme w in Dii, with nasal (w̃) and non-nasal (w) variants. See discussion of the phoneme w below.

1.1 CONSONANTS

Table 1.1 displays Dii consonant phonemes. In the following illustrations, high tone is written /´ /, low tone /` /, and mid tone is left unmarked. Allophones and phonetic symbols are enclosed in brackets [...] following several phoneme symbols.

	bil = bilabial vel = velar	lad = labiodental glo = glottal	alv = alveolar lav = labiovelar	alp = alveopalatal			
	bil	lad	alv	alp	vel	glo	lav
STOPS							
-voiceless	p		t		k	´	kp
-voiced, semi-voiced	b		d		g		gb
-prenasalized	mb		nd		ŋg		mgb
-implosives	ɓ		ɗ				
FRICATIVES							
-voiceless		f	s			h	
-voiced, semi-voiced		v	z		g[gh]		
-prenasalized			nz				
NASALS							
	m		n		ŋ		
LIQUID							
			l				
VIBRANTS							
		vb	r				
SEMI-CONSONANTS							
	w			y			
PREGLOTTALIZED SERIES: ´m, ´n, ´w, ´y							

Table 1.1: Dii consonant phonemes

Distribution of consonants in syllable-initial and syllable-final positions is discussed in section 2.1.

Syllable-initial p, t, k, are aspirated. A more fronted, almost palatal allophone of k occurs when preceding i, ɪ, or e; otherwise k is velar.

p [p^h] pí he sets-a-trap, púg wild animal, pàḥ he carries.

t [t^h] tù he guards, tàà he thinks, tè he washes (clothes), tàà he is-tired.

k [k^h] kì he hears, kó he does, sàkùùd cloud, káákáá eternal, kóó skin.

´ [ʔ] The glottal stop is pronounced in Dii before all words beginning in the popular orthography with a vowel, although it's not

written in this position. In this work, these words will be written as in the popular orthography: bà'á father, áá'à [ʔááʔà] no!, zè' fish, nú' tooth.

kp kpòò he rubs, kpàà bow, kpùù viper, kpáá he scratches.

The phonemes b, d and g have the following allophones: 1) voiced in syllable-initial position; 2) voiceless released or unreleased in free variation syllable-finally in isolation; 3) voiceless unreleased before a following consonant; 4) semi-voiced word-medially after a long vowel. Doubled stops between syllables are always composed of first the voiceless allophone, then the voiced: -bb- = [pb], etc. As for k, a more fronted allophone of g occurs before the front vowels i, ɪ, or e.

b [p, b] bab field, bè he enlarges, he grows, báa he is-lost, dub yam, babbí in the field.

d [t, d] dìì black, dù he cuts-down, dèè he draws, dòg he goes-up, vid night, bíð bad, kòd forest, kòddí in the forest.

g [k, g] gí he sells, gè he breaks, gìgìg agitated, hígìgì astonished, gén (rain) stops, hág country, hággì it's-a-country.

g [gh] A voiced fricative similar to the Parisian r: Paris, and is found almost exclusively between two short, identical vowels: vágád human life principle, yigid shade, shadow, ndígíd he twists-in-pain, kígì round, zágààà all day long. This unit is written with the symbol g in the popular orthography. The following few morpheme combinations (none are single morphemes) might be used to support a phonemic analysis technically, but the Dii literature staff rejects writing the symbol gh: hágá or hágí on the ground; yógáa? tomorrow?; dágáa? one?; í yògòòò like that a long time.

gb gbó he hits, gbaa place of sacrifice, gbèè mumps, Tagbùñ village of Taboum.

mb mbàà he sits, he is, mbùù hyena, mbóg he prepares, mbòò covered with (mud/bees...).

nd ndàà cow, ndóg sore, wound, ndún pepper, ndaad bright red.

ng ngaa yam bean, ngón tuberculosis, ngàgàm a certain fruit, zángà he reads (Ful).

- mgb [ɲmgb] Prenasalized gb: mgbàà bush spirit, mgbà̀ molar, mgbéémgbéé crying without stopping.
- 6 Implosive: bù̀ they are-numerous, b̀̀ today, b̀̀ woven basket, b̀̀ a certain bush.
- d Implosive: d̀̀ he is-far-away, d̀̀ he climbs, d̀̀ calabash, gourd.
- f f̀̀ body, f̀̀ he accepts, f̀̀ he returns, f̀̀ he teases.
- s s̀̀ it is-deep, s̀̀ he pricks, s̀̀ he searches, s̀̀ carefully.
- h h̀̀ it is-full, h̀̀ he wants, h̀̀ country, h̀̀ thing.
- v v̀̀ he asks, v̀̀ fire, v̀̀ neck, v̀̀ he goes-out, v̀̀ bracelet.
- z z̀̀ he drinks, z̀̀ buffalo, z̀̀ sun.
- nz g̀̀ nzúu name of a certain mountain, nzaad gluey.
- m [m, m̥] m̀̀ he speaks, m̀̀ tongue, zum flour; occurs also as nucleus of syllables as in é”mh̀̀m̀̀ expression of sympathy.
- n [n, n̥] ǹ̀ǹ̀ five, na’ he is-big, kan and, with, by; occurs also as nucleus of syllables as in ’n”nh̀̀ǹ̀ expression of sympathy.
- ŋ d̀̀ near, z̀̀ he pounds, vaŋná fast.
- l [l, ɺ] [l] occurs syllable-initially or finally, or when l is doubled: lúú he leaves, b̀̀ elephant, b̀̀l̀̀ it is-an-elephant; but between two vowels word-medially, a flap is possible: là̀l̀ going, lúú́l̀ leaving, l̀̀ thin, l̀̀ thick. The last two examples are of a curious occurrence seemingly mostly in ideophones; very few tokens were found of this sound: the tongue is pushed firmly against the palate behind the alveolar ridge, then flapped forward.
- vb [v̥] The lower lip is placed behind the upper teeth, then flaps forward, simultaneous with voicing: vbóó walking stick, vb̀̀ he rolls, vb̀̀ he snatches, vb̀̀ lie, falsehood, vb̀̀’ he takes-a-lot-of.
- r [r̥] Occurs in Dii only syllable-finally and as an alveolar trill: kp̀̀r̀̀ very rigid, d̀̀ very heavy, ẁ̀ imitation of the sound of crushing grain.

The nasalized variant of w and y occurs either before or after a nasalized vowel. Boyd (1989:198) has appropriately remarked that nasalization in Adamawa languages is often associated with the whole syllable instead of with single phonemes, a remark valid here for Dii.

w [w, w̃] waa child, wəḡ husband, hàw̃ termite, wakéé kəw prostitute.

y [y, ỹ, ñ̃] yúú head, yèd he pours-out, mbógoy it prepares-itself, is-prepared, goy it breaks-itself, is-broken; the variants ỹ or ñ̃ occur before or after a nasalized vowel, individual speakers preferring one or the other in their speech: yag mouth, yà'əd dog, híy it catches-on (something).

'm ['m, 'm̃] Preglottalized m: 'màà he is-thin, 'màn pliers, 'màñ new, 'méñ he finds (a lost item); occurs as nucleus of syllables as in 'm̃m̃'m̃ no.

'n ['n, 'ñ] Preglottalized n: 'ná' he steps-on, stamps, 'nò' she mixes-with-the-sauce, 'néñ only (one); occurs as nucleus of syllables as in 'ñ"nhhè expression of sympathy.

'w Preglottalized w: 'wàa he finishes, 'wəə'wəə swollen, 'wó'wó snail, 'wég hoof.

'y Preglottalized y: 'yúú he sticks-out (his lips), 'yòg he sucks, 'yá'yá worthless.

All consonant phonemes occur initially before the vowel aa (or aã) except nz, 'n, r, and g [gh], as Table 1.2 illustrates. The remaining normally initial consonants, nz and 'n, don't happen to occur with aa or aã in our data. Indigenous Dii r occurs only word-medially and syllable-finally; g [gh] occurs only in double vowels and word-medially; thus these don't appear in Table 1.2.

In a manner of speaking, Table 1.2 becomes a massive contrasting group, corresponding to the 'minimal pairs' that are often sought in phonology, especially in this case since nasalization (see 1.3) and three tonal levels (see 2.2) are shown to be contrastive elsewhere.

<u>pàa</u> he drives	<u>tàa</u> he thinks
<u>kaa</u> village	<u>áá</u> he yawns
<u>kpàa</u> bow	
<u>bàa</u> he hoes	<u>dàa</u> he passes
<u>gàa</u> he knows	<u>gbaa</u> place of sacrifice
<u>mbàa</u> he sits	<u>ndàa</u> cow
<u>ngaa</u> yam bean	<u>mgbàa</u> bush spirit
<u>ḅàa</u> basket	<u>ḁáá</u> he climbs
<u>fàa</u> repeat	<u>sàa</u> village court
<u>hàa</u> he insults	
<u>vàa</u> older brother who watches during circumcision rites and cares for his newly circumcized younger brother	
<u>zàa</u> a bit later	
<u>màa</u> it is-enough	<u>nàa</u> he dances
<u>(ḁa)ḅaa</u> kitchen	
<u>làa</u> he goes	
<u>vbáa</u> it twines around	
<u>waa</u> child	<u>yaa</u> he comes
<u>'màa</u> he is-thin	<u>'wàa</u> he finishes
<u>'yáa</u> he stalks	

Table 1.2: Consonants occuring before /aa/ or /ḁa/

1.2 CONSONANT LENGTH

Consonant length is important in Dii (cf. káné crying, and kánné mutual desire), although most lengthened consonants are predictable. The importance of consonant length can be illustrated by the following two sentences, where the division into grammatical words is given in parentheses:

mínímnáné I'm not yet awake (mí ním ná né), and
mínímnánnè I awoke well (mí ním nánnè).

Consonant length is usually predictable, however, by the length of the preceding vowel and the speed of pronunciation. When a stem containing a short vowel takes a suffix, the stem's final consonant is lengthened if the suffix begins with a vowel: bab field, babbí in the field. But this lengthening is often suppressed in faster speech: babí. After a long (or double) stem vowel, the consonant is not lengthened: ba'ad work, ba'adí at work.

1.3 VOWELS

There are 10 basic Dii vowels, four front (i, ɨ, e, ɛ), two central (ə, ɔ), and four back (u, ɯ, o, ɔ). These vowels can be long, short, double, or (except for ɛ, ɔ and ɯ) nasalized. The vowel ɨ seems not to be nasalizable except as influenced by context. Table 1.3 shows the simple (i.e., non-double) oral and nasal Dii vowels using these criteria, using the usual features of tongue position, lip rounding, and tongue height.

	front	central	back
ORAL VOWELS	<u>unrounded</u>	<u>unrounded</u>	<u>rounded</u>
high - close	i		u
- open	ɨ		ɯ
mid - close	e	ə	o
- open	ɛ		ɔ
low		a	
NASAL VOWELS			
high	ɨ̃		ɯ̃
mid	ɛ̃	ə̃	õ
low		ã	

Table 1.3: Simple (i.e., non-double) Dii oral and nasal vowels

The long, short, double and nasalized vowel possibilities in Dii are theoretically as follows:

ORAL

-short:	a	ɛ	e	i	ɨ	ɔ	o	ə	ɯ	u
-long:	aa	ɛɛ	ee	ii	ɨɨ	ɔɔ	oo	əə	ɯɯ	uu
-double:	aga	ɛgɛ	ege	igi	ɨgi	ɔgɔ	ogo	əgə	ɯgɯ	ugu
	a'a	ɛ'ɛ	e'e	i'i	ɨ'ɨ	ɔ'ɔ	o'o	ə'ə	ɯ'ɯ	u'u

NASAL

-short:	ɔ̃	ɛ̃	ɨ̃	õ	ə̃	ɯ̃
-long:	ɔ̃ɔ̃	ɛ̃ɛ̃	ɨ̃ɨ̃	õõ	ə̃ə̃	ɯ̃ɯ̃
-double:	ɔ̃gɔ̃	ɛ̃gɛ̃	ɨ̃gi	õgɔ̃	ə̃gə̃	ɯ̃gɯ̃
	ɔ̃'ɔ̃	ɛ̃'ɛ̃	ɨ̃'i	õ'o	ə̃'ə̃	ɯ̃'ɯ̃

Double vowels aren't to be confused with long vowels in Dii, although many linguists use the terms synonymously (see Grammont 1965:52-3). Double Dii vowels V-V serve as syllable nuclei in the same way that short V and long VV vowels do. This phenomenon isn't unheard of in West Africa (Bearth 1971:55). Dii has two types of double

vowel, one with a medial glottal V'V, the other with a medial g [gh] VgV. Following are seven characteristics of double vowels.

1. The whole cluster is either oral or nasal: V-V or \bar{V} - \bar{V} , never \bar{V} -V or V- \bar{V} .

2. Both 'parts' of the vowel have identical vowel quality: aga, igi, a'a, i'i, ε'ε, etc.

3. The same tones occur on double vowels of 'content word' dictionary entries as occur on long vowels, i.e., the tone glides high-mid and low-mid occur, but other glide possibilities are excluded. If the double unit were a bisyllable (2 syllables), free occurrence of all tones on any vowel would be expected, as actually does occur with bisyllabic dictionary entries.

4. Since syllable-final nasal (m, n, ŋ) consonants carry a distinctive tone following a short vowel, one would expect that if V-V were a bisyllable, a final consonant in the combinations V-Vm, V-Vn, etc., would bear a distinctive tone, too. This is, however, not the case.

5. Occurrence restrictions with final consonants in syllable patterns indicate also that double vowels aren't bisyllables. Not only do V-V units have their own distinctive occurrence restrictions in contrast to simple V and long VV vowels, but (see Table 1.12) even the two patterns V'V and VgV seem to have different patterns of occurrence.

6. In the verb groups (3.8, Table 3.6), syllables with double vowels cannot be treated as if they contained two short vowels. For example in the negative, a verb with a short vowel adds -n and retains it even when the clause-final marker /né/ is juxtaposed: mí sɛ́n né I don't want to. But if the verb root contains a long or double vowel, this -n is lost when the negative particle is juxtaposed: mí làa(n) né I'm not going; mí nàga(n) né I didn't grind it. Since the pattern CV-V doesn't retain the suffix -n, it shouldn't be interpreted as a bisyllable. Moreover, there seem to be no bisyllabic verb roots of Dii origin, since all bisyllabic roots collected so far are borrowings from neighboring languages.

7. In songs, double vowels are often sung at twice normal speed so as to be included in a single rhythmic beat or note. When singing to melodies of Western origin, the beat can only with extreme reluctance be allowed to fall on the second half of a double vowel. Beats can fall on the first half of a double vowel, however, with no difficulty.

Each vowel will now be examined in turn. First, examples of all short, oral vowels.

- i gí he sells, mìg nose, vìd night.
- i yì he breaks-open (couscous), kì he hides, kid charcoal, tì' he opens (his hand), víd smile.
- e né negative, 'wé cry of pain, be' sky, zè' fish, gègèè kind of sorghum.
- ɛ tè he washes (clothes), kè he pierces, bè he takes, steals, yèd he pours-out, ne' he washes (hands).

Note: e and ɛ have largely complementary distributions describable in terms of CV patterns and vowel length. E occurs short before syllable-final glottal or y, long in the syllable-final position. ɛ occurs short in any CV pattern except before syllable-final glottal or y, long before final consonant. The symbol \$ in the following formulae indicates a syllable boundary. Thus:

E (and ɔ) occur in the patterns:

VV \$
V'V \$
V' \$
Vy \$

ɛ (and ɔ) occur in the patterns:

VVC \$
V'VC \$
VgV(C) \$
and V elsewhere

Examples of e and ɛ in these patterns: dey torn, vee fire, ve' year, kè'e he shucks (peanuts), tégé sandal, kè he digs, velí in the fire, sèg he rubs, nè'ed he licks, séeg orphaned.

Despite this widespread apparent distributional complementarity, a few minimal or similar pairs do indicate a phonemic status for the e/ɛ contrast:

née how vs. 'neɛ'nèé pointed
débdèè waa amulette vs. bèddì it's-a-feather
zèè buffalo vs. zèè with wings out-spread

Some speakers, however, don't follow this exact pattern, but distribute the phonemes differently or use a phone which is between the two under discussion. My two main informants use the pattern here described.

- ɔ gè he breaks, vè he scorches with a bit of flame, nə he sleeps, vəg neck, kád different.

- a sà he pricks, wá' he counts, mam water.
- ɔ zò he drinks, tò it rusts, nónó five, tóg ear, nom dead.
- o vóó our, sòò he looks-for, tò if, wànbó' ten.

See the above discussion for e and ɛ concerning the distribution patterns of o and ɔ for my two principal informants. As for e and ɛ, however, despite wide-ranging apparent distributional complementarity, one can find a rare minimal/similar pair which forces a phonemic interpretation for these two vowels. Examples of apparent complementarity:

vo' thirty vs. vó we
vóó our vs. vógód life
 wòòd small red centipede

Examples of minimal/similar pairs:

yó' he swallows vs. yò' what-you-may-call-it
dòò alcoholic drink vs. ndòò insulting, angry answer

- u dù he cuts-down, pù he gives, zum flour.
- u sú it is-deep, úg he flies, nùh he finds.
- i hì he snores, hì' it is-full, zi' truth potion.
- ɛ hɛ he sets (a post), hɛhɛw very hot (sun, water), dɛ' reed, dɛ' he is-clean, vɛ' he goes-home.
- ɔ həgód very clear (water), kɔ' he flatters, sɔ' he cuts (through).
- ɔ hà he breaks-off (leaf), kà' he is-cold, hag pregnancy, zazá' whitish (water).
- o ò he says, hò he sees, tò' he picks (fruit), dòdòò reason.
- u yúú hú' hair, kpú' very old.

All oral and nasalized vowels occur long as well:

- ii dìì black, líd fruit.
- ij híí he wants, zìì it is-heavy, sííd unfaithful to spouse.
- ii hìì metal, sìì war, dìid fox.

ee zèè buffalo, mbèè sheep, sèè old, péém/sápéém wind.

εε zèè with wings outspread, méé tongue, kèem robber, waa séeg orphan.

εε fèè he accepts, kéé wife, gèem hip/buttock.

əə səə he stays-awhile, nəə he rests, bàəm stutterer.

əə kəə he falls, wəə husband, páəd fragile newborn.

aa bàà he hoes, 'wàa he finishes, bàad planting season.

aa tàà he is-tired, záad alive.

oo ndòò insulting, angry answer, gbòm̀s̀d̀ò̀g earthworm, wòod small red centipede.

oo sòò he searches, 'móóm fine millet powder.

oo fóó body, kpòog deaf-mute.

uu zùù he descends, hùud seed.

uu dùù he follows, gúú six, ya úud sleeping spot.

uu hùù he kisses, vùù imitation of the sound of an airplane, tùú imitation of the sound of passing gas.

Examples of the double vowels that occur follow:

igi kígi ball, lump, round, yigid shadow.

igi tìgi he shakes, tígíd midnight, yígíd he is-made-crazy.

ege

εε tégé sandal, tégém liver.

əə tágə he looks-around, təgəd he filters.

aga lágá he whispers, vágád life, sàgàd sand.

oo yógó tomorrow, f̀g̀d̀d bean leaf.

ogo

ugɥ mbúɥɥ sorcerer, púɥɥ he gives-him, gúɥɥ he compares.
 ugu kúúduɥu bush, kúsúɥum back, sùɥud cotton.
 ɪɪ ɪɪ
 ɛɛ keɛɛ (fishing) net, sɛɛɛd selfishness.
 ɔɔ ɔɔɔd make very uncomfortable
 ɔɔ gbàɔɔ gray duiker, 'yàɔɔ yè now, paɔɔm behind.
 ɔɔ í yòɔɔ like that, kòɔɔ he is-weak, 'yóɔɔ he teases, kòɔɔm weak.
 uɥu uɥud very good (wine).
 i'i ní'i he patches several, kpi'íd laterite rock.
 i'i hí'i he laughs, hì'i he separates, hì'íd fork, branch.
 e'e pè'e he makes-several-flat, yè'è split, kè'èd yellow dirt.
 ɛ'ɛ ḡé'égéd empty (stomach), ké'ém whitish, nè'ed he licks-with-tongue.
 ɔ'ɔ há'ɔ naa small curved knife, bá'ɔ he looks-at-several, mbə'əm imitation of someone slurping gravy.
 a'a tá'a he shoots-several, tá'ád he rises-early.
 ɔ'ɔ 'nò'òm sesame seed, mó'óm covered with dust.
 o'o kó'o (tree) bark, hò'od it has-a-strong-taste, do'od at the foot of.
 u'u ḡù'u he removes-skins-from, yù'u he removes-all-clothes, tù'ud he spits (on someone).
 u'u dù'u he pours-in-several-times, gbú'úd he vomits.
 ɪ'ɪ pi'ɪ they line-up, zɪ'íd he sneezes, sɪ'íd end.
 ɛ'ɛ dè'ɛ he cleans-several, vɛ'ed green, unripe, gbɛ'èm kind of tree.
 ɔ'ɔ də'ɔ small piece, vbə'ón it falls-across.

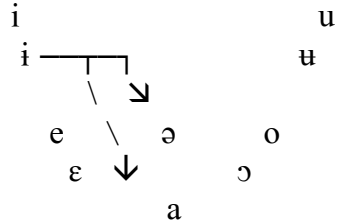
ạ'ạ tạ'ạ he unsticks, kạ'ạd cold, cool.

ọ'ọ kọ'ọ he coughs, kọ'ọd flower, zọ'ọd beginning of dry season.

ự'ự du'ự short (finger), kự'ựd it molds.

1.4 GLIDES

There are two vowel glides in the Dii language, neither of which need be written by a distinctive symbol because they're only phonetic variants. Both are in the front of the mouth, but one is higher than the other. These glides may be represented by arrows to more easily show the direction the tongue moves during pronunciation:



The upper glide is an allophone of the phoneme i, while the lower one is an allophone of ε (ɛ when nasal). They occur before a syllable-final g or ŋ or before medial g [gh]. There are also a few other words which don't end in g or ŋ that contain these glides, but seemingly in free variation with the regular vowel i, ε, or ɛ.

The final part of the i glide almost sounds like ə, but is fronted and higher in the mouth than ə. The last part of the ε (or ɛ) glide(s) sounds almost like the a in Eng. cat, or sometimes sounds nearly like the Dii phoneme a. Examples:

- i líg it flows, zìg it is-sweet, tìgi he shakes.
- ii biig snake, síig spear, zìzìig a certain lizard.
- ε gbèg twenty, béŋ a certain bush, tégé sandal.
- εε méég branch tips, waa séeg orphan.
- ɛ hègɛ he pulls-on-one-end-of (something), kɛgɛ fishing net.
- ɛɛ hɛgɛ bamboo

A set of words with all vowels occurring before syllable-final g has these glides filling the positions i and ε:

- | | |
|------------------------|---------------------------------------|
| <u>sig</u> grasshopper | <u>sug (mam)</u> flying spider thread |
| <u>síg</u> jealousy | <u>sùg</u> he gathers |
| <u>sèg</u> she cackles | <u>sóg</u> very straight |
| | <u>ság</u> abandoned field |
| | <u>sóg</u> price |

It's most significant for the analysis of these vowels that there are environments where i or ɛ become glides. Below, the non-glide is on the left, the glide on the right.

<u>hì</u> he buys	<u>hìgi</u> he buys-it
<u>dì</u> he is-in-the-process-of	<u>digi hìlí</u> he is-it-buying
<u>tè</u> he washes	<u>tègɛ</u> he washes-it
<u>kè</u> he pierces	<u>kègɛ</u> he digs-a-hole-through-the-wall-of (a house)

In other contexts, a glide in the base form (on the left) changes into a 'regular' vowel (on the right), sometimes also with a tone shift that is not explainable:

<u>dèḥ</u> he hits	<u>déné</u> hitting
<u>nèḥ</u> he chases	<u>néné</u> chasing
<u>'méné</u> he finds (a lost item)	<u>'méné</u> finding again

1.5 VOWEL LENGTH

Two topics need to be addressed concerning Dii vowel length. First, there are four lengths identified in the analysis:

- 1- short (e.g., kɛ he pierces, kəd quiver),
- 2- long (e.g., lii it bears-fruit, liid fruit), and double (e.g., sí'íd end, yigid shade),
- 3- overlong (e.g., kíii it's-a-concession, siìi it's-war), and
- 4- indefinitely long (meaning 'anywhere from normal to very long,' here symbolized by ° or by extra vowel or consonant letters: kpùù°/kpùùùù imitation of the sound of a rifle shot, záǵá°/záǵáááá all day long, sììì°/sìììììì very very quiet, tɛɛ°d/tɛɛɛɛd imitation of the sound of a trumpet).

While short, long, and indefinitely long vowels can be termed phonemic, overlong vowels do not occur freely in Dii. They arise from elision across a morpheme boundary (3.1), or from extra length given to a vowel due to an affective intonation pattern, and in addition, they occur only in open syllables. An example of the elision mentioned is the following: waa diìi child Dii-cm (he's-a-Dii), where diì plus the clause-final particle -ì becomes diìi.

An example of the affective lengthening of a clause-final vowel is the following: ò moo là ááa! Good bye! This lengthened final vowel evidently carries more sincerity or friendliness than the 'regular' form ending with áa.

The second topic is to specify the actual length of a given vowel in a given context, which of course is made difficult by multiple conditioning factors. Some of these factors will be listed in the last paragraph in this section.

There is statistical evidence (Bohnhoff 1976, chapters 4 to 6) that what linguistically is called 'length' for vowels in Dii is reflected in physical durational differences, long vowels being measurably longer than short. (This isn't necessarily the case for all languages, see Bohnhoff 1976, chapter 1). It can be maintained that in Dii there are three 'absolute' degrees of vowel length (short, long/double, and overlong), reflected in the following average durations (in centiseconds) extracted from speech sample 1 for the oral vowel /a/ in open syllables (Bohnhoff 1976, chapter 5):

<u>length 1</u>	<u>length 2</u>	<u>length 3</u>
short	long, double	overlong
7.5cs	10.5cs	16cs

For the purpose of comparison, the indefinitely long vowels in the same sample averaged 25cs in duration.

From the above figures, it's clear that long vowels in Dii are not twice as long as short vowels, but are merely longer, given a sufficiently specific context. The ratios between them aren't 1-2-4, or even 1-2-3, but are 1-1.4-2.1 for the three average durations cited above.

Some of the contextual factors that modify the exact duration of a given vowel (other than the speaker's tempo, style, etc.) are the following:

- 1) Vowels in pre-pausal position are lengthened considerably (by 'one length' in terms of the above 'absolute' degrees).
- 2) High vowels (i, u) are shorter than low ones (e, a, o).
- 3) Front vowels (i, e) are shorter than back ones of the same tongue height (u, o, o).
- 4) A hesitation in the speech flow can cause a vowel to be held longer.
- 5) Certain intonation patterns connected with emotions may cause certain vowels to be lengthened.
- 6) Emphasis, intensity, or the duration of an activity or state may cause a vowel to be lengthened. See the beginning of this section for several examples under the title 'indefinitely long.' All of these factors caused the following extremes (shortest and longest vowels) in one test sample (Bohnhoff 1976, chapter 5):

<u>short</u>	<u>long</u>	<u>double</u>	<u>overlong</u>
2-18cs	4-24cs	7.5-21.5cs	25cs

But such overlapping results shouldn't be taken to mean there is no such thing as vowel length in Dii. They simply mean one must allow for all the factors influencing length, removing them from consideration one by one. The result gives us the durational evidence that confirms what we hear as differing vowel lengths.

1.6 CONSONANT AND VOWEL RELATIVE FREQUENCIES

One major count has been done previously, that found in Bohnhoff 1971a and 1971b, section 1.6. The corpus that served as a basis for that count was 41 pages of transcription of spoken Dii, and contained 9,429 phonemes (5,152 consonants, 4,277 vowels). This count was made preparatory to writing the first edition of the Dii primer.

The results presented in Tables 1.4, 1.5, and 1.6 are from speech sample 2 in Bohnhoff 1976 (appendix C), updated by the analysis and orthographic conventions of 1981. A total of 18,541 phonemes were counted: 10,253 consonants, 8,288 vowels. The syllable initial glottal stop /' / was counted among the consonants, although it isn't written in the popular orthography. Consonants of non-Dii origin are enclosed in parentheses.

The consonant n is thus the most frequent consonant (1,237) in spoken Dii, followed by m (923) and ' (872). The total number of nasal consonants (m, n, ŋ, 'm, 'n) is 2,447 (1,297 initial, 1,150 final), or 24% of the total number of consonants in sample 2.

But note that the 'exotic' consonants (gb, d, b, kp, vb, 'm, 'n, mgb, etc.) occur infrequently.

Among the vowels, a is by far the most frequent, representing 38% of the total; and 30% of all vowels are nasalized if we include those nasalized automatically following an initial nasal consonant (1,155 plus 1,297).

<u>initial C</u>		<u>final C</u>		<u>initial C</u>		<u>final C</u>	
'	663					62	y
		660	n	f	60		
l	659			nd	51		
m	650			d'	35		
k	625			'y	31		
v	615					30	w
n	613					25	b
d	560			ŋ	24		
y	538					23	r
b	493			vb	16		
w	436					12	(s)
t	422			(r)	8		
s	389			'n	7		
h	280			kp	6		
		276	d	(kr)	6		
		273	m	ŋg	6		
p	267			(j)[dž]	4		
g	227					3	l
		217	ŋ	(nj)	3		
		209	'	'm	3		
		199	g	mgb	2		
mb	163					1	(k)
z	133					1	(f)
gb	121			(py)	1		
ḅ	80			nz	0		
'w	65					0	vb
				—————			
				8,262		1,991	
						Totals	

Table 1.4: Frequency of Dii syllable-initial and -final consonants; borrowed consonants are enclosed in parentheses

a	2,664	ɑ	487
i	810	ɛ	289
u	807	ɔ	256
ɪ	615	ɪ	77
o	573	ə	42
e	498	ògòòò	4
ɔ	448	ɹ	0
u	343		
ɛ	241		
ə	123		
agi, agaa, igii	11		
Totals	7,133		1,155

Table 1.5: Vowel quality frequency in speech sample 2

	<u>short</u>	<u>long</u>	<u>overlong</u>	<u>V'V</u>	<u>VgV</u>	<u>Total</u>
a, ɑ	1,848	1,118	7	109	69	3,151
i, ɪ	657	209	0	2	19	887
o, ɔ	255	539	0	6	29	829
u	593	147	0	58	9	807
e, ɛ	418	364	0	1	4	787
ɪ	584	21	0	6	4	615
ɔ	410	4	0	0	34	448
u, ɹ	169	156	0	5	13	343
ɛ	232	0	0	1	8	241
ə, ə	63	88	0	12	2	165
(agi, agaa, igii, ògòòò)						(15)
	5,229	2,646	7	200	191	8,288

Table 1.6: Frequency of vowel nuclei types (collated with vowel qualities) in speech sample 2

1.7 OCCURRENCE PATTERNS AND RESTRICTIONS

Not all consonant and vowel phonemes occur in every position within a syllable, word, phrase or clause. The following restrictions deal with units that are recognized elsewhere as phonemic. These patterns are listed with no order of importance or frequency.

The following syllable-final consonants (b, d, g, ʔ, m, n, ŋ, l, w, y), when preceded by a short vowel, automatically double in length before:
-the temporal-locative /lí/ (e.g. babbí in the field, zìŋŋí in the river),
-the verbal noun suffix /lí/ (e.g., sènné saving, lúúlí leaving), or
-a vowel-initial clause marker (which is translated ‘it’s a’ in the example: babbì it’s a field.

See section 3.1 for the use of the bars / /.

The nasal consonant used in the prenasalization of b, d, and g is required to be homorganic: mb, nd, ŋg, mgb = [ŋmgb].

Any vowel following a nasal consonant (m, n, ŋ, ʔm, ʔn) is automatically nasalized; this nasalization is therefore not written: nónó five, màà it is-enough, ʔmàà he is-thin.

The clause-final particle -ì, called a clause marker and abbreviated cm in this chapter (see also 5.1.1), is also automatically nasalized immediately following a nasal vowel: kóóè it’s-skin. This is true also if the nasal vowel is separated from the clause marker by the glottal stop: bà"è it’s-an-egg. The verbal noun suffix /lí/ shows the same automatic nasalization pattern: kà"é to be-cold. These nasalizations wouldn’t need to be written in the popular orthography, although several younger Dii prefer to write them.

After a short nasalized vowel, if no other consonant closes the syllable, the final consonant is seemingly restricted to a glottal stop: kà' he is-cold, sè' he cuts, etc. Only eleven exceptions have been found: hà he breaks-off (leaf), hẹ he sets (a post), hì he snores, hò he sees, ò he says, sò (foot) is-asleep, yá he hides-in-order-to-do-evil-to (someone), yà he attains, yè this, yó he melts (metal), yò there (near by).

When a glottal stop or g [gh] occurs between two short vowels of identical quality, these vowels are treated in Dii as a complex but unitary syllable nucleus (see 1.3), forming what is here termed a ‘double vowel’. The restriction is that each of these vowels must be short and of identical quality: yigid shadow, shade, zígíd sweet, vágád human life principle, yógó tomorrow, sùgud cotton.

When those verbs of the first group that end in a short vowel take a third singular pronoun object, this pronoun is suffixed to the verb and has the form: **g** [gh] plus a vowel identical in quality to the immediately preceding one. Thus: mí vì hẹn I ask something, but mí vìgi hẹn I ask-him something. The vowel of the pronoun is thus not u or o, as for the other verb groups (3.8.10), but is restricted to the quality of the immediately preceding vowel, thus creating a double vowel.

Last of all, certain vowel modifications occur so frequently that they're found in almost every Dii sentence.

-In the temporal and locative (telo) suffix /lí/,

-the verbal noun (vn) suffix /lí/, and

-in the clause markers (cm) ú and /né/,

some (but not all) speakers modify the suffix vowel, assimilating it somewhat to the height of the preceding vowel, as is shown in Table 1.7 (see also 3.4.2, 3.9.1, and 5.1.1). The exact assimilation that occurs for a given vowel following a given morpheme depends on the speaker involved, since these vowels aren't all modified in exactly the same way by all speakers; the forms cited here are as used by my two principal informants.

Although none of the assimilations mentioned in the preceding paragraph are contrastive in these suffix vowels, each assimilation involves distinction(s) that are phonemic elsewhere in Dii phonology: nasalization, and 3 or 4 levels of vowel height. We could write them with cover symbols in technical writing (E, I, O, and U), using capital letters to remind the reader that the assimilations being described are morphophonemic in nature. Such cover symbols aren't very helpful to the Dii reader, however, so these vowels are written in this work and in the popular orthography by symbols reflecting more closely the pronunciation.

Table 1.7 lists in the left margin the preceding vowel and/or consonant which condition(s) the assimilation of the suffix vowel. Across the top of the table are listed the several morpheme titles in / /, with the concrete realizations of these morphemes directly below each.

The bar / in the first three columns of Table 1.7 means 'either/or,' depending on the speaker and the preceding morpheme. For the cm ú in column four, the first option occurs when the preceding syllable ends in a consonant, the second when it ends in a vowel. This second option is initiated by an unwritten glottal stop (ʔ) and is written as a separate word in the popular literature.

Table 1.7 outlines the assimilations referred to above. The negative clause marker /né/ is pronounced either ní or né. The vowel of

the temporal-locative /lí/ is realized either as í, í or é. That of the clause marker -ì is pronounced ì, ì, or è; that of the clause marker ú is realized either as ú, ú, or ó, etc. A high suffix vowel following a nasal consonant is simply nasalized, but a ‘low vowel’ as defined in this chart is lowered even further when preceded by a nasal consonant or a nasalized vowel.

Although some Dii have a less complicated set of realizations than those shown in Table 1.7, all speakers seem to retain some assimilation due to the preceding context. Some examples of the assimilations as per my principal informants follow. As elsewhere in this section, the abbreviation ‘cm’ will be used, ignoring for the moment the finer distinctions of aspect and mood that will be treated in detail in chapter 5.

TEMPORAL-LOCATIVE (telo) SUFFIX /lí/

<u>lìggí</u> in the house	<u>be"í</u> in the sky
<u>kè'emé</u> in the entry house	<u>la"í</u> in the tree
<u>hú"í</u> in the group, herd	<u>kòddí</u> in the woods
<u>mènné</u> in the afternoon	<u>yag kà'amé</u> in the morning
<u>sèy tóólí</u> at another time	

VERBAL NOUN (vn) SUFFIX /lí/

<u>hí"lì</u> wanting, loving	<u>pìmní</u> heating up
<u>tùlí</u> guarding	<u>báané</u> wandering-around-lost

CLAUSE MARKER (cm -ì) WITH FINAL NOUNS

<u>Mí hò yúuì.</u>	I see (a) head-cm.
<u>Mí hò kaaì.</u>	I see (the) village-cm.

CLAUSE MARKER (cm ú) WITH FINAL VERBS

<u>Ya pì ú.</u>	It is-hot cm.
<u>Mam kà"ó.</u>	(The) water is-cold-cm.

NEGATIVE CLAUSE MARKER (cm /né/)

<u>Mí hòn kaa né.</u>	I don't see (the) village.
<u>Zága pìn ní.</u>	(The) sun isn't hot.

CLAUSE MARKER (cm nɔ) WITH FINAL POSSESSIVES

<u>Waa mí nɔ.</u>	Child my cm (He's my child.)
<u>Waa wòd nɔ.</u>	Child his cm (He's his child.)
<u>Waa wòd nɔ.</u>	Child their cm (He's their child.)

preceding conditioning context	vn	telo, cm	cm	cm	cm	neg cm
	/lĩ/	/lĩ/	-ĩ	ú	nɔ	/né/
i/u ± C(C)-	-í	-í	-ì	-ú/ú	nu	ní
í/ú + N- or ĩ/ũ ± C(C)-	-ĩ	-ĩ	-ì	-ú/ú	nu	ní
i u e ə o ε a ɔ	-í	-í	-ì	-ú/ú	nɔ	né
N + low V ± (C(C))- or low V ± (C(C))- or low V/Ÿ + N-	-ĩ/-é	-ĩ/-é	-ì/-è	-ó/ó	nɔ	né

Table 1.7: Vowel assimilation variants in several morphemes, and their conditioning environments

The abbreviations in Table 1.7 have the following meanings:

- C any non-nasal consonant
- N any single (or doubled) nasal consonant
- V any oral vowel, short, long, or double
- Ÿ any nasal vowel, short, long, or double
- low V i u e ə o ε a ɔ
- () optionally present
- / either/or, depending on the speaker and the preceding morpheme

Since not all phonemes occur in initial or final position in syllables, or medially in a word, the following tables indicate the distribution combinations (and thus restrictions) attested so far with an x. Table 1.8 shows which consonants have been found in initial and final positions in syllables, and medially (alone) between vowels in words. Ideophones were included when this table was compiled. Consonant order is as found in Table 1.1. S, f, k, and v occur syllable-finally only in borrowings, so are placed in parentheses.

consonant	initially <u>in syllables</u>	alone medi- <u>ally in words</u>	finally <u>in syllables</u>
p	x	x	
t	x	x	
k	x	x	(x)
'	x	x	x
kp	x	x	
b	x	x	x
d	x	x	x
g	x	x	x
gb	x	x	
mb	x	x	
nd	x	x	
ŋg	x	x	
mgb	x	x	
ʃ	x	x	
ɸ	x	x	
f	x	x	(x)
s	x	x	(x)
h	x	x	
v	x	x	(x)
z	x	x	
g [gh]		x	
nz	x	x	
m	x	x	x
n	x	x	x
ŋ	x	x	x
l	x	x	x
vb	x	x	x
r	x	x	x
w	x	x	x
y	x	x	x
'm	x	x	
'n	x	x	
'w	x	x	
'y	x	x	

Table 1.8: Initial, medial, and final consonant occurrences

 first consonant is listed on left vertically

second consonant listed horizontally:

	p	t	k	'	kp	b	d	g	gb	mb	nd	ŋg	mgb	ʃ	d	f	s	h	v	z	gb	nz	
'		x		x		x					x			x			x		x				
b		x	x			x	x																
d	x		x	x	x		x								x								x
g		x	x	x	x	x	x	x			x					x		x					x
s		x	x																				
v																							
m		x	x			x	x			x	x				x	x		x			x		
n		x					x		x		x				x			x				x	x
ŋ		x	x	x	x	x	x	x	x		x	x	x		x	x		x	x			x	
l		x				x																	
vb																							
r		x	x			x	x	x		x	x												x
w											x												
y																							

	m	n	ŋ	l	vb	r	w	y	'm	'n	'w	'y
'		x										
b				x								
d		x						x			x	x
g		x	x					x	x			
s								x				
v						x						
m	x	x		x								
n		x										
ŋ	x	x	x	x	x			x	x			x
l				x								
vb												
r	x							x	x			
w		x	x					x	x			
y		x						x	x			

 Table 1.9: Medial consonant cluster occurrences

Table 1.9 contains a résumé of the attested occurrences (marked with an x) of consonant clusters medially in words. Ideophones and foreign words assimilated into Dii were included when the table was compiled. In borrowings, Dii permits f, k, s, and v syllable-finally. The ‘first consonant’ in this table is the final consonant of one syllable, and the ‘second consonant’ is the initial consonant of the following syllable.

Anyone desirous of seeing the data behind Tables 1.8 through 1.14 can contact me personally, since those data lists are not included in the present work.

Table 1.10 contains the list of attested oral and nasal vowel qualities occurring with any given syllable-initial consonant. Ideophones were included when the table was compiled.

Those oral and nasal vowel qualities that occur with given syllable-final consonants are shown in Table 1.11. Syllable-final clusters (except -yn) are found only in ideophones (1.8).

Since short, long, and double vowels don’t seem to occur with equal facility before all syllable-final consonants, Table 1.12 displays those combinations that have been attested, for both oral and nasal possibilities. A z indicates when the pattern(s) are only exemplified by ideophones or expletives. An x indicates all other attested forms. It seems there are systematic restrictions against double vowels before ʔ and g, nasal vowels before l, and against long and double vowels before ŋ. Other gaps in the table may be only accidents of the data.

Table 1.13 displays the combinations of differing oral and nasal vowel qualities that occur in syllable nuclei in bisyllabic words. The words are all of the consonant-vowel shape CV(C)-CV(C), i.e., either syllable might be open or closed. Vowel length is not indicated in Table 1.13.

Table 1.14 displays which syllable-initial consonants have been found to occur in syllables with the different syllable-final consonants.

Initial consonant	V o w e l q u a l i t i e s :														
	i	i	e	ɛ	ə	a	ɔ	o	ʊ	u	ɨ	ɛ̣	ɛ̣	ɔ̣	ʊ̣
p	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
t	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
k	x	x	x	x	x	x	x	x	x	x		x	x	x	x
'	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
kp	x	x	x	x	x	x	x	x	x	x	x		x	x	x
b	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
d	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
g	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
gb	x	x		x	x	x	x	x	x	x		x	x	x	x
mb	x	x	x	x	x	x	x	x	x	x					x
nd	x	x	x	x	x	x	x	x	x	x					x
ŋg	x	x	x		x	x	x	x	x	x		x		x	x
mgb	x	x		x	x	x		x	x	x		x		x	
ɸ	x	x	x	x	x	x	x	x	x	x					
ɸ	x	x	x	x	x	x	x	x	x	x					
f	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
s	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
h	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
v	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
z	x	x	x	x	x	x	x	x	x	x	x	x		x	x
nz	x	x			x		x		x	x		x		x	
m	x	x	x	x	x	x	x	x	x	x					
n	x		x	x	x	x	x	x	x	x					
ŋ	x	x	x			x	x			x					
l	x	x	x	x	x	x	x	x	x	x	x	x	x		
vb	x	x	x	x	x	x	x	x	x	x	x				x
r		x	x		x		x			x					x
w	x		x		x	x	x	x	x	x				x	x
y	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
'm	x	x		x	x	x	x	x	x	x					
'n		x		x	x	x	x								
'w			x		x	x	x	x	x						x
'y		x	x	x	x	x	x			x				x	x

Table 1.10: Oral and nasal vowel qualities occurring with syllable-initial consonants in open or closed syllables

<u>V o w e l q u a l i t i e s</u>	<u>final consonants (in descending order of frequency)</u>
i i e ε ə a ɔ o ʊ u ɨ ɛ ɘ ɤ ɔ ʉ	
x x x x x x x x x x x x x x x x	d
x x x x x x x x x x x x x x	g
x x x x x x x x x x x x x	ŋ
x x x x x x x x x x x x x x x x	'
x x x x x x x x x x x x x x	n
x x x x x x x x x x x x x x x x	m
x x x x x x x x x x x x x	b
x x x x x x x x x x x x	y
x x x x x x x x x	w
x x x x x x x	r
x x x x	l
x	rb
x x	rd
x	vb

Table 1.11: Oral and nasal vowel qualities occurring with syllable-final consonants and clusters

Nucleus type:								final consonants (in descending order of frequency)
V	VV	V'V	VgV	Y	YY	Y'Y	YgY	
x	x	x	x	x	x	x	x	d
x	x	z	z	x	x			g
x	z			x				ŋ
x	z			x	z			'
x	x	x	x	x	x	x	x	n
x	x	x	x	x	x	x	x	m
x	x	x	x		x	x		b
x	z	x	x	x		x		y
x	z			x				w
z	z							r
x	x							l
x								rb
	x							rd
x								vb

Table 1.12: Occurrence (x) of vowel nucleus types before final Dii consonants, and occurrence (z) only in expletives and ideophones

vowel of first syllable	V o w e l o f s e c o n d s y l l a b l e														
	i	i	e	ɛ	ə	a	ɔ	o	u	ɨ	ɛ̃	ə̃	ɔ̃	ɯ̃	
i	x	x	x		x	x	x	x	x		x		x	x	
i		x	x		x	x		x							
e			x	x											
ɛ		x		x	x						x				
ə			x		x			x	x	x					
a	x	x	x	x	x	x	x	x	x	x		x	x	x	
ɔ	x		x		x	x	x	x							
o			x					x							
u		x		x	x	x		x						x	
u	x			x		x	x		x					x	
ɨ										x			x		
ɛ̃		x	x	x		x		x			x				
ə̃		x			x							x			
ɔ̃		x	x			x	x	x		x				x	
ɯ̃	x		x			x							x	x	
ɯ̃						x									x

Table 1.13: Co-occurrence of oral and nasal vowel qualities in bisyllabic words, either syllable being open or closed

syllable- initial consonant	s y l l a b l e - f i n a l c o n s o n a n t (in descending order of frequency from left to right)													
	d	g	ŋ	'	n	m	b	y	w	r	l	rb	rd	vb
p	x	x	x	x	x	x	x							
t	x	x	x	x	x	x	x	x	x	x	x			
k	x	x	x	x	x	x	x	x	x	x	x	x		
'	x	x	x	x	x	x	x	x	x	x	x			x
kp	x	x	x	x	x	x		x	x	x		x		
b	x	x	x	x	x	x	x	x		x	x			
d	x	x	x	x	x	x	x	x	x	x	x			
g	x	x	x	x	x	x	x	x	x	x				
gb	x	x	x	x	x	x	x	x		x				
mb	x	x	x	x	x	x	x	x	x					
nd	x	x	x	x	x	x	x	x	x	x	x			
ŋg			x		x	x	x	x	x	x				
mgb	x	x	x		x	x	x		x	x				
ʃ	x	x	x	x	x	x	x	x	x	x				x
ɸ	x	x	x	x	x	x			x	x				
f	x	x	x	x	x	x			x	x	x			
s	x	x	x	x	x	x	x	x	x	x				
h	x	x	x	x	x	x	x	x	x	x				
v	x	x	x	x	x	x		x	x					
z	x	x	x	x	x	x	x	x	x	x	x			
nz	x	x	x		x				x	x				x
m	x	x	x	x	x	x		x						
n	x	x	x	x	x	x	x	x						
ŋ														
l	x	x	x	x	x	x	x	x	x					
vb	x	x	x	x	x	x	x	x	x	x				
r	x					x	x							
w	x	x	x	x	x	x	x	x	x	x	x			
y	x	x	x	x	x	x	x	x	x		x			
'm	x	x	x	x	x	x		x						
'n	x	x	x	x		x								
'w	x	x	x	x	x			x	x					
'y	x	x	x	x	x	x								

Table 1.14: Co-occurrence of syllable-initial and syllable-final consonants

1.8 PHONOLOGY OF IDEOPHONES

Ideophones are words that have often been called ‘descriptive adverbs’ or onomatopoeia. They’re used to intensify an idea, convey a particular impression or ‘color,’ or to imitate specific sounds (or the absence of sound!). See 3.11 for a fuller definition.

Ideophones depart from the ‘regular’ Dii phonological rules in several ways. Most of the following observations are based on lexical frequency or occurrence, not on occurrence in texts of recorded spoken Dii. There are undoubtedly also other characteristics, but I’ve found the following observations to be true.

The first three [now two!] characteristics might be called distinctive, and deal with structures not found in non-ideophones.

1. All non-ideophones (except a few verbs which can end in -yn) are limited to a single consonant syllable-finally. Ideophones, however, may have a CVCC pattern ending in -rb or -rd, (see Table 1.12).

íírd	imitation of a person’s outcry, scream,
karb karb / kparb kparb	imitation of the sound of walking with hide sandals,
nzóórd	very thin.

2. A three-level tone system is found throughout Dii syllable structures. Several ideophones, however, permit an extra-high or an extra-low tone.

dùḡ	imitation of the sound of pawing around on the ground, raising dust,
’má’	exactly equal.

[3. The labiodental flap vb may occur syllable-initially or word-medially in Dii, but it occurs word-finally only in ideophones. The symbol ° is used to indicate indefinite lengthening of the preceding phoneme, which in this case means the flap becomes a trill.

ḡáv°/ḡáv ^o vbvb	imitation of the sound of a horse galloping.
----------------------------	--

Some previous informants used the above form; more recent informants use a related form only:

ḡáv ^o bàvbà	imitation of the sound of a horse galloping, which of course does not have a final -vb. Until another (or more) examples of final -vb are found, this assertion no. 3 is suspended.]
------------------------	--

The following additional phonological characteristics of Dii ideophones must be described in terms of tendencies rather than absolutes. Again it should be noted that the overall structures are shared by ideophones and non-ideophones, but certain structures are more frequent in ideophones than in non-ideophones.

4. The phoneme r, an alveolar flap or trill (see next paragraph), occurs almost exclusively in ideophones, where it's found word-medially and finally.

hò̀̀r	rising all together,
kírìb	imitation of the sound of a cat pouncing on its prey,
kó'rbád	round,
kèráb	crush with a single blow,
è̀ r	imitation of the sound of a belch.

In medial clusters, r is a flap, but it's usually a trill when occurring finally. In rapid speech, this final trill may be reduced to a flap. The only four non-ideophones currently attested with r are the following.

bárávbád	instinct, good sense,
kèrbéd	porcupine,
kpərgád	turtle,
ndè̀ r	no! (a response showing the speaker is irritated, angry).

Borrowings from Fulfulde or French have considerably increased the number of r's in contemporary spoken Dii; traditionally Dii had very few non-ideophones with r. My June 1992 list of 596 Dii ideophones, however, showed 35 with r, or 5.9%.

5. The majority of ideophones end in a consonant (80.5%, or 480 in the 1992 sample of 596 items), while non-ideophone vocabulary has consonant-final shapes in only 51% of the tokens (using 1982 dictionary data containing 4,031 entries).

6. While all vowel qualities, oral and nasal, long and short, occur in Dii ideophones, the majority of ideophones retain identical vowel quality throughout the morpheme. Some examples follow.

dímbìlíd	very very small,
háágá	very light in weight,
kèlálálé	imitation of a woman's cry or yodel,

mgbìgìlígí	very sweet,
pívbí	very steep,
'mìgimìg'mìgimìg	large, robust,
'wàṅgàlàn	imitation of the sound produced by a tree falling.

The only exceptions to this general tendency among the 596 ideophones of this study are the following 11 forms.

hàṅhí	imitation of the sound of blowing a chief's trumpet,
hìigà	numerous,
hẹ́gád	very clear bluish (water),
hèlèlì	shining brightly,
iiyà	imitation of the sound of a lion coughing or roaring,
kíláj	very clear (clean water),
ndìlàn	flipping and flopping,
túlii	imitation of the sound of blowing a <u>hòhò</u> trumpet
wóóe	imitation of the cry of a punished child,
'médídí	covered with pox,
'métég	very small.

7. Dii ideophones tend to be more polysyllabic than non-ideophones. The figures listed below are based on the number of syllables felt to be 'essential' to each ideophone to have its meaning. In addition to these 'essential syllables,' a large number of ideophones may be repeated several times to create a certain effect or in imitation of a sound; I've expressly excluded these 'stylistic' repetitions from the list below.

	number of syllables					totals
	1	2	3	4	5	
ideophones	306	216	54	20	0	596
	51.3%	36.2%	9.1%	3.4%	-	100%
non-ideophones	2,535	1,018	275	38	3	3,869
in dictionary 1972	65.52%	26.31%	7.11%	0.98%	0.08%	100%

8. The final tone-bearing phoneme (vowel or consonant) in some ideophones may be lengthened 'indefinitely.'

dígínún	shining black,
---------	----------------

gbòòòò	lost, hidden,
hòòòò	imitation of the sound of a fire, wind,
kəŋŋŋ	hold in hand without setting down,
sìmm̀m̀	very silent,
'naaaad	stretchy.

The only non-ideophones noted so far that exhibit this characteristic are the following adverbs and temporal morphemes.

háááá/fáááá	a long time,
náaàà/í yògògògò	like that a long time,
wààníì	very much,
zágàààà	all day long.

9. A higher percentage of Dii ideophones than non-ideophones contain reduplication in their 'essential' form (as defined above in 7). Reduplication occurred in 213 of the 596-item sample (35.7%).

The non-ideophone exhibiting reduplication most frequently is the noun root (Bohnhoff 1971a (and 1971b):3.4.1), but even here the percentage isn't high: 89 out of approximately 1,150 roots, or about 8% in the 1972 dictionary. It should be stressed that this subclass of nouns seems to be a closed class, with all of its members (potentially) listable, whereas ideophones constitute an open class of thousands of tokens in Dii.

As may be noted from the examples below, reduplication involves only vowel quality, not length or tone.

Three types of reduplication are discernable: either the whole syllable is reduplicated, or some portion of the initial or of the final syllable is reduplicated. Although no strong conclusions should be drawn from the following statistics (since the sample is relatively small), it's nevertheless interesting to note that among the polysyllables in the sample (290), 114 exhibited total reduplication (39.3%), while 57 showed initial reduplication (19.6%), and 42 final reduplication (14.5%).

Examples of total reduplication are the following.

bàtágbàtá	very dirty (water),
kéńkéń	shining (moon, metal roof); white (clothes),
'móy'mòy	imitation of the sound of several mice squeaking together,

'yád'yád being absent.

Examples of reduplication involving the initial syllable are the following.

fífífid imitation of the sound of sniffing around,

kpèkpèkèkpèh imitation of the sound of walking fast,

'nè'nèh'nèg soaked with oil.

Examples involving reduplication of some portion of the final syllable are the following.

gìlìlì imitation of the sound of animals or men fleeing,

kálálóló° imitation of the sound of a bell ringing,

lúgúgú lukewarm (water).

Quite probably these noun roots that exhibit reduplication are of ideophone origin (Welmers 1973:469-70) but in the synchronic description of Dii, they function like any other members of the invariable noun class. Semantically, as is frequently the case across West Africa, most of these nouns refer to insects, small animals, body parts, and a few refer to plants or birds. A few examples follow.

bùbùgum toad,

láláb butterfly,

vóóvóó mosquito (to avoid the taboo name yád).

To summarize, from the phonological perspective, Dii ideophones as a class can be characterized, in contrast to non-ideophones, as potentially exhibiting the following distinctive traits.

1. consonant-final CVCC patterns CVrd and CVrb,
2. an extra-high or an extra-low tone,
3. vb word-finally [trait suspended for the moment]

The following phonological tendencies are also visible, in contrast to non-ideophones (i.e., the structures in question aren't unique, but the frequency is significant).

4. They contain the phoneme r more frequently.
5. A larger number of their syllables are closed (CVC(C)).
6. They tend to retain identical vowel quality throughout.
7. They are more often polysyllabic.
8. They lengthen their final sonorant 'indefinitely' more frequently.
9. They exhibit more reduplication in their 'essential' form.

1.9 MORPHOPHONEMICS

The following sections are recommended for fuller details about several morphonemic phenomena:

Vowel height and nasalization assimilations to phonemes in the preceding context:

- 1-clause markers, positive /ú/ and negative /né/: section 1.7 and Table 1.7; section 5.1.1 and Table 5.1;
- 2-the temporal-locative suffix /lí/: section 1.7 and Table 1.7; section 3.9.1;
- 3-the verbal noun suffix /lí/: section 1.7 and Table 1.7; section 3.4.2 and Table 3.1.

The negative suffix //N//: a) exhibits partial assimilation to the point of articulation of the final consonant of the verb; b) causes HH and LL tones on the verb stem to be drawn to HM and LM before //N//; c) drops its syllable-final form -n if preceded by a long vowel and if followed immediately by the cm né: see section 3.8.3 and Table 3.6. The ‘accompaniment verbal suffix’ is identical to the negative: section 3.8.6.

Reciprocal verbs exhibit partial assimilation as in a) above; however they don’t exhibit features b) and c), so I give this morphoneme the title //N₂//: see section 3.8.6 and Table 3.7.

CHAPTER 2

SYLLABLES AND THEIR COMBINATIONS

2.1 CV PATTERNS

The most frequent syllable patterns in Dii consist of an initial consonant C followed by a vowel nucleus V^{nuc} , with an optional final consonant, i.e., $CV^{nuc}(C)$, where parentheses indicate optionality. The vowel nuclei may be short V, long VV, overlong VVV, double V'V or VgV, or indefinitely long ° vowels. The tones associated with these syllables are discussed in section 2.2.

initial consonant	vowel nucleus	final consonant
p t k ' kp	with one tone, any V or V̄	b d g '
b d g gb		
mb nd ŋg mgb	with two tones, any V or V̄	m n ŋ
ɓ d'		w l y
f s h		r
v z		
nz		
m n ŋ	with two tones, any VV or V̄V̄	b d g '
l		m n ŋ
vb r		w l y
w y	any V'V or V̄'V̄	
'm 'n		r
'w 'y		
	any VgV or V̄gV̄	

Table 2.1: Possible initial, final Dii consonants and vowel nuclei in syllables of the pattern $CV^{nuc}(C)$

Table 2.1 gives an overall picture of which consonants occur initially in syllables, and which final consonants can occur with the various types of vowel nuclei. The number of tones associated with each subpattern of $CV^{nuc}(C)$ is also specified.

Overlong vowels VVV don't appear in Table 2.1 because they arise only from elision across syllable boundaries or from certain intonational modifications of vowel nuclei (Bohnhoff 1976, chapter 2).

Specific restrictions on consonant and vowel co-occurrences are already listed in the tables and illustrations in sections 1.7 and 1.8.

There are a few less frequent CV patterns which are typically associated with specific grammatical categories or positions in sentences. In Table 2.2, N symbolizes a nasal consonant. Parentheses continue to indicate optionality. Ideophones are sometimes called ‘descriptive adverbs,’ and are more fully defined in 3.11.

<u>pattern</u>	<u>example</u>	<u>t r a n s l a t i o n</u>	<u>r e s t r i c t i o n</u>
N(N)	m	exclamation showing irritation	expletive
	m̀m̀	yes	expletive
	m̀m̀	sigh, groan	ideophone
’N(N)	’m̀m̀’m̀	no	expletive
	’m̀’m̀m̀’m̀	well then, yes	expletive
hNN	é”mh̀m̀m̀	oh no!	expletive
	h̀m̀m̀	exclamation of surprize	expletive
	h̀m̀m̀	describes the action of thinking	ideophone
CVyn	keyn	it’s (not) pierced	stative/passive negative verbs only
CVVrd	írd	a scream	ideophones only
CVrb	kparb kparb	sound of walking in animal-skin sandals	ideophones only
V(V)	-ì	untranslatable (see 5.1.1)	limited to certain clause-final function words (clause markers)
	-áa	interrogative	sentence function word
CCVC	bred	bread	only in borrowed words
	klàs	class	
	bríg	brick	
	Kríddù	Christ	

Table 2.2: Patterns and examples of infrequent syllable structures

The number of open compared to closed syllables in spoken Dii is exemplified in Table 2.3. The text which served as a basis for this count was speech sample 2 in Bohnhoff 1976, appendix C. Also included are figures on the number of syllables without an initial consonant, and those with a nasal consonant syllable nucleus.

Of special note in Table 2.3 is that although there were over three times as many open syllables as closed, closed syllables did still comprise 24% of the total sample. Contrary to some African languages which have only open syllables, Dii has a relatively large percentage of closed syllables.

	<u>initial C</u>	<u>nucleus</u>	<u>final C</u>
with initial C	8,262		
without initial C	27		
with vowel nucleus V ^{nuc}		8,288	
with nasal N nucleus		1	
closed syllables			1,991
open syllables			6,297
Totals	8,289	8,289	8,289

Table 2.3: Types of syllables in speech sample 2

	<u>number of syllables in the word:</u>						<u>Total words:</u>
	1	2	3	4	5	6	
speech sample 2:	5,241	1,281	138	13	3	1	6,677
dictionary totals:	2,765	1,128	298	50	3	0	4,244

Table 2.4: Number of monosyllabic and polysyllabic words in speech sample 2 and in the dictionary

	1	2	3	4	5	6	<u>Total:</u>
speech sample 2:	78.49	19.18	2.07	.20	.05	.01	100%
dictionary totals:	65.15	26.58	7.02	1.18	.07	0	100%

Table 2.5: Percentages of the respective subtotals for each figure cited in Table 2.4

The number of syllables per word is seldom the same in spontaneous speech as in dictionary entries. Tables 2.4 and 2.5 testify that there is a higher percentage of monosyllables in spoken Dii than in dictionary entries. Correspondingly, there is a higher percentage of words of 2, 3, and 4 syllables in the dictionary entries than in spoken Dii. Table 2.4 provides the raw data from which the percentages of Table 2.5 are drawn.

Of interest, however, is not only the fact that Dii words have a certain number of syllables, but also that certain grammatical categories have a high correlation with specific numbers of syllables and/or with open/closed syllable patterns. Table 2.6 is a collation of the grammatical categories of the first edition of the Dii dictionary (1972) entries with their syllable shapes and their number of syllables. Polysyllables are referred to as bi, tri, quad and quint; cpd stands for compound. Chapter 3 explains each grammatical category in greater detail.

The following conclusions can be drawn from Table 2.6.

- Nouns are heavily of the CVC pattern, whether noun roots (n_1) or nominalizations from verbs (n_2).
 - The CVC pattern for monosyllabic n_1 nouns (456) comprises 38.1% of the total n_1 group.
 - Many n_1 nouns are, however, bisyllabic (32.3%).
 - Over half of the n_2 nouns (57.6%) are of the shape CVC.
- Remember a V in Table 2.6 stands for a short or long vowel, but not a double vowel. Double vowels are indicated by V-V.

Pronouns are usually of the shape CV (40.4%), but many are also CVC (25%), while very few contain double vowel syllable nuclei.

Qualifying adjectives are mostly of the shape CVC (47.6%).

Intransitive verbs are usually of the CV (39.4%) or CVC (46.1%) shape, and few have double vowel syllable nuclei. The repetitive verbs, however, have a relatively high percentage of double vowel syllable nuclei (36.8%), but also have many CV forms (48.3%).

Transitive verbs have about an equal number of CV (42.9%) and CVC (43.4%) forms.

In Table 2.6 all compounds were lumped together into a single category. In Table 2.7 they're broken down also by number of syllables, and in Table 2.8 the totals from Tables 2.6 and 2.7 are compared to each other.

<u>category</u>	<u>n</u>	<u>v</u>	<u>cv</u>	<u>cv-v</u>	<u>cvc</u>	<u>cv-vc</u>	<u>bi</u>	<u>tri</u>	<u>quad</u>	<u>quint</u>	<u>cpd</u>	<u>total</u>
adverb			9	1	16	2	10	2			7	47
<u>na</u> adverb			1		2		8					11
clause marker		3	14	3	2		2				9	33
demonstrative			11									11
expletive	4		31		33	3	23	8			2	104
focus adjective			3									3
fraction					1			2				3
ideophone (CVCC: 2)	2		36	2	170	18	107	23	10		5	375
indefinite adjective			1				1					2
locative			15	5	15	5	8	1			1	50
limiter					1		2	1				4
place locative			3		7	1	5	6			8	30
noun 1			171	35	456	65	387	75	7	1		1,197
noun 2			21	2	68	19	4	4				118
compound noun											567	567
kinship noun			2	1	1						20	24
non-personal pronoun			5		3						1	9
number			1	1	2		15	8	1			28
plural			1									1
proper name							5					5
possessive	2	1	13		-y: 1						2	19
pronoun	2	3	42		26		10				21	104
qualifying adjective 1		1	14	3	40	6	18	2				84
qualifying adjective 2			13	2	17	13	1					46
<u>na</u> qualifying adjective							5					5
recall adjective			8									8
relator			18	1	8		8				2	37
temporal			10	3	9	2	11	8	1		17	61
temporal-locative		1	5		3	2	1					12
auxiliary verb		2	14		9							25
descriptive verb			2									2
desiderative verb			2									2
equative verb			1									1
intransitive verb			136	20	159	28	2					345
inchoative verb			1		5							6
intentional verb			3		1							4
locative verb			2									2
perception verb			2		1							3
repetitive verb			42	32	11	2						87
<u>say</u> transitive verb			1									1
transitive verb			307	43	311	45	10					716
verbal noun			2				4					6
misc. particles		2	6		2		1					11
misc.			14	1	10	1	6				3	35
Totals:	10	13	983	155	1389	212	654	140	19	1	665	4,244
<u>category</u>	<u>n</u>	<u>v</u>	<u>cv</u>	<u>cv-v</u>	<u>cvc</u>	<u>cv-vc</u>	<u>bi</u>	<u>tri</u>	<u>quad</u>	<u>quint</u>	<u>cpd</u>	<u>total</u>
% of total:	.2	.3	23	3.6	32.7	5.0	15.4	3.3	.4	.02	15.7	99.69
+ -y: 1 = .02%, CVCC: 2 = .05%												

Table 2.6: Collation of grammatical category of dictionary entries with shape of syllable and number of syllables

<u>c a t e g o r y</u>	<u>bi</u>	<u>tri</u>	<u>quad</u>	<u>quint</u>	<u>totals</u>
adverb	6	1			7
clause marker	9				9
expletive	2				2
ideophone	3		2		5
locative	1				1
place locative	8				8
compound noun	386	151	28	2	567
kinship noun	20				20
non-personal pronoun		1			1
possessive adjective	2				2
pronoun	19	2			21
relator	1	1			2
temporal	15	1	1		17
misc.	2	1			3
Totals:	474	158	31	2	665

Table 2.7: Number of syllables in compounds in dictionary entries

	<u>mono</u>	<u>bi</u>	<u>tri</u>	<u>quad</u>	<u>quint</u>	<u>total</u>
roots:	2,765	654	140	19	1	3,579
compounds:	0	474	158	31	2	665
Totals:	2,765	1,128	289	50	3	4,244
	65.15%	26.58%	7.02%	1.18%	.07%	100%

Table 2.8: Numbers of syllables in compounds (from Table 2.7) contrasted with those of roots (from Table 2.6)

2.2 TONE

Tone is mostly lexical in Dii, and one or two tone(s) are attached to each syllable (not to the vowel!), such that a given tone must be pronounced on whichever phoneme it falls, whether consonant or vowel. Only a few tones are modified in given grammatical contexts.

The Dii are conscious enough of their 3 phonemic tone levels ('voices' in Dii: yég) that they've given each a name:

<u>yég 'mèń</u>	tiny voice,	or <u>yég gúba</u>	voice above,
<u>yég waa</u>	small voice,	or <u>yég sàámé</u>	voice in the middle,
<u>yég gbòò</u>	large voice,	or <u>yég hágá</u>	voice below.

Five or six phonetic pitch levels can easily be distinguished, however. If two or more otherwise identical morphemes are distinguished only by their tones, we will call them a minimal tone pair, triplets, quadruplets, quintuplets, etc.

Due to the relatively few minimal tone triplets in Dii, the Dii Literature Committee finds it necessary to write only one tone in the literature it produces: the high tone. This tone is indicated by the acute accent: gbó he hits. But in this work, all 3 are distinguished: /´ / for high (H) tone, /` / for low (L) tone, with mid (M) tone unmarked.

As indicated earlier, the tone(s) on a given syllable are analyzed as attached to the syllable, not just to the vowel. Thus in Table 2.1, 2 tones are attached to any syllable consisting of a short vowel followed by a nasal or other sonorant consonant. The second tone is pronounced on the final consonant, and is thus marked here, and in the dictionary. Syllables containing long or double vowels distribute their two tones on the vowel, so the syllable-final consonant in these syllables does not bear a contrastive tone. Such final consonants are pronounced with a tone matching that of the latter half of the vowel.

The following groups containing tone-bearing final consonants illustrate the above point.

báá	antelope (Cob de Bufon)	báá	dual future pronoun ‘we’
dál	horse antelope	bán	yesterday
		baà	dual non-future pronoun ‘we were’
		bàn	contraction of <u>bà</u> and <u>wúú</u> ‘that he will’
bàà	elephant	bàà	incisive (tooth)
		dẹ́ẹ́	he hits several times
dam (pélí) without equal		dẹ̀ẹ̀	ford
dàm	your neighbor	dẹ̀ẹ̀	certain kind of plant
dàm	complaint	dẹ̀ẹ̀	he hits
dòw (sáj) his younger brother		hày	razor blade
đòw	sypilis	ngàỳ	large bat
káá	that I		
kan	with		
kàn	he encircles	kpàý	fairly warm
kàà	if he (hyp)	kpàý	imitation of the sound of lightning hitting someone
séy	only (Ful)	sínno	he-will
séy	soul-stealing	sínná	then (exclamative)
sèy	time (Ful)		
váy	certain kind of tree	zùr	in quantity (ideophone)
vəy	he bumps into	wù r	pounding grain (ideophone)

We find many minimal tone pairs and quite a few minimal tone triplets in Dii, along with a few quadruplets and quintuplets. An abbreviated list follows, but there are many others in the language. Note that the tone is always written on both vowels of a long vowel. See 3.8.19 for other examples.

béé	he calls several	bíí	sticker on end of some grass seeds
bee	call	bíi	he listens closely (in all directions)
bèè	grass fence	biì	emphatic logophoric pronoun
bèè	he calls	biì	he pours into (a large-mouthed receptacle)
bòò	thunder, lightning	bóó	he precedes
bòò	certain kind of vine	bóò	he crushes (with his fingernail)
bòò	he soaks (a garment)	bòò	he builds-up, tapering inwardly
bòò	eagle	bòò	he leans on, pushes down on
díí	stem, trunk	fíí	he returns home
dii	mouse, rat	fii	it becomes dark
dìi	he's handy, capable	fii	he gives back
dìi	black, Dii (Duru)	fìi	commerce (Ful)
fóó	he plays	gáá	he glistens
fóo	he caresses; he rejoices	gáa	leaves or white garment worn by newly circumcized
foo	a certain blacksmith's tool	gaa	thorax

fòo	he cuts (weeds) the first time	gàa	she puts on (necklace)
fòò	he plasters with mud	gàà	he knows
hẹẹ	(rooster) crows	húú	he diminishes in size
hẹẹ	a pile of grass to be burned		
hẹẹ	he sets several (posts)	huu	dense forest, jungle
hẹẹ	(tree) grows (branches)	hùu	he puts down
hẹẹ	he takes a detour	hùù	he sows broadcast
kíí	(beer) makes drunk	kọ́ọ	he hunts
kíi	compound, house	kọọ	(road, river) meanders
kii	it resounds	kọọ	she gives birth to
		kẹẹ	he cuts down
kìì	behind	kẹẹ	it's crooked
líí	he's straight, just	móó	your
líî	then, exclamative	móo	you emphatic
lii	he makes straight	moo	word, palaver
lìì	it bears (fruit)	mòò	he speaks
náá	like that	néé	he's strong, hard
náa	certain kind of lizard	née	how?
naá	exclamative particle		
naa	broom		
nàa	a certain woman	nèe	he raises (child)
nàà	riches	nèè	it's wide

nóó	eye	sáá	he chooses (field)
		sáà	forest not containing a river or stream
nóó	he dies; poison for fishing	sàà	he guesses
nòó	he kills		
nòò	he gathers (honey)	sàà	he makes a dam; returns

séé	he moves	síí	he shows (teeth)
sée	he scolds, reproaches	sii	stomach
sèè	he makes come close	sii	certain kind of plant
sèè	old	sìì	anteater

síí	arrow	táá	he thinks several times
sii	war, warrior	táa	spear
sìì	kind of parakeet	tàa	it itches
sìì	he defends	tàà	he thinks

téé	where?	wáá	he covers (pot)
tée	and then	waa	child
tèè	he leads, guides	wàa	he has lots of pox
tèè	this, that (recall)	wàà	it forms pox, a blister

yéé	name, song	yíí	he drinks (soup)
yée	male	yíí	fish trap
yee	open court; kidney, back	yìì	(couscous) is broken
yèè	he fans	yìì	he breaks several (balls of couscous)
yèè	he chooses, they elect		

yúú	he paddles, he drives	zèé	small

yuu	it's soft, tender	zɛɛ	fresh (meat)
yùu	he tans	zɛ̃ɛ	katydid
yùù	he sharpens (knife)	zɛ̃̃ɛ	he scrapes off

áá	he digs up several	'wáa	he's finished
aa	granary		
àá	what? (repeat...)		
àa	he nurses, he sucks	'wàa	he finishes
àà	he digs up	'wàà	imitation of the sound of a gunshot

It's also important to study what the relative frequency of each of the three Dii tones. Table 2.9 lists the tone patterns (and their frequency) found on syllables in speech sample 2 (Bohnhoff 1976, appendix C). This table completes the information on types of vowel nuclei in sample 2 already detailed in Table 1.6.

H	1,674	ML	21
M	1,429	MH	15
LL	1,212	HL	1
L	1,060	HHH	6
HH	994	MHHH	2
MM	913	MMMM	2
HM	586	HMH	1
LM	348	MHM	1
LH	23	MML	1
			8,289
total:			

Table 2.9: Frequency of tone patterns occurring on vowel nuclei of Table 1.6 from speech sample 2

The count in Table 2.9 still doesn't provide us with the overall frequency of each of the 3 Dii tone levels, however. Long syllables should be broken down, each 'tone segment' receiving a count of 'one.' When each tone segment is weighted in this manner, it's found that:

H occurs 4,314 times in speech sample 2 (34.7%),
 M occurs 4,240 times (34.1%), and
 L occurs 3,878 times (31.2%).
 12,432 total ‘tone segments’

No tone is ultimately found to be very much more frequent than any other in spoken Dii.

Several tone glides exist in Dii. HM and LM are very frequent on verbal and nominal dictionary entries, and need no specific documentation here. HL, ML and LH glides are rarer. Some examples:

HL	lî	then, exclamative
ML	baà	we two (emphatic)
LH	bàá/òó’	exclamation of surprise
	òó/èé/èé/àá	what? (asking for a repetition)
	òó’/àá’/àá’	exclamation of irritation
	fòód/vèéj/ndè’r	insult, angry answer

Emotion and/or politeness may bring longer tone glides into being:

HMH	néeé	well then! (clause-finally)
HML	áà	exclamation of grief
	wààniî°	much (Ful)
HLM	Ò moo là áà!	Good-bye!
MML	woow	listen now! (clause-finally)
LMH	lèw°	go fast and leave a wake behind in the water

Several ideophones that all have a final d or w, have been noted with what seems to be 3 tones (LHM, MHM, LML) on a single syllable:

MHM:	lòód	overripe
LHM:	vbèéd	(mouse) entering its hole
	nòód	very dirty
LML:	mbòód	with enough peanut sauce
	kpààw	red

These glides all seem to revolve around a mid or low tone, with a pitch rise in the middle before the tone falls again. Too few examples have been collected to see how this phenomenon fits into the overall tone structures outlined in Table 2.1.

Some ideophones have special very-high or very-low tones that aren’t possible in non-ideophones. This seems to mean ideophones use five tonal levels instead of the three used elsewhere in Dii. This

particularity has already been examined in 1.8: 'má' exactly equal, dùh imitation of the sound of pawing and raising dust.

Transitive/intransitive or transitive/auxiliary distinctions in verbs (3.8.17 and 3.8.19) are often accompanied by differences in tone (among other differences), but since each of these verb types is differentiated by internal and distributional characteristics already, tone is merely an additional difference between them. See also some transitive/stative/passive relationships as discussed in 3.8.5.

2.3 STRESS AND JUNCTURES

Accent (or stress) in Dii is an emphatic stress, used where the speaker wants to emphasize a certain word in a sentence (tà' and sà in the following examples).

Mí tà' ʌ kan síi. I shot-him with (my) arrow!

Mí sàga kan síg. (1B35) I pierced-him with (my) spear!

Stress is analyzed in Dii as belonging to the intonation pattern. Each word does not have its own accent, and Dii thus has no words differentiated only by their accent, as Eng. 'import (noun) and im'port (verb).

A stressed syllable is pronounced with a marked increase in force. There may also be a slight pause (juncture) before such a stressed word in Dii. In such a case, the initial consonant of the stressed word is often doubled, as in the following example (llà' instead of là').

Bàbàḡm tii nag kpáag llà' kíddulí. (3-122, 123)
Rabbit turns hand left hits tar-there
(Rabbit pulls back his left hand and hits the tar-man.)

Several other junctures exist in Dii. They may be termed final, sustained, open, and close junctures.

Final junctures occur at the ends of grammatical sentences or in utterance-final position. This type of juncture is usually manifested by a slight downturn at the end of the intonation pattern. It's marked in written Dii by a period.

Sustained juncture is found especially following an initial subordinate clause, before the rest of the sentence is pronounced. If there are two or more such initial subordinate clauses, each will normally be followed by such a (potential) pause before the utterance continues. This juncture is most frequently manifested by a slight lengthening of the vowel in the two most frequent morphemes that close subordinate clauses: máa and tée. Such a sustained juncture may also occur following the main clause, when a subordinate clause closes the sentence. This juncture is marked in written Dii by a comma.

Open junctures occur between those elements that are analyzed in chapter 3 as 'words' in Dii. They're manifested by a (potential) break in the stream of speech, and are marked in written Dii by the space between words. An example:

Liggòò di kaalí.

House-his is village-in (His house is in the village).

Close juncture is found between the syllables of polysyllabic ‘words’ as defined in chapter 3; to a lesser extent, it’s also manifested between the elements of a compound word in Dii. Such compounds (e.g. a compound noun) may not normally be broken internally by the (potential) break which is open juncture. For example, nàa ‘woman,’ gbà ‘she guards,’ and wəə ‘husband’ all may occur elsewhere as separate words, but the compound nàa gbà wəə ‘one of the planets (Jupiter?)’ is knit together more strongly than are separate ‘words’ in the sense of chapter 3. Although it would be possible, and probably even desirable, to mark close junctures in compounds by writing hyphens between the elements of the compound, they’re not written in the popular literature aimed at Dii readers because the Dii reject the symbol.

A close juncture can also occur between two words that are modified when contracted: lig ‘house’ + wòò ‘his’ become liggòò ‘his house,’ as in the sample sentence just above.

It seems important in the analysis of Dii to recognize the role of potential pauses or breaks between morphemes, words, or longer stretches of speech, as per Pike 1947a:123.

2.4 SYLLABLE-DIVISION RULES

The following set of rules may be used to divide a Dii text into syllables, or to place hyphens correctly at margins.

1. Long VV and double V-V vowels cannot be divided: *dágá*, *dè'ɛn*, *dìì*, *kègè*, *má'án*, *túú*, *tú'ud*, *yigid*.

2. With the exception of *'* and *g* [gh] in the V-V pattern, any single consonant between two vowels goes with the following vowel: *kí-rib*, *ká-lóh*, *kú-kà'á*, *ná-nán*, *vɛ-lí*, *wi-dó'*.

3. Any doubled consonant between two vowels is to be divided, one consonant with each syllable: *mam-mé*, *nán-nè*, *na'-'é*, *wòw-wòw*.

4. The following consonants are di/trigraphs and cannot generally be divided:

kp, *gb*, *vb*

mb, *nd*, *ng*, *mgb*, *nz*

'm, *'n*, *'w*, *'y*

kpà-kpá'ad, *gbò-gbòò*, *mà-vbèè*,

kí-mbá, *ndù-ndùù*, *ngò-ngògòd*, *mgbè-mgbèg*, *nzù-nzú*,
'mó-'mó', *'nɛɛ-'nèé*, *'wá-'wáá*, *'yá-'yá'*.

5. With the exception of those consonants listed in number 4, any other combination of two consonants between vowels is to be split: *dàm-dam*, *gìm-siì*, *kég-dágá*, *káh-káh*, *kpám-lám*, *làb-làà*, *táj-tíib*, *wàh-bó'*.

6. Exceptions to rule number 4 are sometimes of non-Dii origin, or sometimes contain reduplicated syllables, but some seem to have no apparent 'reason' for being exceptions:

bəgəm-ba, *bun-dukaa(le)*, *dím-bilíid*, *đúj-gúd*, *gbìh-gbìh*, *gbúj-gùm*,
màh-ginà, *mban-zɔgɔlì*, *zùh-gbùh*, *'wàh-gàlàh*, *'wàh-gàh*.

Several words with a medial prenasalized consonant retain the nasal in syllable division, but the two nasals are elided (and therefore only 'one' is heard) in the pronunciation:

<u>syllable division</u>	<u>pronunciation</u>
<i>bín-nda</i>	<i>bínnda</i>
<i>gbùh-mgbùh</i>	<i>gbùhgbùh</i>
<i>hàh-ngáá</i>	<i>hàhngáá</i>
<i>kàh-ndá</i>	<i>kàhnda</i>
<i>pásín-nzà</i>	<i>pásínzà</i>
<i>sèh-ηgəlèh</i>	<i>sèhηgəlèh</i>

CHAPTER 3

ROOTS AND WORDS

3.1 DEFINITIONS

Roots, words: Dii roots and words can be defined as any units bound by the borders of phrase-level ‘positions’ or ‘slots’ which are not themselves clause or phrases. (See Longacre 1964:103, and the phrase definitions in 4.0). ‘Words’ are capable of word-level expansion by affixes, while ‘roots’ are ‘minimum free forms’ which cannot be further subdivided into other ‘free forms’. Words may also be compounds.

Thus the expression the beautiful tail of the peacock contains the roots the and tail and the word beautiful (there is beauty and -ful), but of the peacock is itself a phrase which must be broken down into the roots of and the, and the word peacock.

In Dii the following are all ‘roots,’ incapable of division into smaller meaningful parts: èè ‘yes’, wí ‘exclamation of surprise’, kó ‘he does’, and vṽ ‘plural’. Roots are always single morphemes.

‘Morphemes’ are defined as ‘the smallest individually meaningful elements in the utterances of a language’ (Elson and Pickett 1967:2). Morphemes don’t always correspond to ‘words’. For example, lions is composed of two morphemes: lion and -s ‘plural’. Similarly, jumped is divisible into jump and -ed ‘past tense’, both of which are morphemes. In the Dii language, kón ‘he does-not’ is composed of kó ‘he does’ and -n ‘negative’, while kaalí ‘in the village’ contains the two morphemes kaa ‘village’ and -lí ‘location’. (See Table 1.7 for the alternate forms of -lí used in other contexts.)

‘Allomorph’ means ‘other form’, since a single morpheme may have two or more forms differing according to context. The -s of lions and the -en of oxen might be considered allomorphs of a single morpheme ‘plural’ in English. The Dii morpheme /lí/ ‘location’ mentioned above (the bars / / indicate the ‘title’ of a morpheme which has two or more allomorphs) has one allomorph after consonants: it generally causes the doubling of the preceding consonant and has the vowel -í; after a vowel, however, an ‘l’ is inserted (epenthetic) before the suffix vowel -í.

Kólí ‘doing’ or ‘to do’ is a ‘word’ composed of kó ‘do’ plus the verbal noun suffix -lí. Lig gáá is also a ‘word’, containing lig ‘house’ and gáá ‘visitor’, a compound noun meaning ‘guest-house’. Proper names, compound nouns, kinship nouns and place names are all called ‘words’ in Dii (see discussions on each below in this chapter), because they each occupy single positions on the phrase level. Such ‘words’ as lig gáá could be written with a hyphen or without a space between them to show their internal structure more clearly, but they are written as above to retain a constant visual image for each element before the Dii reader’s eyes.

The morpheme /lí/ ‘time-location’, always written as a suffix, is also a separate root, since it’s an element on the phrase level filling the position ‘relator’ (4.8, 4.9).

Another example of possible confusion between word and phrase levels is seen in dàn nì ‘my older brother’. The -nì, while written as a suffix, is actually analyzed as a root, an element on the phrase level filling the possessive position in the kinship noun phrase (4.2.8).

A word should be said here about clause markers, but this is difficult. All clause markers will be described on the clause level (5.1.2), and the reader is advised to see that section for a full description.

3.2 SYLLABIC STRUCTURES

Dii words and roots are usually monosyllabic. In twenty six pages of average text, I counted over six times as many monosyllabic words and roots as bisyllabic (1,852 to 289). Among the bisyllabic words, three quarters exhibited monosyllabic stems (212 to 77, leaving one quarter with bisyllabic stems). Only 10 words were trisyllabic: either contractions of two words, or distributive numerals, or containing a suffix on a bisyllabic stem. Words borrowed from other languages and proper names were not counted. See section 2.1 for fuller details, especially Tables 2.4 and 2.5 for statistics based on ‘speech sample 2’.

3.3 PROPER NAMES

The nature of Dii proper names (pn) is diverse, as heavy borrowing has brought names from several sources into the language. Indigenous proper names are often combined and/or contracted forms of otherwise distinct Dii words, roots, or clauses, sometimes contracted to the point where some of the original forms are no longer discernible or known to native speakers.

Proper names occur in vocative slots in sentences or in head slots in noun phrases. We forego a tagmemic formula at this time, due to the extremely diverse nature of these names.

‘Last names’ are often borrowed from Fulani: Diinà, Sùmán, Múúsà, Sàlátù, Bòbózi, Hàwá, Àwdí, Fántà; while many first names come from French: Jacques, Martha, Joseph, Paul, etc. A second term may be added to a name using the name of one’s village, father or mother, for further precision.

Examples of indigenous Dii proper names:

Gbaṅgòṅ	from <u>gban</u> chief, and <u>gòṅ</u> shield (warrior)
Gbaṅ’èná	from <u>gban</u> chief and <u>èṅ</u> what + Q (3-83)
Bàasùgwaa	from <u>bàa</u> man, <u>sùg</u> he gathers, <u>waa</u> child (name given to a Dii chief who keeps his people together well) (5-70)
Gbaṅkaḡhòlè	from <u>gban</u> chief, <u>kaḡ</u> pleases, and <u>hòlè</u> to see; ‘beautiful chief’(4-43)
Kúṅmbàà	from <u>kúṅ</u> he bends over, and <u>mbàà</u> he sits (name of the chief of Mbé) (3-99)
Mánwaané	from <u>mán</u> hates-NEG, <u>waa</u> child, and <u>né</u> NEG (3-96)
Bàabiḡ	from <u>bàa</u> sir, man, and <u>biḡ</u> snake (3-96)
Kulàyáḡ Déḡ	Koulagna (from) Ngaouyanga

3.4 NOUNS

Our discussion of nouns will be divided into the following sections:

- 3.4.1 noun roots (n_1)
 - a) possessable roots (n_{1a})
 - b) unpossessed roots (n_{1b})
 - c) possessed roots (n_{1c})
 - d) allomorphs before temporal-locative /lí/ (n_{1d})
- 3.4.2 verbal nouns (vn)
- 3.4.3 other nominalizations from verbs (n_2)
- 3.4.4 compound nouns (n_{cp})
- 3.4.5 kinship nouns (n_{kin})
 - a) unpossessed
 - b) possessed

Nouns generally fill head slots of noun phrases or axis slots of relator-axis constructions. The verbal noun fills the head slot of the verbal noun phrase as well.

3.4.1 Noun roots (n_1). The majority of Dii nouns (n_{1a}) contain no affixes but are simply roots. Some examples of nouns possessable on the phrase level (i.e. capable of being possessed but not necessarily possessed) follow:

də̀də̀g	chin	lig	house
d̂ag	calabash	nag	hand

A small subclass of noun roots (n_{1b}) is never possessed (unpossessed) on the phrase level (see NP₂, 4.2.4):

bà'á	father	nà'á	mother
à'á	grandmother		

Another small subclass of n_1 roots (n_{1c}) which must be possessed on the phrase level (see NP₃, 4.2.5) is composed of:

bà' (míí)	(my) father	nà' (míí)	(my) mother
à' (míí)	(my) grandmother		

Still another subclass of noun roots (n_{1d}) has shorter allomorphs which occur before the temporal-locative /lí/ (3.9.1). Members of this subclass are:

yúlí	on the head (yúú)	nólé	in the eye (nóó)
f̂ólé	on the body (f̂óó)	dólí	on the foot (doo)
velí	in the fire (vee)	sílí	in the stomach (sii)

3.4.2 Verbal nouns (vn). Verbal nouns (sometimes called infinitives) are ‘words’ and are characterized by

- 1) their derivation from the base forms of transitive, intransitive, stative/passive, reciprocal, descriptive, or repetitive verbs, and
- 2) the use of a single nominalizing morpheme /lí/ which has three allomorphs: -lí, -né, and -í. The ‘l’ in the first form listed is treated as epenthetic after a vowel-final verb stem.

If the tone on the root is HH or LL on a long vowel or a short-vowel-plus-consonant, the tone is modified to HM and LM respectively before the allomorph -né. For example:

ním, nímní	wake up	líí, lííní	be straight
vúd, vúnní	go out.		

Some verbal nouns have a different tone on the stem of the vn than on the dictionary base form, for example ay and àyné in group 8.

Tagmemic formula: vn = +nuc:vns +nomr:/lí/

Read: the verbal noun consists of a nucleus filled by a verbal noun stem (derived from a transitive, intransitive, stative/passive, reciprocal, descriptive, or repetitive verb base) plus a nominalizing element /lí/.

The three allomorphs of /lí/ in question are in complementary distribution describable mainly in terms of the final consonant of the verb stem, i.e., the same basis on which we set up the verb groups (3.8.2), being thus phonemically defined. With verb groups 1A and 1B, however, the distribution of the allomorphs is morphemically defined and the verbal nouns taking -né are cited as exceptions in the dictionary, since fewer verbs are involved. We have already discussed the morphophonemics of the final suffix vowel in this morpheme in section 1.7, see especially Table 1.7.

The only difference between verb groups 1A and 1B is the use of the suffix -lí or -né. Although there seems to be no consistent way to predict all the occurrences of one suffix instead of the other, two partial correlations have been noted:

- 1) repetitive verbs (3.8.18) take -né. These verbs are indicated in the following list by: (repet).
- 2) Only the -né form is used following double vowels (V’V, VgV); see also section 2.1.

The following are illustrations of the members of group 1B:

àḡ	he nurses	bḡḡ	he goes-stray
----	-----------	-----	---------------

bùu	he unties	ḃèe	he takes (repet)
dẹ'ẹ	he cleans (repet)	dù'u	he pours-into (repet)
gá'a	he hits-with-his-fist (repet)	gbàga	he stalks
gbóo	he hits (repet)	hí'i	he laughs-at
kè'e	he takes-(skin)-off	kìgi	he makes-balls-of (repet)
kàə	he sweeps	kúgu	he learns
lèe	he rinses	líí	it is-straight
làə	he sets (posts)(repet)	nòo	he kills
ndógò	it hurts, gives-pain	sàgə	he cultivates (peanuts)
sùgu	he gathers-together (repet)	tii	he turns, changes
tò'ọ	he picks (fruit) (repet)	tógə	he looks-closely-around
tú'u	he shows, teaches (repet)	tù'ṹ	he opens (door)
vịị	he darkens, blackens	vbii	he rolls (barrel)
wáá	he falls	wá'a	he counts (repet)
yìi	he breaks (couscous)(repet)	yóó	he stretches
yọọ	he stretches-out (arm)	zàà	he heals
'ná'a	he steps-on (repet)	'wáa	he is-finished
'wàa	he finishes	'wá'a	it gives-a-headache

verb group	verb base	vn stem	suffix	vn	translation
1	gbó	gbó	lí	gbólí	hitting
1A	dàə	dàə	lí	dàəlí	cooking
1B	yèe	yèe	né	yèené	fanning (grain)
2	sẹ'	sẹ'	í	sẹ''ẹ	cutting
	mbóg	mbóg	í	mbóggí	preparing
3	səd	sən	né	sənné	saving
4	pìb	pìm	ní	pìmní	heating (something) up
5	pàṽ	pà	né	pàné	carrying
6	ṽn	ṽn	né	ṽnné	burning
	hín	hín	ní	hínní	mutual loving
7	nìm	nìm	ní	nìmní	waking (someone) up
8	ay	ay	né	àyné	entering in large quantity

Table 3.1: Verbal noun formation

Table 3.1 contains a list of the verb groups with reference to their base form and the stem changes before /lí/. Reciprocal forms fall in group 6, and stative/passive forms in group 8. Note the changes in final d, b, and ŋ before the suffix.

Although -né occurs more frequently on Table 3.1, -lí is statistically more frequent in spoken Dii and is thus chosen as the title morpheme despite possible confusion with the temporal-locative /lí/.

Several of the final consonants of the verb bases are partially assimilated to the nasality of the suffix -né: d becoming n, b becoming m, but m remaining m.

The verbal noun suffix /lí/ before the interrogative morpheme /a/ loses the vowel -í and becomes -lá, -ná, or -á.

3.4.3 Other nominalizations from verbs (n₂). Many nouns are formed on a verb stem by use of suffixes quite different from the /lí/ of the verbal noun. There seem to be no synchronic rules for these formations, and these morpheme-final consonants are evidently survivals of former noun classes in this language family (Boyd 1989:205). The following distinctive characteristics are noted:

- 1) only transitive and intransitive verb bases are involved as stems,
- 2) the stem changes, in comparison to the verb base, are not nearly as regular as with the verbal noun, but several trends may be seen at work:
 - a) suffixation (with -m, -n, -', -d, -g, or -b, and some verbs also show modification of their stem vowel);
 - b) no consonantal or vowel change between the verb and the noun, but often with a tone change;
 - c) suffixation of -g or -n with a loss of n, ŋ, ', or g in the verb stem;
 - d) shortening or lengthening of the verb base to form the noun.

There are irregular tone changes in many of the forms, but these irregularities have not been incorporated into the present description. Note the insertion of euphonic vowels with verb stems ending in -g, -', and -ŋ.

Only 88 n₂ nouns were found at the time when there were in 3,160 entries in the dictionary.

Tagmemic formula:

$$n_2 = +nuc:v_{tr}/v_{is} + nomr:\underline{m/n/d/'/g/b/\emptyset}$$

shortening/lengthening stem

Read: n_2 consists of a nucleus filled by a transitive or intransitive verb stem plus a nominalizing element m, n, ʼ, d, g, b, or \emptyset , or the shortening or lengthening of the verb stem. Irregular tone differences have not yet been included in the above formula.

Examples:

a) with suffixation (with modification of the verb's vowel in some stems):

with suffix -m:

gèè	he complains	gè̀m/gè̀m	complaint
kàg	he encloses	kàgàm	enclosure
kàʼ	it is-cold	(yag) kàʼam	cold
nɔɔ	he dies	nɔm	death
pí	he sets-snare	píim	snare
wəə	he breathes	wə̀m	breath

with suffix -n:

kàà	he strains (liquid)	kààn	strainer for liquids
wàà	he plays	wà̀n	African bell

with suffix -ʼ:

kàà	he strains (liquid)	kàʼ	grains left after straining beer
sò	(foot) goes-to-sleep	sòʼ	(foot's) sleeping

with suffix -d:

bà	he plants	bàad	planting season
hùù	he sows	hùud	seed
kàʼ	it is-cold	kàʼad	calm, peace
liì	he bears-fruit	liíd	fruit
lúg	it is-long	lúgúd	length
síʼ	it ends	síʼíd	end
vbáń	he puts (one piece) across another	vbàgàd	cross, crossed pieces of wood

with suffix -g:

fàà	he doubts	fàag	doubt
hàà	she brings-forth	hàg	pregnancy
hì	he snores	hìg/hìg	snoring
kèè	it curves	kèəg	a curved thing
tùù	he forges	túg	forge
víí	it is-black	víig/víig	something unclean
'màà	he is-thin	'màag	thinness

with suffix -b:

bàà	he cultivates	bab	field
nàà	he dances	náb	dance

b) no consonantal or vowel change between verb and noun, often with a tone change:

bèè	he calls	bee	call
họọ	it makes-ill	họọ	illness, sick person
ìì	it is-gluey/slippery	íí	3 kinds of plant whose leaves are gluey when cooked
kìgì	he makes (balls of)	kígì	ball
mòò	he speaks	moo	word, palaver
nàṅ	he hits	naṅ	blacksmith
sọọ	he castrates	sọọ	eunuch
súd/sùd	it sprinkles	súd	sprinkling
wàà	he makes-fall	wàà	loss of virginity
zàṅ	he braids	zaṅ	cord

c) suffixation of -g or -ṅ with loss of -n, -', -g or -ṅ:

final -n replaces -ṅ:

dẹṅ	he hits	dèn	drum
káṅ	he cries out	kán	cry, wail
zùṅ	he strikes	zùn	anvil
'màṅ	he takes-with-a-pliers	'màn	pliers

final -g replaces glottal:

sà'	he smells	sàg	odor, smell
-----	-----------	-----	-------------

final -g replaces -n or -ṅ:

mán	he hates	mààg	enemy
nàṅ	he grinds	nààg	grinding stone
tòn	he reconciles	tòòg	reconciliation

final -g replaces -d:

hàd	he sweats	hààg	sweat
nód	he dreams	nèèg	dream
tùd	he destroys (village)	tùg	destruction (of a village)

d) shortening or lengthening of the verb base to form the noun:

kám	(chief) sits	kám/káam	throne of chief
ndógò	it hurts	ndóg	open wound

One irregular form is extremely interesting:
 zígín they are-numerous zìgìzígí the Pleiades

3.4.4 Compound nouns (n_{cp}). Compound nouns are of two main types, nominal and verbal. Their external distribution is identical with that of n_1 and n_2 .

The nominal compound noun has the following characteristics:

- 1) Its nucleus contains one of the morphemes an n_1 , n_2 , $\underline{í}$ ‘the one who’, or \underline{ya} ‘place’.
- 2) Following the nucleus is a detail slot containing one of several possible morphemes or constructions: noun phrase 1, place name, temporal root, cardinal numeral, $qual_1$ or $qual_2$ adjective, or a verbal noun clause. The formula for the nominal compound noun:

$$n_{cp} = +nuc:n_{1/2}/\underline{í}/\underline{ya} + det:NP_1/lo_{place}/te/card/qual_{1/2}/VNCl$$

Examples:

ààm kin	peanut big (Bambara peanut)
bàa káń	mister cry (child who cries a lot)
bàa lig	mister house (owner)
bìig kaa	snake cushion (python--carried on the head like a cushion)
bìig nii	snake elder (certain kind of large snake)
bàà nòó tóəd	basket eye open (large-holed woven basket)
doo núug	leg curve (knee)
dâg yíg	calabash rainy-season (certain kind of calabash)
gan dágá	horn one (rhinoceros)
hád vbìn	earth Vina-river (yellow dirt of a specific color)
hẹn mam	thing water (animals living near water; water spirit)
í moo sẹ”ẹ	one-who word cutting (judge)
í nii	one-who elder (elder)
í ’yélí	one-who guarding (clan chief, lord)
moo zọ́ọ dẹ”ẹ	word heart making-clean/joyful (good news)
nàa dâg silí	woman calabash stomach-on (woman who ties stone-filled calabash rattles to her waist to make noise = bogeywoman)
nán sààm telí	person clothes washing (laundry worker)
ya hẹn hà”í	place thing sacrificing (altar)
ya mbààlí	place sitting (place to sit; thing to sit on)
yạ’ bìig nii	intestine snake elder (certain kind of vine)
zág nan	panther couscous (glutton)

In several respects the verbal compound nouns resemble factative clauses, but they differ from them at several points, in addition to distributional differences.

- 1) The compound noun never has a pronoun subject (or is it always third person singular = 'Ø'?).
- 2) Only a limited number of verb types are used: intransitive, transitive, repetitive, ditransitive, and reciprocal.
- 3) Peripheral clause positions (except the locative) are rare.

These constructions are quite varied in structure. Abbreviations used are those found in chapter 5 while discussing clauses. The initial noun is often the subject of the verb, and the verb may be followed by an indirect object and/or a direct object, a locative phrase, the negative clause marker sá, etc. A formula outlining only those constructions that have been found follows:

$$\begin{array}{c} \pm S:n_{1/2} + P_{tr/repet} \quad + O:NP_{\perp} \pm Lo:LoP_{lf} \quad \pm CM_{neg:sá} \\ \text{Ideo} \\ P_{tr} \\ \hline P_{i/recp} + Lo:LoP_{lf} \\ P_i + P_{di} + I:pr + O:nprQ + CMQ \\ P_{tr} + O:pr \end{array}$$

Examples:

ààm zàg hágá	peanut creep ground-on (certain kind of peanut)
gàh pàh	carry carry (spotted hyena)
gìh nà'am	find-absent mother-your (hartebeest)
lání sòmémé	eat-together family-in (certain kind of yam)
lúg kón ẹná	be-long do-me what-Q (fourth finger of hand)
mbàà hòm nós	sit see-you eye (little finger)
nàa gbà' wọọ	woman treat-well husband (planet Jupiter)
nàa yúú gàh dòò sá	woman head carry wine not (certain kind of grass-hopper with a pointed head)
nán gàà Tayii sá	person know God not (pagan)
nóg sèg la"í	bird drill-hole tree-in (woodpecker)
tà' kpág	snap kpág (spring-activated snare, trap)
waa tà mbèè	child guard sheep (shepherd)
wèè nú'	fall-out teeth (certain kind of termite)
'wàa táa nagá	finish spear hand-in (certain kind of bird)

3.4.5 Kinship nouns (n_{kin}). Many kinship nouns (generally names for relatives) have two forms, an unpossessed (absolute form) and a possessed form. Kinship nouns have the following characteristics:

- 1) When possessed, they occur only with $poss_{kin}$ possessives (3.7.5). Many possessed forms are also shorter than their corresponding unpossessed forms.

2) They are compounds, the possessive being suffixed to the first element of the compound.

3) The first element may be called a kinship noun stem, while the second element is a noun or qualifying adjective adding precision (detail) to the first element.

Tagmemic formula:

$$n_{kin} = +nuc:n_{kinS} +det:n/qual$$

Read: A kinship noun consists of a nucleus filled by a kinship noun stem and a detail slot filled by a noun or qualifying adjective.

Examples (with the $poss_{kin}$ in parentheses):

<u>unpossessed</u> n_{kin}		<u>possessed</u> n_{kin}
à yée	grandfather	à(n) yée (my) grandfather
à wəə	husband of a man's or a woman's younger sister	à(n) wəə (my) younger sister's husband
ag fəə	mother-in-law	à(n) fəə (my) mother-in-law
dag ba'ad	co-worker	dà(n) ba'ad (my) co-worker
dag dọŋ	circumcision friend	dà(n) dọŋ (my) circumcision fr.
dag gbòò	friend	dà(n) gbòò (my) friend
dag nì	older sibling of same sex	dà(n) nì (my) older brother/sister
dag sáŋ	younger sibling of same sex	dà(n) sáŋ (my) younger "
dag yée	a girl's older/younger brother	dà(n) yée (my) older/younger brother
dag kẹ́ẹ́	a boy's older/younger sister	dà(n) kẹ́ẹ́ (my) older/younger sister
pəg wəə	mother's brother	pá(ń) wəə (my) mother's brother
tɔg fəə	father's sister	tógó(n) fəə (my) father's sister
yəg wəə	husband of a man's or a woman's older sister	yà(n) wəə (my) older sister's husband

3.5 NON-PERSONAL PRONOUNS

There are three kinds of non-personal pronouns (npr) in the Dii language:

3.5.1 interrogative (npr_q)

3.5.2 indefinite (npr_{indef})

3.5.3 indefinite relative (npr_{rel})

3.5.1 The interrogative pronouns (npr_q) are roots and seem to be seldom modified by an adjective. They occur in the head position in noun phrases. The root née/nén is also used as an adjective (3.7.11). They have allomorphs which occur only before the interrogative /a/ as below; the n is euphonicly doubled:

(npr1)	nóo/nón	who	nón(ná)
	née	how, how many	nén(ná)
	èñ	what	èñ(á)

3.5.2 Tóó ‘a certain one, some’ is an indefinite root (npr_{indef}) which can occur as a pronoun (or as an adjective). It occurs in the head position in noun phrases. It may be repeated in consecutive clauses where the form nónná also occurs:

(npr2)	tóó... tóó	the one... the other, some... others
	nónná... nónná	the one... the other

3.5.3 The indefinite relative pronoun (npr_{rel}) í is a root that may be translated ‘the one who’ or ‘the one’. It can occur as first member of a compound noun (see 3.4.4), and in noun phrases (NP₁, 4.2.1) and í phrases (ÍP_{mod}, 4.4).

3.6 PERSONAL PRONOUNS

Most of the Dii personal pronouns (pr) will be presented in three large series, a mí series, an àh series, and a bi series. A slightly irregular set of hypothetical pronouns will be treated later. Our discussion will have the following headings:

- 3.6.1 general meanings
- 3.6.2 specific pronominal meanings and uses
- 3.6.3 mí series
- 3.6.4 àh series
- 3.6.5 bi series
- 3.6.6 hypothetical pronouns

3.6.1 General meanings. Dii direct and indirect object pronouns are the easiest to describe, having only PN (person-number) and L (logophoric) meanings on the clause level. These same meanings are also found in the head slot of pronoun phrases (PrP). Subject pronouns, however, are much more complicated, and fill the composite PN-ML-T position (person-number, mood-logophoricity, tense), and sometimes also add emphasis (E). In a certain sense, it can be said that Dii subject pronouns are ‘conjugated’ instead of verbs. A broad discussion of this topic is found in Nordlinger & Sadler 2004; Dii tense, aspect, mood markings on subject pronouns would be termed ‘propositional TAM on dependent nominals’.

Person and number are familiar categories. Dii has three persons and singular versus plural, distinguishes a dual ‘you-and-I’, and has inclusive and exclusive first plural. The inclusive pronoun (1 pli) is used if the person spoken to is included in ‘we’; the exclusive pronoun (1 ple) is used if the person spoken to is excluded from ‘we’. Pere also has a three-way contrast dual/inclusive/exclusive (Raen 1981:119). A chart of these options for the least complicated mí subject pronoun set (mí_{subj}) is as follows. All Dii pronouns are divided up into sets of eight forms like this one and labelled.

(pr1) PN	minimal forms		plural forms	
1	mí	‘I’	vó	‘we (exclusive)’
1 + 2 d	ba	‘we-2’	ba...ví	‘we (inclusive)’
2	mó	‘you s’	ví	‘you pl’
3	Ø (zero)	‘he/she/it’	vɛ	‘they’

Mood (see Comrie 1976) and logophoricity are indicated primarily by a choice among the three pronominal series, mí, àh, and bi:

The mí series appears in the factative mood (perfective and imperfective aspects), and in the following subordinate clauses: indirect questions, comparison, manner, ‘until’, and cause clauses that are introduced by moo ‘because’.

The àṅ series is used for subject pronouns in the imperative mood and as subjects in most of the subordinate clauses.

The bí series pronouns replace certain pronouns (subject or object) which refer back to the pronoun subject of a preceding dominating clause, and are thus logophoric (LOG). The uses of logophoric pronouns are complicated; only their forms and examples will be cited in this section. A full explanation of their uses is given in section 7.3.

The following chart lists the sets of pronouns on the left, the moods/aspects where they occur in the center, and the subordinate clauses where they occur on the right.

(pr2)	independent clause	
<u>pronoun series</u>	<u>moods/aspects</u>	<u>subordinate clauses</u>
<u>mí</u> subjects (± future/non-future) (+ LOG = <u>bí</u> subjects)	factative	indirect quotation comparison cause (<u>moo</u> ...) manner ‘until’
<u>àṅ</u> subjects (No tense mark) (+ LOG = <u>bí</u> subjects)	imperative	indirect order temporal-locative- conditional relative desiderative purpose (affirmative) concessive cause (<u>ka/bà</u> ...)
hyp subjects (± present/past) (± LOG...)	hypothetical	hypothetical negative purpose
<u>mí</u> objects (+ LOG = <u>bí</u> objects)	all moods/aspects, including verbal noun mood	all subordinate clauses

The hypothetical mood (perfective and imperfective aspects) calls for a separate set of subject pronouns hyp_{present} and hyp_{past}. The

hypothetical forms show they're diachronically related to the mí series, but their indication of tense is 'present/past' instead of 'future/non-future' as elsewhere in the Dii system.

Tense (T) is generally timeless, but in the mí series 'future' is indicated by a pronominal suffix -ń (high tone), non-future by a lower tone -n or -ñ.

Emphasis (E) is usually indicated by lengthening a pronoun vowel, by modifying the tone on the pronoun, or by a suffix. See discussion of the specific forms below.

The following chart displays the person/number/logophoricity/tense/emphasis marking options for Dii pronouns:

(pr3)	<u>person</u>	<u>number</u>	<u>logophoricity</u>	<u>tense</u>	<u>emphasis</u>
	first	singular	<u>mí/àn</u> : non-LOG	timeless	ordinary
	second	dual	<u>bi</u> : LOG	future	strong
	third	plural		non-future	
	inclusive				
	exclusive				

See Bohnhoff 1986 for a full treatment of Dii pronouns and possessives from a slightly different perspective than this work gives.

The some 264 Dii pronoun and possessive form options are divided into sets of eight pronouns and each set is given a title, (26 pronoun sets, 4 possessive sets, 3 contracted form sets). The mí_{subj}, àn_{subj}, and bi_{subj} titles refer to pronouns occurring in the PN-ML-T composite position; they're timeless in tense, 'ordinary' in emphasis.

The titles mí_{obj} and bi_{obj} refer to pronouns occurring in the indirect and direct object positions only. Tense is not indicatable.

The mí_{fut}, mí_{nonfut}, and bi_{fut} and bi_{nonfut} titles refer to pronouns which occur only in the composite PN-ML-T position, with either future or non-future tense as options.

The mí_{emph}, àn_{emph}, àn_{sbench}, and bi_{emph} titles refer to pronouns used in the composite PN-ML-TE position, with 'strong' emphasis. Their tense is always timeless. One set of mí_{emph} and bi_{emph} pronouns can occur in non-subject positions, in which case only PN-L-E meanings are relevant.

The titles mí_{futemph} and bi_{futemph} refer to emphatic future pronouns, stronger in emphasis than mí_{emph} and bi_{emph}, but they can occur

respectively in any subject position wherever mí_{emph} and bi_{emph} forms appear.

3.6.2 Specific person meanings and uses. The distinction between and the uses of the 2 s and the 2 pl pronouns requires some comment. The 2 s is used between members of the same family, with children, and with friends and equals after greetings have been completed. It's also used in speaking to your inferiors, but may be used even to the village chief if the speaker is 'teaching the chief a lesson'!

The 2 pl is used in 'formal' situations, in speaking to the chief normally, to village elders, to people older than the speaker, to persons who know medicine, to the blacksmith, in almost all greetings, and in general (especially during greetings) to anyone you want to 'honor', e.g., a close friend. Frequently a person will 'honor' someone with the 2 pl who is younger than the speaker. The 2 pl is also used in speaking to an angry person in order to calm him/her down.

The use of the 2 s and 2 pl pronoun varies, however, between villages and dialects. At Mbé, e.g., a father may be addressed in the singular by his son, but this is not so in all villages even within the Western (mam be') dialect.

The 1 ple can replace the 1 s in speaking of yourself sometimes: 'we' (i.e., I) went hunting.

All forms of the 1 pli that contain '...' in tables 3.2, 3.3, and 3.3b (e.g.: ba...vî), are discontinuous morphemes. The whole verbal complex (i.e., the verb, its suffixes and any object pronouns), even a whole set of serial verbs, may occur between the two elements of these morphemes!

The 3 pl is a form of respect used when speaking about individuals you wish to 'honor', and can replace the 2 pl in direct address, e.g., in speaking to the chief: 'Are the chief (i.e., you!) going to town?'

The 3 pl and the dual are also impersonal forms, the dual being used especially often in proverbs with this meaning.

The 3 pl is not always used even when the referent is clearly plural, provided the context is clear. It might be argued, however, that the noun takes on a more generalized meaning when the 3 pl pronoun is thus omitted. See line 128 of the Rabbit and Cornucopia story in Bohnhoff 1968:130.

A pronoun may be plural if later in the clause the other referent will be mentioned in the IA (instrumental-accompaniment) position:

(pr 4) Súprèfé yaa vó hòlè kan kèé míí. (2-34)
 SP came us to-see and wife my
 (The souspréfet came to see ‘us’ (me!) and my wife.)

3.6.3 Mí series. The mí series is used in the factative mood (in both perfective and imperfective aspects) as well as in a few subordinate clauses as indicated in (pr2) above.

The absence of an overt pronoun form is indicated by Ø, which is as significant in Dii as the presence of another pronoun. If no subject pronoun ‘occurs’, it’s automatically 3 s and is a ‘zero pronoun’.

See 3.8.8 for when to use the suffixed (bound) forms, when the fuller (free) mí and mó forms. The 3 s mí_{obj} pronoun provides special difficulties; see the footnote on Table 3.3 below.

Table 3.2 cannot contain all the mí forms; the remaining four sets spill over into Table 3.3: the non-future emphatic, and the object forms, and the possessives.

person, number	unmarked <u>mí_{subj}</u>	non- subject <u>mí_{emph}</u>	normal subject pronouns				final <u>mí_{emph}</u>
			<u>mí_{emph}</u>	<u>mí_{nonfut}</u>	<u>mí_{fut}</u>	<u>mí_{futemph}</u>	
1 s	-ń/mí ¹	míí	míí	mín	míń	míńᵋ	mí
1 + 2 d	-a/ba ¹	bàà	baà	baᵋ	báń	báńᵋ	ba
2 s	-ím/mó ^{1,2}	móó	móó	món	món	mónᵋ	mó
3 s	Ø	wòò	wᵋ	Ø	wúń ⁴	wúńᵋ ⁵	wᵋ
1 ple	vó	vóó	vóó	vón	vón	vónᵋ	vó
1 pli	ba...ví ³	bàà ví	baà...ví	baᵋ...ví	báń...ví	báńᵋ...ví	ba ví
2 pl	ví	víí	víí	vín	víń	víńᵋ	ví
3 pl	vᵋ	vòò	vᵋᵋ	vᵋᵋ	vúń	vúńᵋ	vᵋ

Table 3.2: mí series pronouns

Notes on Table 3.2:

1. The contracted form is on the left of the slash; the uncontracted is on the right.
2. mó or mó
3. Discontinuous forms indicated by ‘...’, where the verb, its pronominal object, even a set of serial verbs, are insertable between these elements.
4. wúń or síń or sí or áń
5. wúńᵋ or síńᵋ or áńᵋ

Each of the forms in Table 3.2 will now be illustrated.

Examples of mí_{subj} forms as they occur in independent clauses follow. They are termed ‘unmarked’ because they occur if the subject carries no indication of emphasis, tense, or logophoricity.

(pr5) <u>Mí</u> làà kaalí.	I go town-to (I go to town.) (5-215)
<u>Mó</u> làà kaalí.	You go...
<u>Ø</u> làà kaalí.	He/she/it goes...
<u>Ba</u> làà <u>ví</u> kaalí.	We (incl.)...
<u>Vu</u> làà kaalí.	They...

Examples of mí_{subj} forms as they occur in dependent clauses will be illustrated below in the subsection on contractions, see Table 3.3b.

Examples of mí_{emph} pronouns used in non-subject slots are the following:

(pr6) <u>Mó</u> sén <u>móó</u> né.	You want-not you F-I-NEG (5-217) (<u>You</u> don’t want to.)
<u>Ø</u> sén <u>wòò</u> né.	He/she wants-not him/her F-I-NEG (<u>He/She</u> doesn’t...)
<u>Ba</u> sén <u>ví</u> <u>bàà</u> <u>ví</u> ní.	We (incl.) don’t...
<u>Vu</u> sén <u>wòò</u> né.	<u>They</u> ...
<u>Míí</u> mí mòò moo...	Me I speak word... (I’m speaking...) (4-60)
<u>Í</u> <u>míí</u> máa,...	The-one me as for... (As for me,...) (4-59)
<u>Ya</u> <u>wòò</u> ’wààpád...	Place them all... (All of them...) (4-49)

Note the exceptional abbreviated form of non-subject mí_{emph} in the following:

(pr7) <u>Bàà</u> ba sén ví ní.	We we want-not F-I-NEG. (4-60) (<u>We</u> don’t want to.)
--------------------------------	---

Examples of mí_{emph} used in subject slots are the following:

(pr8) <u>Móó</u> hò bà’á kaalí.	<u>You</u> see father town-in (5-216 & 217) (<u>You</u> saw father...)
<u>Wu</u> hò bà’á kaalí.	<u>He</u> saw...
<u>Baà</u> hò <u>ví</u> bà’á kaalí.	<u>We</u> (inclusive) saw...
<u>Vuù</u> hò bà’á kaalí.	<u>They</u> saw...
<u>Míí</u> mòò moo...	<u>I</u> speak word... (4-59)
<u>Amáa</u> <u>míí</u> pàgà né.	But <u>I</u> bear-not F-I-NEG (3-96) (But <u>I</u> didn’t father her.)

Examples of mí_{nonfut} used in subject slots follow. The bà is a temporal morpheme indicating ‘indefinite past time’ but is not a tense marker.

- (pr9) Bà món làà télá? Past you go where (Where were you?) (5-218)
Bà’á bà Ø làà télá? Father past he go where
 (Where did father go?)
Bà bañ làà ví télá? Past we go we where (Where did we all go?)
Bà vuñ làà télá? Past they go where (Where did they go?)

Examples of mí_{fut} used in subject slots are the following:

- (pr10) Món làà kaalí. You-will go town-to (5-217)
Wuñ làà kaalí. He-will...
Báñ làà ví kaalí. We-(incl.)-will...
Vuñ làà kaalí. They-will...

Examples of mí_{futemph} used in subject slots follow:

- (pr11) Mónɔ làà kaalí. You-will go town-to (5-217 & 218)
Wuñɔ làà kaalí. He-will...
Báñɔ làà ví kaalí. We-(incl.)-will...
Vuñɔ làà kaalí. They-will...

Examples of mí_{emph} used in ‘final’ slots (i.e. post-verbal, near the clause end) are the following. Because of the several conditioned allomorphs of the clause markers, all forms are listed here.

- (pr12) Vu híí bi vì míw. They want they ask me (5-217)
 (They want to ask me.)
Vu híí bi vì ba yu. ...us-2.
Vu híí bi vì mó yọ. ...you-singular.
Vu híí bi vì wu yu. ...him/her.
Vu híí bi vì vó yu. ...us (excl.).
Vu híí bi vì ba víw. ...us (incl.).
Vu híí bi vì víw. ...you-plural.
Vu híí bi vì vu yu. ...them.

The mí forms continue in Table 3.3. The object forms are in the first column, then the non-future emphatic forms. The possessive forms and the kinship possessives are listed in the third and fourth columns; they are discussed in 3.7.3 and 3.7.5 respectively, but are listed here for comparison.

The forms in columns 5 to 7 are from the bi series and are listed here only for comparison. The bi object forms will be discussed below in 3.6.5, and the logophoric possessives in 3.7.4 and 3.7.5b respectively.

person, number	<u>mí</u> series			<u>bi</u> series			
	<u>mí</u> _{obj}	<u>mí</u> _{nonfutemph}	non-kinship poss	kinship poss _{kin}	<u>bi</u> _{obj}	non-kinship poss _{log}	kinship poss _{kinlog}
1 s	-n/mí ¹	mínnɔ	míí	-n	-n/mí	míí	-n
1 + 2 d	ba	bánnɔ	bàà	bà	ba	bàà	bà
2 s	-m/mó	mónnɔ	móó	-m	bi	bìì	bì
3 s	-wɯ ²	bànnɔ	wòò ⁴	-gà ⁵	bi	bìì	bì
1 ple	vó	vónnɔ	vóó	vó	vó	vóó	vó
1 pli	ba ví	bánnɔ ³ ...ví	bàà ví	bà ví	ba ví	bàà ví	bà ví
2 pl	ví	vínnɔ	víí	ví	bi	bìì/víí	ví
3 pl	vɯ	vúnnɔ	vòò	vɯ/-y ⁶	bi	bìì/vòò	bì/vɯ

Table 3.3: mí series: object, non-future emphatic pronouns, possessives
bi series: object pronouns and possessives

Notes on Table 3.3:

1. The contracted form is on the left of the slash; the uncontracted is on the right.
2. -wɯ: one of several allomorphs. The 3 s mí_{obj} pronoun provides special difficulties; its allomorphs occur in specific contexts as follows (see Table 3.8 for examples):
 verb group 1, short vowel: -g + vowel identical with verb vowel
 verb group 1, long oral vowel: -wɯ
 verb group 1, long nasal vowel: -wɔ
 other verb groups: double a stem-final m, n, or ŋ, +ɔ,
 or double other consonant +ɯ
3. bánnɔ: high tone occurs only following bà
4. wòò becomes -òò by contraction with the preceding morpheme, in which case, the w causes reduplication of the final consonant of the preceding morpheme: lig wòò becomes liggòò his house.
5. -gà: one of several allomorphs (see 3.7.5). The vowel is a duplicate of the vowel in the verb.
6. -y: this form contracts with the preceding vowel (see 3.7.5).

Examples of mí_{obj} pronouns, as direct or indirect objects follow. The first two examples use contracted forms, the last two show the uncontracted forms used with the negative.

(pr13) Mí vá'am doo ba'adì. I greet/thank-you foot work-F-I

	(I thank you for the work.) (5-216)
Mí vá'' <u>u</u> doo ba'adì.	I thank-him/her... (vá'' <u>u</u> = vá' + -w <u>u</u>)
V <u>u</u> vá' <u>ba ví</u> doo ba'adì.	They thank us incl...
Mí vá' <u>v<u>u</u></u> doo ba'adì.	I thank them...
Mó vá'an <u>mí</u> ní.	You greet-not me F-I-NEG (You don't greet me.)
Mí vá'an <u>mó</u> né.	(I don't greet you.)

Examples of the mí_{nonfutemph} subject pronouns:

- (pr14) Mí ò bà mónno làa kaalí. I say that you go town-to (5-218&219)
(I say that it was you who went to town.)
- Mó ò bà'á bànnò làa kaalí. You say that father he goes...
- Bà'á ò bà vínno làa kaalí. Father says that you-plural go...
- Bà'á ò waa bà vúnno làa kaalí. Father says that the-children they...

Illustrations of the bi object forms are found below in 3.6.5, and the corresponding kinship and non-kinship bi possessives in 3.7.4 and 3.7.5b.

We may say that mí_{subj} and mí_{obj} pronouns are roots. The other mí pronouns have the following formulae:

$$\underline{mí}_{fut} = +nuc:free \underline{mí}_{obj} + fut:-\underline{n}$$

Read: the mí_{fut} pronoun is composed of a nucleus filled by a free mí_{obj} pronoun (i.e., non-suffixed) followed by a future slot filled by -n. NB: the mí_{fut} 3 s pronoun is an exception, where only the mí_{obj} form wú serves as stem, and three other forms (sín, sí, án) appear alongside wún. The 1 pli in subject position is a discontinuous morpheme.

The non-future pronouns have a similar structure but with mid or low tone on -n, as per Table 3.2.

$$\underline{mí}_{emph} = +nuc:free \underline{mí}_{obj} + emph:V \text{ length}$$

Read: the mí_{emph} pronoun is composed of a nucleus filled by a free mí_{obj} pronoun, plus an emphatic component realized as vowel length. The 3 s pronoun is an exception to this formula.

There are tonal differences between the subject and the non-subject forms of the emphatic mí pronouns; these differences are not incorporated in the formula above.

$\underline{m\acute{i}}_{\text{fute}} = + \text{nuc:} \underline{m\acute{i}}_{\text{fut}} + \text{emph:} \underline{-n\textcircled{a}}$

Read: the future emphatic mí subject pronoun is composed of a nucleus filled by a mí_{fut} pronoun, followed by an emphatic slot filled by -nᵹ.

The mí_{nonfute} pronoun has tonal irregularities that preclude an easy formula here.

3.6.4 The àṅ series. Pronouns of the àṅ series are many fewer in number and occur only in the PN-ML(-T) position of imperative clauses and of most dependent clauses (see chart (pr2) in 3.6.1 and sections 7.1.2 and 7.2). With a total of only 4 sets, two appear in independent clauses, and the other two in subordinate clauses.

The contraction of the subordinate particle ka with the pronoun is not a separate pronoun type, but is listed for reference since these forms are not predictable.

Another contraction of the subordinator ka occurs with the àṅ_{sbemph} forms, but the cases I've seen are limited to relative clauses: $ka + \text{àṅnᵹ} > káṅnᵹ$, and $ka + \text{àṅmᵹ} > kámᵹ$ (5-76). An example follows:

(pr15) ...í m^í káṅnᵹ tú'ud nán vᵤ hḗn yè,... (1 Cor. 9:27)
the-one I sb-I-emph teach-to person pl thing dem
(...I, I who have taught people,...)

A special pronoun (i_{subj}) occurring TWO levels down from its dominating pronoun subject antecedent is listed here with the contractions, but is explained only in section 3.6.5 with the other logophoric pronouns.

Subject pronouns can also be rendered emphatic by adding àgà 'self' before the àṅ_{emph} forms: àgà m^í I myself.

The dependent/subordinate subject emphatic forms (àṅ_{sbemph}) occur only in indirect orders. There are few differences between the independent àṅ_{emph} and the dependent type àṅ_{sbemph} pronoun sets, and further research is needed concerning the relationship between what at this point appears to be two sets of forms.

person, number	unmarked <u>à̀</u> _{subj}	independent		subject <u>à̀</u> _{sbemph}	<u>ká</u> far past + <u>à̀</u> _{subj}	<u>ka</u> sb + <u>mí</u> _{subj} or <u>à̀</u> _{sbsubj}	<u>ka</u> sb +
		subject <u>à̀</u> _{sbsubj}	subject <u>à̀</u> _{emph}				
1 s	<u>à̀</u>	<u>à̀</u>	<u>à̀</u> nnɔ/a mí	<u>à̀</u> nnɔ	káń	káń	káń
1 + 2 d	ba	àa	à baà	à baà	káa	kaa	kaa
2 s	<u>à̀</u> m ¹	<u>à̀</u> m	à móɔ	<u>à̀</u> mmɔ	kám	kám	kii
3 s	à	à	à wɛ	à wɛ	ká	ka ²	kii
1 pl	òo	òo	à vóo	à vóo	kóo	kóo	kóo
1 pli	ba...ví	àa...ví	à baà...ví	à baà...ví	káa...ví	kaa...ví	kaa...ví
2 pl	ì ¹	ì	à víi	à víi	kíi	kíi	kii
3 pl	ùu	ùu	à vuù	à vuù	kúu	kuu	kii

Table 3.3b: à̀ series pronouns, and contractions with ká and ka

Notes on Table 3.3b:

1. These pronouns are optional in the 2 s and 2 pl when the context is clear, so contrary to almost all other Dii pronouns, these 2 forms are not strictly obligatory.

2. Three contractions occur between bà, ka and certain 3 s forms:

bà wún = bàn

ka wún = kan

ka ìi = kii

Examples of à̀_{subj} pronouns follow. Again, if there is no subordination or emphasis, the pronoun can be termed ‘unmarked’.

(pr16) À̀m làa kaalí. or: _ làa kaalí. You-IMPV go town-to (5-223)
(Go to town!)

À̀ làa kaalí. He-IMPV... (He must go to town!)

Oo làa kaaláa? We-excl.-IMPV... (Must we go to town?)

Ì làa kaalí. or: _ làa kaalí. You-pl-IMPV... (Go to town!)

Ùu làa kaalí. They-IMPV... (They must go to town!)

À̀ zuu mílì. She-IMPV come-down me-to (3-109)

(She must come down to my (dispensary)!)

Ì tàa í yògò sá sám. You-pl-IMPV think like that IMPV-NEG at-
all (Don't think like that at all!) (3-113)

_ gbó waa víi vu sá. (You-pl-IMPV) hit child your plural IMPV-
NEG (Don't hit your children!) (3-60)

Examples of à̀_{sbsubj} follow:

(pr17) À̀m làa kaalí tée,... If-you go town-to dem (5-223)
(If you go to town,...)

<u>A</u> a làà kaalí tée,...	If-we-2...
<u>A</u> a làà <u>v</u> í kaalí tée,...	If-we-incl...
<u>U</u> u làà kaalí tée,...	If-they...

Examples of the independent ành_{emph} follow.

(pr18) Agà <u>à</u> nnò (à míi) làà.	Self I-IMPV (me) go (5-223) (It's I that must go.)
Agà <u>à</u> wu làà.	It's he/she that must go.
Agà <u>à</u> baà làà <u>v</u> í.	It's us (incl.)...
Agà <u>à</u> vuù làà.	It's they...

Examples of the dependent ành_{sbemph} follow.

(pr19) Gbanàà vu ò bà <u>à</u> nnò dòg.	(3-56b, 5-223 & 224) Chief they(=he) say that I-IMPV go-up (The chief says that it's me that must go up (to see him).)
Gbanàà vu ò bà <u>à</u> mmò dòg.	Chief they(=he) say that you-IMPV go-up (The chief says that it's you that...)
Gbanàà vu ò bà <u>à</u> baà dòg <u>v</u> í.	Chief they(=he) say that we-incl.-IMPV go-up (The chief says that it's us all...)
Gbanàà vu ò bà <u>à</u> vuù dòg.	Chief they(=he) say that they-IMPV go-up (The chief says that it's they...)

The ành_{subj} and the ành_{sbsubj} pronoun sets are roots.

The two sets of ành_{emph} and ành_{sbemph} show many similarities but have too many irregularities to permit a tagmemic formula at the moment.

3.6.5 Bi series. The bi series of logophoric pronouns is used in 'dominated' clauses only and refers back to the co-referent subject pronoun of a previous dominating clause, e.g.: 'You (mó) say that tomorrow you-will (bín instead of móú) carry the wood' (see 7.3). There is a corresponding possessive form (3.7.4 and Table 3.3).

Basically, for every pronoun of the mí series, there is a corresponding form in the bi series, such that Table 3.2 and the beginning of Table 3.3 can be reproduced and bi forms found for every slot.

Table 3.2 is therefore here reproduced and modified as Table 3.4.

(pr21) Mí ò mí sɛn mí ní. I say I want-NEG me F-I-NEG (5-220)
(I say that I don't want to.)

Mó ò bi sɛn bì ní. You say that you...

Ba ò ví bà sɛn ví bàà ví ní. We say that we...

Vɛ ò bi sɛn bì ní. They say they...

Examples of subject bi_{emph} pronouns:

(pr22) Mó ò bà bì hò Múúsà kaalí. You say that you see Moses village-in
(You say that you saw Moses in town.)(5-220)

Mí ò bà bì hò Múúsà kaalí. I say that I...

Ba ò ví bà bì hò Múúsà kaalí. We say that we...

Vɛ ò bà bì hò Múúsà kaalí. They say that they...

Examples of subject bi_{nonfut} pronouns:

(pr23) Mó ò bà bì làà kòddí. You say that you go forest-to (5-221)
(You say that you went to the forest.)

Bà'á Ø ò bà bì làà kòddí. Father he says that he...

Ba ò ví bà bì làà kòddí. We say we that we...

Vɛ ò bà bì làà kòddí. They say that they...

Examples of subject bi_{fut} pronouns:

(pr24) Mó ò bà bín làà kòddí. You say that you-will go forest-to (5-221)
(You say that you will go to the forest.)

Bà'á Ø ò bà bín làà kòddí. Father he says that he-will...

Ba ò ví bà bán làà ví kòddí. We say that we-will...

Vɛ ò bà bín làà kòddí. They say that they-will...

Examples of subject bi_{futemph} pronouns:

(pr25) Mó ò bà bínnɔ làà kòddí. You say that you-will go forest-to (5-221)
(You say that you will go to the forest.)

Bà'á Ø ò bà bínnɔ làà kòddí. Father he says that he-will...

Ba ò ví bà bánnɔ làà ví kòddí. We say that we-will...

Vɛ ò bà bínnɔ làà kòddí. They say that they-will...

Examples of subject bi_{emph} pronouns used in 'final' position (i.e., post-verbal, near the end of the clause) follow. Third person forms are all bi; second person forms are sometimes bi and sometimes mí; first person forms have no overt trace of bi usage. Because of this situation, all forms will be listed below.

(pr26) Mí ò bà vún híjí bi vì míw. I say that they want they ask me-cm

(I say that it's me they want to ask something of.) (5-220 & 221)
 Ba ò bà vún híí bi vì ba yu. We-2 say that it's us-2...
 Mós ò bà vún híí bi vì biw (or: mó yọ). You say that it's you...
 Bà'á Ø ò bà vún híí bi vì biw. Father he says that it's he...
 Vós ò bà vún híí bi vì vó yu. We-(excl.) say that it's we-(excl.)...
 Ba ò ví bà vún híí bi vì ba víw. We-all say that it's we-all...
 Ví ò bà vún híí bi vì biw (or: víw). You-plural say that it's you-pl
 Vu ò bà vún híí bi vì biw. They say that it's they...

Table 3.3 is here reproduced and modified as Table 3.4b to be able to exhibit the remaining bi pronoun forms. The logophoric possessives are also shown for comparison.

Examples of the bi_{obj} pronouns follow. The first group is of direct objects, the second of indirect objects.

person, number	<u>bi</u> _{obj}	<u>bi</u> _{nonfutemph}	non- kinship poss _{log}	kinship poss _{kinlog}	unmarked <u>ii</u> _{subj}
1 s	-n/mí ¹	biñno	míí	-n	àñ
1 + 2 d	ba	biñno	bàà	bà	àa
2 s	bi	biñno	bìì	bì	ìì
3 s	bi	biñno	bìì	bì	ìì
1 ple	vó	biñno/vónno	vóó	vó	òo
1 pli	ba ví	biñno	bàà ví	bà ví	àa...ví
2 pl	bi/ví	biñno	bìì/víí	ví	ìì
3 pl	bi	biñno	bìì/vòò	bì/vù	ìì

Table 3.4b: Logophoric bi series: object, non-future emphatic pronouns, possessives, and ii pronouns

Notes on Table 3.4b:

1. The contracted form is on the left of the slash; the uncontracted is on the right.

(pr27) Mí híí bà'á à gbó-n sá. (5-219)
 I want father he-IMPV hit-me IMPV-NEG
 (I don't want father to hit me.)
 Mós híí bà'á à gbó bi sá. You want father he hit you...NEG
 Nà'á Ø híí bà'á à gbó bi sá. Mother she want father he hit her.NEG
 Ba híí ví bà'á à gbó ba ví sá. We-all want father he hit us-all..NEG
 Vu híí bà'á à gbó bi sá. They want father he hit them...NEG
 Mí híí àm nìm mí ú. I want you wake-up me F-I (2-68b)

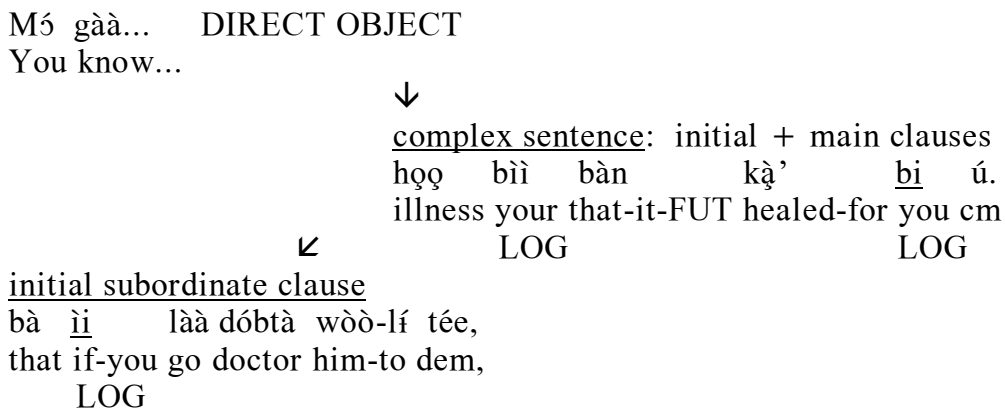
(pr28) Mí híjì bà'á à pú- ñ bèè sá. (5-220)
 I want father he-IMPV give-me goat...IMPV-NEG
 (I don't want father to give me a goat.)
 Mós híjì bà'á à pú bì bèè sá. You want father he give you...NEG
 Ba híjì ví bà'á à pú ba ví bèè sá. We-all want father he give us-all..
 Vú híjì bà'á à pú bì bèè sá. They want father he give them...NEG

The logophoric possessives $poss_{log}$ and $poss_{kinlog}$ are discussed more fully in 3.7.4 and 3.7.5b, and examples are given there.

The ìjì pronoun subject forms are very special. They occur
 1-only two levels of structure down from the preceding dominating co-referential subject pronoun,
 2-only as subject of that second level clause, and
 3-the special ìjì form occurs only in the second and third persons.
 If the co-referent pronoun occurs in object position on the second level, it simply takes the 'normal' bì logophoric form. These pronouns are more fully explained in section 7.3. We can however, illustrate the second level co-referent subject here with a sentence showing a second level initial clause inside the complex sentence. See section 7.3 for examples where the second level clause follows the main clause.

(pr29) $\overset{\text{ì}_{subj}}{ìjì}$ $\overset{poss_{log}}{bì}$ $\overset{bì_{obj}}{bì}$
 Mós gàà bà ìjì làà dóbtà wòò-lí tée, họọ bì bì bàn kà' bì ú. (5-222)
 You know that you go doctor him-to dem, illness your sb-it cool you cm
 (You know that if you go to the doctor, your illness will be healed.)

If we break this down structurally, we get the following diagram:



The bì_{subj}, final bì_{emph} and bì_{obj} pronouns are roots.

bì_{fut} = + nuc:free bì_{obj} + fut:-í

Read: the future bi pronoun is composed of a nucleus manifested by the free (non-suffixed) bi_{obj} pronoun, which is followed by the future suffix -ñ. Some first person pronouns are based on mí_{obj} forms instead of bi_{obj} forms.

bi_{nonfut} = + nuc:bi + non-fut:-ñ

Read: the non-future bi pronoun is composed of a nucleus containing bi (except the dual: ba), plus a non-future suffix -ñ.

bi_{emph} = + nuc:free bi_{obj} + emph:V length

Read: the bi emphatic subject pronoun is identical with the mí_{emph} pronoun except that the nucleus of this pronoun is filled by the free (non-suffixed) forms of the bi_{obj} pronoun. The 1 pli has no ‘...ví’.

non-subject bi_{emph}: no formula readily visible.

bi_{futemph} = + nuc:bi_{fut} + fut-emph:-no

Read: This pronoun is identical with the mí_{futemph} pronoun except that the nucleus contains a bi_{fut} pronoun.

bi_{nonfutemph}: all are biñno except an option in the 1 ple.

3.6.6 Hypothetical pronouns. In hypothetical or contrary-to-fact clauses/sentences, the subject pronoun differs significantly from the mí forms, but seems related diachronically. In addition, these forms are used in both subordinate and main clauses, even in independent clauses (i.e., without the presence of a subordinate clause).

Initially, I thought the hypothetical pronouns were identical with the mí ‘future’ forms, but time showed the tense division to be different: the mí forms have a future/non-future distinction, but the hypothetical forms contrast ‘present’ and ‘past’. Since they treat an unreal world, a present/past dichotomy isn’t the best terminology either.

Note that:

- 1) the particle kà is present in both subordinate and main clause,
- 2) the two hyp subject pronoun forms are identical in the clauses of a single sentence,
- 3) the subordinate-final demonstrative tée is NOT interchangeable with máa which is common in other subordinate clauses, and

4) in the d, 3 s, and 1 pli, the ‘present’ and ‘past’ forms are each neutralized and therefore not distinctive!

In the emphatic forms that I’ve seen, the present/past distinction doesn’t seem to be relevant.

Examples of the hypothetical ‘present’ follow.

(pr30) Kà míń nán nàà-ì téé, kà míń yòò lig ɓuulí nà’à. (5-224)
 Hyp I person rich-IMPF dem, hyp I build house be-much many
 (If I were rich, I’d build many houses.)

person, number	<u>hyp_{present}</u>	<u>hyp_{past}</u>	<u>hyp_{emph}</u>
1 s	kà míń	kà mín	kà míńno
1 + 2 d	kà ban	kà ban	kà banno
2 s	kà món	kà món	kà mónno
3 s	kàń	kàń	kàńno
1 ple	kà vón	kà vón	kà vónno
1 pli	kà ban...ví	kà ban...ví	kà banno...ví
2 pl	kà vín	kà vín	kà vínno
3 pl	kà vùn	kà vùn	kà vùnno

Table 3.4c: Hypothetical pronouns

(pr31) Kà ban ví nán nàà- ì téé, kà ban yòò ví lig
 Hyp we person rich-IMPF dem, hyp we build we house
 ɓuulí nà’à. (5-224)
 be-much many (If we-incl were rich, we’d build many houses.)

(pr32) Bà’á kàń nán nàà- ì téé, kàń yòò lig
 Father hyp-he person rich-IMPF dem, hyp-he build house
 ɓuulí nà’à.
 be-much many (If Papa were rich, he’d build many houses.)

(pr33) Kà vùn nán nàà- ì téé, kà vùn yòò lig
 Hyp they person rich-IMPF dem, hyp they build house
 ɓuulí nà’à.
 be-much many (If they were rich, they’d build many houses.)

Examples of the hypothetical ‘past’:

- (pr34) Kà mín yaa vaṅná téé, kà mín d̀̀g kaa- lí sú'ú. (5-224)
 Hyp I come fast dem, hyp I go-up village-to PERF
 (If I had come fast, I'd already have gone up to the village.)
- (pr35) Kà ban yaa ví vaṅná téé, kà ban d̀̀g ví kaa- lí sú'ú.
 Hyp we come we fast dem, hyp we go-up we village-to PERF
 (If we all had come fast, we'd already all have gone up to the village.)
- (pr36) Bà'á kà̀n yaa vaṅná téé, kà̀n d̀̀g kaa- lí sú'ú.
 Father hyp-he come fast dem, hyp-he go-up village-to PERF
 (If Papa had come fast, he'd already have gone up to the village.)
- (pr37) Kà vùn yaa vaṅná téé, kà vùn d̀̀g kaa- lí sú'ú.
 hyp they come fast dem, hyp they go-up village-to PERF
 (If they had come fast, they'd already have gone up to the village.)

As if this weren't structure enough, if an overt expression of time is used in a supposedly past situation, then the 'present' forms of the pronouns come 'back':

- (pr38) Ká bán kà mín yaa vaṅná téé, kà mín d̀̀g kaa-lí sú'ú. (5-224)
 Yesterday hyp I come fast dem, hyp I go-up village-to PERF
 (Yesterday if I had come fast, I'd already have gone up to the village.)

An example of the emphatic hypothetical form hyp_{emph} follows. Notice in this case that there is only an independent clause in the sentence. See also the examples (hyp1) and (hyp2) in section 7.1.4.

- (pr39) Kà mínnɔ d̀̀- m yag. (5-224)
 Hyp I bear-you mouth/witness
 (It should have been I that bore you witness).

3.7 ADJECTIVES

The several types of Dii adjectives are all roots except $qual_2$ and lim . They generally modify nouns in noun phrases, but may also be used as complements in descriptive and equative clauses. Only the indefinite, limiting and interrogative roots may occur as subject or object of a clause, in addition to their adjectival functions.

Dii adjectives will be treated roughly in their order of occurrence in the noun phrase:

- 3.7.1 qualifying ($qual_1$)
- 3.7.2 adjectivalizations ($qual_2$)
- 3.7.3 possessives ($poss$)
- 3.7.4 logophoric possessives ($poss_{log}$)
- 3.7.5 kinship possessives ($poss_{kin}$)
- 3.7.5b logophoric kinship possessives ($poss_{kinlog}$)
- 3.7.6 focus (foc) and recall (rec)
- 3.7.7 indefinite ($indef$)
- 3.7.8 demonstratives (dem)
- 3.7.9 plural (pl)
- 3.7.10 limiters (lim)
- 3.7.11 interrogative (adj_q)

3.7.1 Qualifying adjectives ($qual_1$). This group of adjective roots contains such morphemes as:

gbòò	big	ḅíd	bad
fḅg	old	'màḅ	new

The total number of $qual_1$ in Dii is not large. I counted only 88 in the 2002 dictionary containing 5,299 entries.

The usage of $qual_1$ differs markedly from that of adjectives in English, where ‘they are afraid of ants’ indicates that ‘ants’ is a kind of direct object of the adjective ‘afraid’ (i.e., ‘they fear ants’). In Dii, $qual_1$ only modify nouns (or subject pronouns in descriptive and equative clauses) and do not take objects of any sort. There is a qualifying ‘slot’ in the structure of the noun phrase in which these qualifying adjectives appear (see 4.2.1).

3.7.2 Adjectivalizations ($qual_2$). $Qual_2$ adjectives have the following characteristics:

- 1) they’re derived from intransitive or transitive verb stems,

2) many of the same suffixes used for n_2 nouns appear here also: m, d, g, b, lengthening or doubling of the verb stem vowel, final -n replaces final -ŋ, or no change.

A few of these adjectives are identical with the noun in form (3.4.3). There are irregular tone and/or stem changes in some forms that haven't been incorporated into the present description. Note the insertion of euphonic vowels with verb stems ending in -' and -g.

Only 55 $qual_2$ were noted in the 5,299 entries of the 2002 edition of the dictionary.

Tagmemic formula:

$qual_2 = +nuc:v_{is}/v_{tr}s + adjr:\underline{m}/\underline{d}/\underline{g}/\underline{b}/\emptyset/\text{vowel length or doubling}$

Read: $Qual_2$ consists of a nucleus filled by an intransitive or transitive verb stem and an adjectivalizer filled by m, d, g, Ø, or by vowel length. In one item, final n replaces ŋ.

Examples:

a) with suffix -m:

kògò	he is-weak	kògòm	weak
pì	it is-hot	píím	hot
yəə	he is-blind	yəm	blind

b) with suffix -d:

gbòò	he is-old	gbòòd	old
kà'	he is-cold/slow	kà'əd	cold/slow
sí'	it ends	sí'íd	last
zàà	it lives	záəd	alive
zìg	it is-sweet	zìgid	sweet

c) with suffix -g:

kə̀ə̀	it is-crooked	kə̀ə̀g	crooked
víí	it is-black/dark	vííg/víig	dirty
yó	it is-cooked	yóg	cooked
'wó	it dries-out	'wóg	dried

d) with vowel of verb stem lengthened or doubled:

bà	he gets-(eye)-put-out	báa	(eye) put out
gè	he breaks	gáa	broken
yè'	he splits	yè'è	split

e) with suffix -b:

yuu	it is-flexible	yuu b	flexible
-----	----------------	--------------	----------

f) final -ŋ replaces final -ŋ:

bùŋ	it rots	bún	rotten
-----	---------	-----	--------

g) with no consonantal change between verb and adjective:

d <u>uu</u>	it is-good	d <u>uu</u>	good
g <u>ìì</u>	he ties	g <u>ìì</u>	tied together
g <u>òò</u>	he wraps-up	g <u>òò</u>	wrapped up
k <u>ìgi</u>	he makes (balls of)	k <u>ìgi</u>	round
kin	it is-big	kin	big
kp <u>àa</u>	he breaks-in-pieces	kp <u>àa</u>	small
s <u>ú</u>	it is-deep	s <u>ú</u>	deep
t <u>òò</u>	it is-pleasing	t <u>òò</u>	delicious
y <u>èè</u>	it is-reddish	y <u>èè</u>	reddish
y <u>òm</u>	it is-bitter	y <u>òm</u>	bitter
'm <u>àa</u>	he is-thin	'm <u>àa</u>	thin

3.7.3 Possessives (poss). The ordinary, basic set of possessives parallels closely the m₁emph set of pronouns (see Table 3.3). It's used everywhere except where replaced by a logophoric or kinship form (see next 3 subsections). Some examples follow.

(poss1) Ø lig mí nu. (5-219)
It house my F-I (It's my house.)

(poss2) Ø lig móo no.
It house your F-I (It's your house.)

(poss3) Ø gbá' fòó wòò. (4-148)
He takes-care-of body his (He takes good care of himself.)

The relevant portion of Table 3.3 is here reproduced, with the necessary footnotes:

person, number	non- kinship	kinship	non- kinship	kinship
	poss	poss _{kin}	poss _{log}	poss _{kinlog}
1 s	míí	-n	míí	-n
1 + 2 d	bàà	bà	bàà	bà
2 s	móó	-m	bìì	bì
3 s	wòò ⁴	-gà ⁵	bìì	bì
1 + 1 ple	vóó	vó	vóó	vó
1 + 2 pli	bàà ví	bà ví	bàà ví	bà ví
2 pl	víí	ví	bìì/víí	ví
3 pl	vòò	vù/-y ⁶	bìì/vòò	bì/vᄁ

portion of Table 3.3: mí series: possessives

bì series: possessives

Notes from Table 3.3:

4. wòò becomes -òò by contraction with the preceding morpheme, in which case, the /w/ causes reduplication of the final consonant of the preceding morpheme: lig wòò becomes liggòò his house.
5. -gà: one of several allomorphs (see 3.7.5). The vowel is a duplicate of the vowel in the verb.
6. -y: this form contracts with the preceding vowel (see 3.7.5).

3.7.4 Logophoric possessives (poss_{log}). The logophoric possessive set parallels closely the set of bì_{obj} pronouns (3.6.5 and Table 3.3). Like the bì pronoun set, this set is used wherever the possessive refers back to the subject pronoun of the preceding dominating clause (7.3). The forms are seen above in the portion extracted from Table 3.3.

An example (underlined):

(poss4) M₃ g₃à b₃ h₃en bìì nu. (5-222)
 You know sb-it thing LOG F-I
 (You know that it's yours.)

3.7.5 Kinship possessives (poss_{kin}). These possessives, underlined in the examples below, resemble the mí_{obj} pronouns except in the 3 s, 3 pl, and sometimes in 2 pl (see Table 3.3 and the portion of it reproduced in 3.7.3 above). In the 3 s there is either a lengthening of the vowel or g plus a reduplication of the preceding vowel.

Examples:

dàn gbòò	my friend (4-28,146,159)	dà vó gbòò	our (excl.) friend
dà bà gbòò	our (dual) friend	dà bà ví gbòò	our (incl.) friend
dàm gbòò	your (s) friend	dà ví gbòò	your (pl) friend
dàgà gbòò	his/her friend	dèy gbòò	their friend

But compare some 3 s exceptions:

dàgà dọ̀	his circumcision friend
dàà sáń	his younger brother/her younger sister
tògò fạ	his father's sister

3.7.5b Logophoric kinship possessives (poss_{kinlog}). These possessives, underlined in the examples below, resemble the logophoric possessive forms seen in 3.7.4. See also Table 3.3 and the portion of it reproduced in section 3.7.3 above.

dàn sáń	my brother	dà vó sáń	our (excl.) brother
dà <u>bà</u> sáń	our (2) brother	dà <u>bà ví</u> sáń	our (incl.) brother
dà <u>bì</u> sáń	your (s) brother	dà <u>bì/dèy</u> sáń	your (pl) brother
dà <u>bì</u> sáń	his/her brother	dà <u>bì</u> sáń	their brother

An example:

(poss5) Mó ọ̀ bà dà bì sáń- ì.
 You say sb-he brother LOG younger-F-I
 (You say he's your younger brother.)

3.7.6 Focus (foc) and recall (rec) adjectives. The adjective máa can have either or both focus and recall functions. It's used in the focus position of clauses as well as the recall position in noun phrases. In the focus position, it draws special attention to the noun it modifies.

We could translate the recall adjectives by 'already mentioned', referring the listener back to someone or something previously discussed.

Three adjectives, súu, pèè, and tèè have only recall functions and occur only in noun phrases. The form súu refers back to something in the immediate context 'just mentioned', while máa, pèè, and tèè refer further back in time 'already mentioned', which may vary from 'a day ago' to 'years ago'.

A focus example:

(foc1) Kùù máa, Ø kó keb wàńnî. (4-43)
 Quail foc, he does trick much (As for Quail, he's very tricky.)

A recall example:

(rec1) Mós yó' gam tètè sá'áa? (2-18)
 You swallow pill rec FACT-PERF-Q
 (Have you swallowed that pill already?)

There are shorter allomorphs of máa and súu which are used only before the clause marker: má nɔ and sú nɔ respectively.

3.7.7 Indefinite adjective (indef). The indefinite root tóó is used as an adjective meaning 'some', 'a certain': bàa tóó 'a certain man'. See also 3.5.2.

3.7.8 Demonstratives (dem). Demonstratives in Dii have locative or temporal nuances:

yè	this (very close)	tée/té	future time
zù	that (far)	máa/má	non-future time
yè	this, that (close)		
yò	this (close)		
yò	this (close)		

The forms té and má occur before the clause marker and before naa at the end of some subordinate clauses.

3.7.9 Plural adjective (pl). Nouns are pluralized by using an adjectival morpheme vɛ which appears near the end of noun phrases. But if the context of an utterance clearly shows an item to be plural, vɛ may be dropped.

Since the plural vɛ and the subject 3 pl pronoun vɛ are homophonous, the question immediately arises as to whether they are one and the same morpheme. They clearly have a single origin diachronically, but synchronically they occur in different positions. They can both occur in a single sentence, and if the subject noun phrase is a coordinated phrase, vɛ may appear several times in a single sentence. In the following example, two vɛ appear (underlined) in the subject NP, each modifying its noun, followed by the subject pronoun in the PN-ML-T (PM) position:

(pl1)	S	PM	P _{tr}	O	Te
	-----	---	---	---	-----
	Bàbàam kẹ́ẹ́ <u>vɛ</u> kan waa <u>vɛ</u> , <u>vɛ</u> lá nan háá háá.(4-9E)				
	Rabbit wife pl and child pl they eat couscous long-time long-time				
	(Rabbit's wife and children ate couscous a very long time.)				

3.7.10 Limiters (lim). The words 'wààpád or pád 'all', and waaná' 'a little, a few, some', limit the meaning of the noun they modify:

(lim1) nán 'wààpád pèè (4-157)
man all rec (all those men)

(lim2) hẹn yẹ vᵤ 'wààpád (3-115)
thing dem pl all (all those things)

(lim3) Vín kì hẹn waaná' yúú moo yè- lí. (N.T. intro)
You-FUT hear thing some on word dem-on
(You'll year something about this problem.)

In addition to modifying nouns in noun phrases, the limiter may also be subject or object of the verb on occasion:

(lim4) Vᵤ kì 'wààpád. (3-55)
They hear all (They understood all of it.)

The form 'wààpád seems to be composed of 'wàa 'he finishes' and pád 'all (Ful)'; waaná' seems to be waa 'little' and ná' 'like that'.

Waaná' also has a distributive form: waaná'ná' 'a little of each' (3-18).

3.7.11 Interrogative adjective (adj_q). The interrogative roots née (nén before interrogative /a/) 'how many, how much', and ẹ̀n 'which', are used as adjectives in the quantity position in noun phrases. Both roots are also used as pronouns (3.5.1).

Two examples:

(Q1) Í yè Ø dálà nénná? (1A44)
The-one dem it 5-frs how-many-Q (How much is this one?)

(Q2) Mós gậ' ẹ̀ná? (4-9G)
You horn which-Q (What kind of horn are you?)

3.8 VERBS

Two usually verbal categories are expressed in Dii by the subject pronoun: mood (factative, imperative, hypothetical), and tense (future, non-future). Another usually verbal category is in Dii realized by clause markers: aspect (perfective, imperfective), and one negative clause marker distinguishes the imperative mood from non-imperative moods.

In contrast to the above, the specific contributions of Dii verbs are the following:

1. They can be divided into ‘transitivity’ groupings depending on what subjects or objects they occur with. This gives us verbs that are transitive, intransitive, locative, perception, intentional, descriptive, inchoative, etc.
2. They can be grouped according to which suffixes, if any, that each verb can take: negative, ditransitive, dative, reciprocal, stative/passive, or accompaniment.
3. Another subgrouping of Dii verbs specifies a plurality of the actors or of the actions involved. Dii ‘repetitive’ verbs require either several actors, several objects or persons being acted upon, or the verbal process itself may simply be ‘pluralized’, i.e., repeated several times.
4. When suffixes are attached to a verb stem, Dii verbs may be divided into 8 groups according to their final phoneme: a consonant, a long vowel, or a short vowel.

Dii verbs will be described under the following headings:

- 3.8.1 order of suffixes
- 3.8.2 verb base, verb groups
- 3.8.3 negative
- 3.8.4 intransitive verbs
- 3.8.5 stative/passive verbs
- 3.8.6 reciprocal verbs and the accompaniment suffix
- 3.8.7 locative verb
- 3.8.8 direct object pronouns
- 3.8.9 transitive and desiderative verbs
- 3.8.10 ditransitive verbs
- 3.8.11 dative verbs
- 3.8.12 transitive and ditransitive saying verbs
- 3.8.13 perception verbs
- 3.8.14 intentional verbs
- 3.8.15 descriptive verbs

- 3.8.16 inchoative verb
- 3.8.17 auxiliary verbs
- 3.8.18 repetitive verbs
- 3.8.19 transitive/intransitive contrasts
- 3.8.20 borrowed verbs
- 3.8.21 exceptions
- 3.8.22 summary of verb formulas

3.8.1 Order of suffixes. Verbal suffixes in Dii express the following ideas: negative, stative/passive, reciprocal, accompaniment, ditransitive and dative. Table 3.5 shows the relative order of all Dii suffixes but does not show which suffixes may be attached to any particular verb. This chart will provide a useful overall perspective. If any two suffixes occur together, they occur in this order. No two items in a single column may occur simultaneously.

	1	2	3
verb stem	stem lengthening	stative/passive reciprocal ditransitive dative accompaniment	negative

Table 3.5: Order of verbal suffixes

3.8.2 Verb base, verb groups. The verb base is that form of the verb which has none of the above suffixes attached. The simple factative imperfective clause is the best place to find it: I see the house; the sun is-hot, etc. If there is a direct object, it should be a noun, not a pronoun, to reveal the verb base. BEWARE: although the verbal noun ('infinitive') seen earlier in Table 3.1 is the citation form of Dii verbs, it's not the easiest form from which to derive all other verbal forms; it's therefore not used as the base form in the dictionary.

Given the form of any verb base, the form of any suffix it will take can be predicted according to certain fixed rules. Any form that is an exception to the rules is listed in the dictionary. Dii verbs are divided into eight groups according to their final consonant or vowel. Table 3.6 displays these groups and their characteristics.

3.8.3 Negative. It's only by agreement with the clause marker that verbs take the negative suffix. The negative morpheme is the nasal consonant -n wherever possible, a morphophonemic //N//, with partial

assimilation to the bilabial position. Thus stem-final -b becomes -m in the negative. Note also the absorption of negative -n following stem-final -m or -n, which both remain unchanged in the negative.

Throughout the verb system, verb stems are lengthened before the negative suffix in groups 2 and 5, and in addition, -n becomes -g in group 5. In these groups a short vowel before the final consonant in the stem becomes a ‘double’ vowel by reduplicating the stem vowel following this final consonant, e.g.: óg > ógó.

All HH or LL tones on verb stems are modified to HM and LM respectively before the negative suffix.

The negative will be assumed to conform to these rules elsewhere in this grammar except where specifically mentioned to the contrary.

verb group	characteristic	base form	negative	translation
1	short final vowel	gbó	gbón	he hits
	long final vowel	dàà	dàən	he cooks
2	-’	sə’	sə’ə̀n	he cuts-through
	-g	mbóg	mbógən	he prepares
3	-d	səd	sən	he saves
4	-b	pìb	pìm	he heats-(something)-up
5	-ŋ	pàŋ	pàgən	he carries
6	-n	à̀n	à̀n	he burns
		hì’ìn	hì’ìn	he separates
7	-m	nìm	nìm	he wakes-(someone)-up
8	-y	ay	ayn	(they) enter-in-large-numbers

Table 3.6: Verb groups, base forms, and the negative

The verbs in Table 3.6 will be used in all the verb charts, so the group characteristics and translation columns will henceforth be omitted.

All negative forms with a long or double vowel on the verb stem drop the negative -n phonetically when the verb is immediately followed by the negative clause marker né: *Mí gàan né* > *Mí gàa né* ‘I don’t know.’ Rhythm in the speech chain often shortens a doubled consonant to a single following long or double vowels.

3.8.4 Intransitive verbs (v_i). Intransitive verbs have the following characteristics:

- 1) Their nucleus may contain either an intransitive or an intransitive repetitive (3.8.18) verb stem.
- 2) They have a possible negative suffix attached to the stem.
- 3) They occur in the head slot of the intransitive verb phrase.
- 4) The affirmative verb form serves as stem for dative verbs, the verbal noun, and may also serve as the stem for nominalizations (n₂) and adjectivalizations (qual₂). See 3.4.3 and 3.7.2.
- 5) One verb (mbàà ‘sit’) can take the ‘accompaniment suffix’ explained and illustrated in 3.8.6, but seems the only intransitive verb to do so; this suffix will not therefore be listed in the tagmemic formula below.

Dii verbs with several different meanings appear in this category:
 1-‘true’ intransitive verbs (e.g., ‘fall’),
 2-stative verbs (e.g. ‘be-clean’), and
 3-motion verbs (e.g. ‘come’). (Note that certain of the motion verbs are used in a special way in intentional clauses--see 3.8.14 below.)

Tagmemic formula:

$$v_i = +nuc:V_i/repetiS \pm neg://N//$$

Read: the intransitive verb is composed of a nucleus filled by an intransitive verb stem or an intransitive repetitive verb stem followed optionally by the negative suffix.

Examples:

dẹ́	he is-clean	hì	he is-full
làà	he goes	lúú	he rises
nɔɔ	he dies	pɛ	he falls
pì	it is-hot	sí	he gets-down
vẹ́	he returns	'yém	he walks

3.8.5 Stative/passive verbs (v_{stv}). Stative/passive verbs have the following characteristics:

- 1) They generally have a stative/passive suffix (or ‘extension’) -y attached to a transitive verb stem; some stative/passive verbs change their tone (compared with the transitive) instead of or in addition to the suffix -y.
- 2) They may have the negative suffix in addition.
- 3) They occur in the head slot of stative/passive verb phrases.
- 4) The affirmative form serves as stem for the verbal noun.

Some linguists (e.g., Grimes 1975:97) refer to this type of verb as ‘nonagentive’.

The action of the stative/passive verb is kept within itself, and may be translated into English by the passive or the past participle. Table 3.7 shows a shorter stem (an allomorph of the transitive verb) for some transitive verbs in group 1 before the stative/passive suffix (d̀̀̀̀̀). Groups 2 and 5 lengthen their stems here in the same manner as before the negative suffix seen in Table 3.6.

The stative/passive verb is not often used, and in the negative it’s rarer still. Group 8 seems to contain no transitive verbs, so there are no reciprocal or stative/passive forms for this group in Table 3.7. Negative forms for each group are illustrated in Table 3.7.

The similarity of meaning between the intransitive and the stative/passive requires closer examination. That they’re distinct forms is easily shown by comparing the following:

<u>intransitive</u>	<u>transitive</u>	<u>stative/passive</u>	
p̀̀̀̀̀	p̀̀̀̀̀b	p̀̀̀̀̀b	be-hot, etc.
s̀̀̀̀̀	s̀̀̀̀̀d	s̀̀̀̀̀y	descend, etc.
s̀̀̀̀̀g	s̀̀̀̀̀g	s̀̀̀̀̀guy	gather-together, etc.
ỳ̀̀̀̀g	ỳ̀̀̀̀g	ỳ̀̀̀̀guy	hide, etc.

Tagmemic formula:

$$V_{stv} = +nuc:V_{tr}S \quad +stv: \pm -y / \pm \text{tone change} \quad \pm neg://N//$$

Read: the stative/passive verb is composed of a nucleus filled by a transitive verb stem and a possible stative/passive suffix -y and/or a tone change, followed optionally by the negative //N//.

Examples in addition to those in Table 3.7:

d̀̀̀̀̀	he tears	dey	it is-torn
k̀̀̀̀̀	he does	k̀̀̀̀̀y	it is-done

mbóg he prepares

mbógoy it is-prepared

3.8.6 Reciprocal verbs (v_{rcp}) and the accompaniment suffix.

Reciprocal verbs describe an action where two or more actors are doing something to or for each other, and have the following characteristics:

- 1) They have a reciprocal suffix (or ‘extension’) -n attached to a transitive, descriptive, or intransitive verb stem; this -n becomes -m in groups 4 and 7, drawn to the point of articulation of the verb stem and might be entitled morphophonemic //N₂//.
- 2) A second tone on the syllable is usually high, whether it falls on the second half of a double(d) vowel or on the final n/m of the reciprocal suffix; several verbs with a lexical low tone take high tones in the reciprocal.
- 3) In groups 2 and 5, they have the stem vowel doubled euphonicly as was seen before the negative suffix in Table 3.6.
- 4) Only affirmative forms have been found so far, which serve as stems in the verbal noun.
- 5) They occur in the head slot of the reciprocal verb phrase.

verb group	base form	reciprocal	stative/passive	negative stative/passive
1	gbó dèè	gbón dón	gbóy dèy	gbóyn dèyn
2	sè' mbóg	sé'ón mbógón	sè'oy mbógoy	sè'oy mbógoy
3	səd	són	səy/səd	səyn
4	pìb	pím	píb	pím
5	pàj	págán	pəgəy	pəgəyn
6	àn hí'ín	ón hí'ín	àn hí'ín	àn hí'ín
7	nìm	ním	ním	ním
8	ay	??	??	??

Table 3.7: Reciprocal and stative/passive verbs

Examples of reciprocal constructions:

(rcp1) V_{tr} mbógón hẹn lálí. (4-15)
 They prepare-for-each-other thing to-eat
 (They prepare food for each other.)

(rcp2) Ì híń ya ví- lí. (John 13:35)
 You-pl-IMPV love-each-other place you-pl-at (Love each other!)

Tagmemic formula:

V_{rcp} = + nuc:V_{tr/desc}S + rcp://N//

Read: the reciprocal verb consists of a nucleus filled by a transitive or (intransitive? or) descriptive verb stem, plus a reciprocal suffix //N//, realized as -ń or -m.

The ‘accompaniment suffix’ (or ‘extension’) describes a joint action/state where the subject of the verb is ‘accompanied’ in the action or state by someone or something. This morpheme was initially confused with the reciprocal suffix, but must be distinguished from it. It has the following characteristics:

- 1) Formally, it appears identical to the negative suffix seen in Table 3.6, but with an affirmative meaning (and of course it’s not followed by a negative clause marker).
- 2) It’s usually (not always) followed by an accompaniment (IA) phrase which designates who or what ‘accompanies’ the actor specified as subject of the verb--see 5.2 and the RAP_{kan} phrase in 4.10.1.
- 3) The accompaniment form can serve as stem in the verbal noun.
- 4) Almost all the stems that permit this suffix are transitive, but one may be intransitive or is the ‘descriptive verb’, both having the form mbàà ‘he sits/is’; the descriptive verb is followed by predicate nouns or adjectives. An exact title for mbàà is problematic.

Examples of accompaniment constructions:

(acc1)	PM	P _i	IA	Lo	
	----	-----	-----	----	
Ø kée	doo	dágá	’néń,	mí	mbàan kan- nọ yò. (3-124)
	It remains foot one only, I sit-with with-it here				
	(I’ve got only one foot left here.)				

(acc2) PM P_{desc} C₁
 ---- - - - - -
 V_H mbàan dag gbòò... (4-86B)
 They are-with neighbor friend(They became good friends.)

(acc3) PM P_{tr} O₁ CM
 --- ---- - - - - -
 (V_H kàb vee) v_H ùun púgg-ì. (4-35E)
 (They light fire) they dry-with meat-F-I
 (They light a fire and dry meat (i.e., with the fire).)

(acc4) in a subordinate purpose clause:
 sb S sb PM P_{tr} O₁ IA

 Bậbậm Ø sò kớó...moo kếế bìi bà à gàgan waa wu-lí.(3-129)
 Rabbit he skins skin..for wife his that she carry-together child
 it-in (Rabbit skins out the hide...so his wife can carry her
 child in it (i.e., with the skin's 'participation').)

3.8.7 Locative verb (v_{lo}). The locative verb has the following characteristics:

- 1) It has only the form dì 'he is-there' in the affirmative and pé 'he is-not-there' in the negative; the negative form is therefore a 'replacive' form.
- 2) It takes no suffixes, and is thus a 'root' according to the definition used in this grammar.
- 3) It occurs in the head slot of the locative verb phrase.

This verb and its characteristics are so special that the reader is referred to section 5.1.2, subsection f) for a fuller discussion and examples.

3.8.8 Direct object pronouns. Before turning to transitive verbs, it's useful to examine direct object pronouns in some detail. They occur with transitive, ditransitive, dative, stative/passive, objective complement, inchoative, and ditransitive introducer verbs.

These pronouns cause no orthographic difficulties except in the singular, since all plural object pronouns are written as separate words. All three persons of the singular m_{1obj} pronoun set are, however, written as suffixes if possible (3.6.3 and 3.6.5), and the first singular pronoun of the b_{1obj} set presents the same problem.

Table 3.8 shows the number of allomorphs of the verb stem in use before the direct object pronoun; this number varies according to the verb group. The first form listed for each verb group shows the result of

contraction with the 1 s and the 2 s direct object pronouns. The 1 s pronoun is shown on the chart, and is in parentheses. Again, longer verb stems occur before these suffixes in groups 2 and 5 (as before the negative suffix--3.8.3).

The second form listed for each verb group shows the 3 s object pronoun in parentheses. This second form is always the same as the verb base form, and is used before the 3 s and all plural direct object pronouns.

The longer free (non-suffixed) form of the pronoun is used if the verb stem ends in -n or -m. Following the negative suffix also, the object pronoun occurs in its longer, free form.

Contraction rule: Any final -d or -b in the verb stem, when it occurs before a suffix -n or -m, is lost (absorbed in the speech chain by the nasal suffix). The negative suffix is inserted between the verb stem and any eventual object pronoun; these pronouns then normally take their non-suffixed form seen in Table 3.3.

Examples ('>' means 'is realized as'):

səd + -n (1 s) > sən
pìb + -m (2 s) > pìm

səd + -n (neg) > sèn + -m (2 s) > sèn mó
mbóg + -n (neg) > mbógən + -n (1 s) > mbógən mí

3.8.9 Transitive and desiderative verbs (V_{tr} , V_{desid}). Transitive verbs have the following characteristics:

- 1) Their nucleus may contain either a transitive or a transitive repetitive (3.8.18) verb stem.
- 2) They may take the negative suffix, and some can take the accompaniment suffix (but not both simultaneously: 3.8.6).
- 3) Before a direct object pronoun, some transitive verb stems have allomorphs as shown in Table 3.8 and as discussed in 3.8.8.
- 4) The affirmative verb base form serves as stem for verbal nouns (vn) and nominalizations (n_2); see 3.4.2 and 3.4.3, and may serve as stem for stative/passive, reciprocal, or ditransitive verbs.
- 5) They occur in head slots in transitive verb phrases.

Some 'transitive' verbs have causative meaning: dəd 'he makes-enter'. There's no causative verb suffix as such in Dii.

Desiderative verbs (V_{desid}) may be regarded as a subclass of the transitives, in that they often appear in transitive predicates. The two

verbs involved, however, híí and sé, both meaning ‘he wants’, are the only two that can fill the desiderative predicate slot in desiderative clauses.

Tagmemic formula:

$$V_{tr} = +nuc:V_{tr/repetr}S \quad \pm \frac{neg://N//}{acc://N//}$$

Read: the transitive verb consists of a nucleus filled by a transitive or a transitive repetitive verb stem followed optionally by the negative suffix or by the accompaniment suffix.

Examples (underlined>:

(tr1) Hẹn tóó Ø mà' waa míí sú'ú. (4-47B)
 Thing other it catch child my F-P
 (Something has caught (killed) my son.)

(tr2) V_{tr} 'yé bà'á hóg- ọ bá' vo' ndaddú. (4-35U)
 They keep father bush-in day -ty four
 (They keep father in the bush for forty days.)

(desid1) Bà'á Ø híí bi làà kaa- lí. (5-219)
 Father he wants LOG go town-to
 (Father wants to go to town.)

3.8.10 Ditransitive verbs (v_{di}). Ditransitive verbs have the following characteristics:

- 1) They have a transitive verb stem which is followed by a ditransitive suffix (or ‘extension’) -d (with lengthened stem forms in group 2).
- 2) The ditransitive suffix maybe followed by the negative suffix, which in turn may be followed by an indirect object pronoun.
- 3) The indirect object pronoun in the singular is suffixed if possible.
- 4) Several ditransitive verbs take a high tone on their stem instead of the tone from the lexical base; these are exceptions and are listed in the dictionary as such.
- 5) They occur in the head slots of ditransitive verb phrases.

The morphemes occurring with ditransitive verbs, then, appear in the following order:

(di1) verb stem -d (di) //N// (neg) indirect object pronoun

The first form cited under each group in Table 3.8 in the indirect object pronoun column is the result of contraction with the 1 s pronoun (in parentheses on the chart). The 2 s indirect object pronoun is attached in the same manner.

The second form cited in each group in the same column is used with the 3 s and all plural indirect object pronouns, and shows the 3 s form suffixed in parentheses. All plural pronouns are written as separate words, while the 3 s is suffixed.

verb group	base form	direct object pronoun	indirect object pronoun	negative + 3 s indir obj pronoun
1	gbó	gbó(n) gbó(gɔ)	gbód(ɖ)	gbón(nɔ)
	dàà	dàà(n) dàà(wɖ)	dàəd(ɖ)	dàən(ɔ)
2	sɛ̀'	sɛ̀'ɔ̀(n) sɛ̀'('ɔ̀)	sɛ̀'ɔ̀d(ɖ)	sɛ̀'ɔ̀n(ɔ)
	mbóg	mbógɔ(n) mbóg(gɖ)	mbógɔd(ɖ)	mbógɔn(ɔ)
3	səd	sə̀(n) səd(ɖ)	sá(n) sád(ɖ)	sən(nɔ)
4	pìb	pì(n) pìb(bɖ)	pí(n) píb(bɖ)	pím(mɔ)
5	pàṽ	pàgà(n) pàṽ(ṽɔ)	pà(n) pàn(nɔ)	pàn(nɔ)
6	àṽ	àṽ (mí) àṽ(nɔ)	áṽ (mí) áṽ(nɔ)	àṽ(nɔ)
	hì'in	hì'in (mí) hì'in(ɔ)	hì'in (mí) hì'in(ɔ)	hì'in(ɔ)
7	nìm	nìm (mí) nìm(mɔ)	ním (mí) nìm(mɔ)	ním(mɔ)
8	ay	??	??	??

Table 3.8: Direct and indirect object pronouns and the negative

Contraction rule: the rule in 3.8.8 is repeated here:

Any final -d or -b in the verb stem, when it occurs before -n or -m, is lost (absorbed in the speech chain by the nasal suffix). The negative suffix is inserted between the verb stem and any eventual object pronoun.

So the ditransitive suffix -d is absorbed by any following -n or -m. The longer (free) pronoun form is used when an -n or -m precedes the pronoun in the verb stem:

Examples ('>' means 'is realized as'):

gbó + -d (di) > gbód + -n (1 s) > gbón
mbóg + -d (di) > mbógɔd + -m (2 s) > mbógɔm

gbó + -d (di) > gbód + -n (neg) + -n (1 s) > gbón mí
mbóg + -d (di) > mbógɔd + -n (neg) + -m (2 s) > mbógɔn mó

Another contraction involving the ditransitive suffix -d: it is 'lost' (absorbed) by an preceding b, d, n, m or η in the verb stem; this involves groups 3-7. Group 5 is irregular, final η becoming n, and an irregular shortened verb stem (like pə) occurring before the 1 s and 2 s indirect object pronouns.

Examples:

pìb + -d (di) > pìb + -m (2 s) > pìm
pìb + -d (di) > pìb + -m (neg) > pìm + -m (2 s) > pìm mó

àñ + -d (di) > àñ + -n (1 s) > àñ mí
àñ + -d (di) > àñ + -n (neg) > àñ + -n (1 s) > àñ mí

Hyphens from one column into the next in Table 3.8 indicate the same form occurs in both columns.

Tagmemic formula:

$v_{di} = +nuc:v_{tr}s + di:-\underline{d} \pm neg://N//$

Read: the ditransitive verb consists of a nucleus filled by a transitive verb stem and a ditransitive suffix -d which is optionally followed by a negative suffix.

Examples:

- (di2) Vᵁ v̄àḍ bà'á s̄àḿ 'màḥ. (4-35U)
They sew-for father clothes new.
- (di3) Mí d̄- m nagg-ì!
I clap-for-you hand-F-I (I thank you!)
- (di4) Mí ndagad vᵁ la'. (4-13)
I plant-for them picket(s).
- (di5) M̄ó lí- n yégg- ì! (3-40)
You ruin-me voice/reputation-F-I
(You've ruined my reputation!)

3.8.11 Dative verbs (v_{dat}). Dative verbs have the following characteristics:

- 1) Their stems are intransitive or descriptive verb stems.
- 2) They take the suffix (or 'extension') -d, which is homophonous with the ditransitive suffix, but:
- 3) An inanimate (grammatical) subject is required, whereas the 'indirect object' is animate, and is the semantic 'subject' of the clause; see section 5.1.2, subsection i) for a fuller description of the uses of this verb type.
- 4) Some dative verbs manifest a different tone from their corresponding intransitive counterpart.
- 5) They occur more rarely than ditransitive verbs in spoken Dii.
- 6) They occur in the head slots of dative verb phrases.
- 7) Rules for contractions are the same as already seen in the previous subsection for ditransitives.

Tagmemic formula:

$$v_{\text{dat}} = + \text{nuc}:v_{i/\text{desc}S} + \text{dat}:-\underline{d} \pm \text{neg}://N//$$

Read: the dative verb consists of a nucleus filled by an intransitive or descriptive verb stem followed by the dative suffix -d, which may be followed by the negative suffix.

Examples:

d̄uud	it is-good-for-(someone)	kéed	it lacks-for-(someone)
mbàad	it sits/is-for-(someone)	néed	it is-difficult-for...
tiid	it becomes-for-(someone)	t̄oḍ	it is-pleasing-to...

- (dat1) Z̄óḡ Ø d̄e'ed nà'á. (4-35M)
Heart it is-clean-for mother (Mother is happy.)

(dat2) Sààm Ø mbàa- n lig- í. (4-16)
 Clothes it sits-for-me house-in (I have clothes at home.)

3.8.12 Transitive and ditransitive saying verbs (v_{saytr} , v_{saydi}).

These verbs bear similarities to and overlap somewhat the ordinary transitive and ditransitive verb categories, however:

- 1) They're verbs of saying that introduce direct or indirect quotes.
- 2) They occur in the head slots of transitive and ditransitive saying verb phrases respectively (i.e., in the introducer clauses).
- 3) In the negative, the verb in the quoted clause is made negative formally by agreement with the negative of the dominating clause, but retains an affirmative meaning!

$v_{\text{saytr}} = + \text{nuc}:v_{\text{saytr}} \quad \pm \text{neg}://\text{N}//$

Read: the transitive saying verb consists of a nucleus filled by a transitive saying verb stem, followed optionally by a negative suffix.

$v_{\text{saydi}} = + \text{nuc}:v_{\text{saydi}} \quad + \text{di}:-\underline{d} \quad \pm \text{neg}://\text{N}//$

Read: Ditransitive saying verbs consist of a nucleus filled by a ditransitive saying verb stem, plus a ditransitive suffix $-\underline{d}$, and an optional negative suffix.

Examples of transitive saying verbs:

híí he answers tàà he thinks
 vá' he greets

(say_{tr}1) Vù ò: “Vó nòò púg...” (3-54I)
 They say we kill animal (They said: ‘We’ve killed an animal.’)

Examples of ditransitive saying verbs; note the negative clause marker is outside the quoted clause.

hííd he answers-to òd he says-to

(say_{di}1) Mí òn mó: “Àm yaan mí-lí” ní. (4-15)
 I say-to-NEG you you-IMPV come-NEG me-to F-I-NEG
 (I didn't say to you: ‘Come to my house.’)

3.8.13 Perception verbs (v_{perc}). Perception verbs have the following characteristics:

- 1) Verbs of perception can also function as transitive verbs in transitive clauses, but:

- 2) Their usage in this context is restricted to affirmative polarity, and:
- 3) There are only 3 perception verbs: find, see, discover.
- 4) They occur in the head slot of perception verb phrases.

Perception verbs are roots, so have no tagmemic formula.

Examples:

hò	he sees	màà	he finds/discovered
nùh	he finds		

(perc1) Ø nùh Kpoo Ø nɔɔ sú'ú. (4-9N)
 He finds Baboon he dies F-P
 (He finds Baboon is already dead.)

3.8.14 Intentional verbs (v_{int}). Intentional verbs have the following characteristics:

- 1) They consist of a small number of motion verbs, all of which function elsewhere as full intransitive verbs, however their use in complex clauses is unique and justifies this separate category.
- 2) The motion of the verb leads to a goal expressed in the verbal noun complement clause, e.g.: he goes to chase them.
- 3) They may take the negative suffix.
- 4) They occur in the head slot of intentional verb phrases.

Tagmemic formula:

$$v_{int} = + nuc:v_{int}S \quad \pm neg://N//$$

Read: intentional verbs are composed of a nucleus filled by a motion verb stem with or without the negative suffix.

Examples:

dòg	he goes-up	làà	he goes
yaa	he comes	zùù	he goes-down

(int1) Mí làà vɛ nɛné- è. (3-141)
 I go them to-chase-F-I
 (I'm going (in order) to chase them.)

3.8.15 Descriptive verbs (v_{desc}).

- 1) Descriptive verbs are two in number: mbàà 'he sits/is' and tij 'he changes, becomes', which function elsewhere as intransitive verbs.
- 2) They fill the head slot in descriptive verb phrases.

- 3) They usually occur in the affirmative, but can take the negative or the ‘accompaniment’ suffixes.
 4) The affirmative form serves as stem for the verbal noun, and for reciprocal or dative verbs.

Tagmemic formula:

$$V_{desc} = +nuc:V_{desc}S \quad \begin{array}{l} \pm \text{neg://N//} \\ \text{acc://N//} \end{array}$$

Read: the descriptive verb consists of a nucleus filled by a descriptive verb stem followed optionally by the negative or the accompaniment suffix.

See 3.8.6 for an example of the descriptive verb with the accompaniment suffix. Other examples follow:

(desc1) Hǎǎb tǎè Ø tii gǎ’ nan. (4-9D)
 yam rec it becomes horn couscous
 (The yam changed into a horn of food.)

(desc2) Gǎ’ tóó vǎ tiin gǎ’ nan né. (4-14)
 Horn other they turn-NEG horn couscous F-I-NEG
 (Other horns don’t turn into horns of food.)

3.8.16 Inchoative verb (v_{inch}). Some of the inchoative verbs are valid transitive verbs elsewhere, but the following verbs when used with a verbal noun clause as complement, have the following characteristics:

1) There are only seven:

dǐ ‘he is-in-the-process-of/is ...-ing/is-about-to...’,

bé’ or vbíń or dǎŋ ‘he begins’,

sǐ’ ‘he finishes’,

kǎń ‘he begins-without-hesitation’,

mǎà ‘he helps’.

2) They are followed by a verbal noun clause in a complement position.

3) They can take the ditransitive suffix (or ‘extension’) -ǎ when they precede the indirect object of the verbal noun in the complement clause.

4) They occur only in the affirmative.

5) They occur in the head slot of inchoative verb phrases.

6) They’re subject to the same contractions before pronoun objects as the transitive and ditransitive verbs (3.8.8 and 3.8.10), despite the fact that these objects are ‘logically’ the objects of the verbal noun in the complement position.

Tagmemic formula:

V_{inch} = + nuc:V_{inch}S ± di:-d

Read: the inchoative verb consists of a nucleus filled by an inchoative verb stem followed optionally by the ditransitive suffix -d.

Examples:

(inch1) Ø bàà di dòn zòlí. (3-143)
He habitual is-in-process-of wine to-drink (He is drinking wine.)

(inch2) Mí did ví moo tóó òlẹ̀- ẹ̀. (3-94)
I am-in-process-of-to you word other to-say-F-I
(I'm telling you something.)

3.8.17 Auxiliary verbs (v_{aux}). Some auxiliary verbs have the same (or similar) forms as certain transitive or intransitive verb bases, but:
1) they must be separated out as a group, since no auxiliary verb ever takes any suffix whatever, and
2) they occur only in pre-verb and post-verb positions in verb phrases when functioning as auxiliaries. See 4.7 for a fuller discussion of auxiliary verbs in the phrase context.

There are two classes of auxiliary verbs, those which merely lend movement or position to the main verb of the verb phrase, and those that change the aspect of the main verb.

Those lending movement or position to the main verb are the following:

dàà	pass-by	dòg	go-up
là	go	làn	take-away
lúú	leave/rise	súg	gather-together
ya	come	yà	arrive
yaan	bring	zùù	go-down

Lúú occurs only preceding the main verb, while làn and yaan occur only following it; the others in this list can occur in either pre-verb or post-verb position.

Some of those that change the aspect of the main verb and precede the main verb:

bàà	duration of the action, habitual
dəŋ	beginning of the action or doing something first before another action

dùù	repetition of the action, or indicates that another action will follow next: ‘and then...’
fàà	repetition of the action
mbóg	repetition of the action

Two auxiliary verbs of this latter type always follow the main verb:

wəd	termination of the action
’wàa	termination of the action

3.8.18 Repetitive verbs (V_{repet}). Repetitive verbs are known rather widely in West African languages. Mba (1996/97) refers to them as having a ‘pluralizer’ affix in gbómálá’, one of the Grassfields Bamiléké languages. Boyd (1989:206) notes that an iterative form of the ‘verb process’ is ‘widespread’ in the Adamawa-Ubangi group. Elders (2000:183-94) describes ‘extensions pluractionnelles’ in Mundang, a French adaptation of Newman’s term ‘pluractional’ in speaking of this phenomenon in Chadic languages (Newman 1990). Others working with Chadic languages refer to ‘plural verbs’ (see Cope 1993:73-4).

These verbs in Dii might be treated as a separate verb type, but they seem to be only a subcategory of transitive and intransitive verbs, occurring wherever these larger categories occur. I therefore list them above in those respective subsections, and here only draw attention to their very interesting common characteristics:

- 1) Although their stems seem to be limited in number (transitive or intransitive), they do seem to be productive synchronically.
- 2) Repetition of the action of the verb is shown either by a lengthened or reduplicated vowel, or by a tone change, or by both; it’s not clear which option is used with which verb, which would seem to indicate that this process has been in existence for a long time in the language.
- 3) The object (or the subject) may be expressed in the plural.

It’s not always possible to neatly separate these forms into subcategories. First some illustrations of the repetition of the verbal action:

gbò	he leaves (someone)	gbóo	he leaves...several times
pa	he announces	pà’a	he announces several times

The following illustrate a mixture of actions repeated with a plurality of objects being manipulated:

6á'	he asks for	6á'a	he asks several times or for several things
6à'	he crushes	6à'a	he crushes several
mbóǵ	he prepares	mbóǵo	he prepares several times or things
ndag	he transplants	ndaga	he transplants several
sà	he lights-a-fire	sàa	he lights several or in several places
'wò	he breaks	'wóo	he breaks several

The following is a case where the subject of the verb must be plural:

ǎáá	he climbs-up	ǎáa	(they) climb-up
lúú	he leaves	lúu	(they) leave

On the other hand, sometimes a change of tone alone indicates the repetitive:

dù	he cuts-down	dú	he cuts-down several
nòḡ	he bites	nóḡ	he bites several times
wòò	he pulls	wóó	he pulls several times or things

3.8.19 Transitive/intransitive contrasts. Certain transitive/intransitive contrasts involve differences in tone. Generally (but not always) the higher tone corresponds with the intransitive, the lower tone with the transitive:

intransitive:

gód	he becomes-quiet
hì'i	they separate
lúú	he rises
nam	he moves
ním	he awakes
nɔɔ	he dies
sód	he is-saved
súǵ	(they) come-together
túm	it falls-down
vẹ'	he goes-back
vǐǐ	it is-black
vúd	he goes-out
vbád	it falls-from-position
yúǵ	he hides
zàà	he is-healed

transitive:

gèd	he quiets
hì'i	he separates (things)
lùu	he raises (something)
nàm	he moves (something)
nìm	he wakes-(someone)-up
nòɔ	he kills
sèd	he saves
sùǵ	he gathers together
tùm	he destroys
vẹ'	he gives-back
vǐǐ	it blackens
vùd	he puts-out, takes-out
vbàd	he makes-it-fall
yùǵ	he hides (something)
zàà	he heals

'wáa	it is-finished	'wàa	he finishes
'wóð	it dries up	'wòð	it makes-dry/thirsty
'yám	it gets-wet	'yàm	he makes wet

Some other intransitive/transitive contrasts, however, are marked by suffixes (sometimes with an accompanying tone change):

dó	he enters	dòd	he inserts
gà	it boils	gàb	he heats-up-very-hot
pè	(wind) blows	pèd	he blows-on
pì	it is-hot	pìb	he heats-up (something)
sí	he goes-down	sìd	he lowers
ti	he is-lost	tìd	he loses
tú	it is-destroyed	tùd	he destroys-completely

3.8.20 Borrowed verbs. Fulani verbs are borrowed into Dii and retained as verbs, but the only suffix they may take seems to be the verbal noun suffix /lí/. Nominalizations (n₂) may also be formed from Fulani verbs, but all these adaptations are in flux as Fulani gains influence in the Dii area.

Examples:

bínní or bín	'writing' from <u>bínda</u> 'he writes'
díni	'religion' from <u>díñ</u> 'he prays-as-a-muslim'
zánné	'reading' from <u>záñgà</u> 'he reads'

French verbs are accepted into Dii only in their infinitive form and are used as verbal nouns, seeming to occur consistently as objects of the verb kó 'he does':

(bor1) Ba kó ví voté- ì.
 We-incl-IMPV do we vote-IMPV (Let's vote!)

3.8.21 Exceptions. Some Dii speakers have irregularities involving members of verb group 1. Only the irregular forms are cited in Table 3.9, the other forms of the same verbs being inferred from the charts in the preceding sections on verbs. Listed at the right are references to my note books and to texts in the Dii New Testament where some exceptions are found.

verb base	translation	direct object pronoun	indirect object pronoun	
àà	he digs		àà 3 s	3-122
dùù	he follows	dù(m) 2 s dù(gu) 3 s		Mk. 2:14, dict.
màà	he helps	má(m) 2 s		dict.
pú	he gives		pú(gu) 3 s	Mk. 4:25, dict.
sà	he pricks		sà(ga) 3 s	Rev. 12:14
vì	he asks		vì(gi) 3 s	Mat. 9:14
yà	it arrives		yà(ga) 3 s	Lk. 4:2
yèè	they elect	yè(n) 1 s yè(ge) 3 s		3-35 3-35

Table 3.9: Verbal exceptions

The internal phonological structure of some verbs is seen to be somewhat irregular: After a short nasalized vowel, if no other consonant closes the syllable, a glottal stop will almost always close it: kà' he's-cold, sè' he cuts, etc. Only eleven verbal exceptions have been found to this practice:

<u>hà</u>	he breaks-off (leaf)	<u>hè</u>	he sets (a post)
<u>hì</u>	he snores	<u>hò</u>	he sees
<u>ò</u>	he says	<u>sò</u>	(foot) is-asleep
<u>yá</u>	he hides-in-order-to-do-evil-to	<u>yà</u>	he attains
<u>yè</u>	this	<u>yó</u>	he melts (metal)
<u>yò</u>	there (near by)		

3.8.22 Summary of verbal formulas. A summary of the tagmemic formulas for Dii verbs is found in Table 3.10; note that v_{lo} , v_{perc} , and v_{aux} are roots and have no formulas themselves.

verb	nucleus	stative/passive reciprocal ditransitive dative accompaniment	neg
V _i	+ V _{i/repeti} S		± //N//
V _{tr}	+ V _{tr/repetr} S	<u>± acc://N//</u>	± //N//
V _{rcp}	+ V _{tr/desc} S	+ rcp://N ₂ //	± //N//
V _{di}	+ V _{tr} S	+ di:- <u>d</u>	± //N//
V _{dat}	+ V _{i/desc} S	+ dat:- <u>d</u>	± //N//
V _{stv}	+ V _{tr} S	+ stv:-y/tone chg	± //N//
V _{inch}	+ V _{inch} S	± di:- <u>d</u>	
V _{int}	+ V _{int} S		± //N//
V _{desc}	+ V _{desc} S	<u>± acc://N//</u>	± //N//
V _{saytr}	+ V _{saytr} S		± //N//
V _{saydi}	+ V _{saydi} S	+ di:- <u>d</u>	± //N//

Table 3.10: Summary of verbal formulas

3.9 TEMPORAL-LOCATIVES

Discussion of temporal-locatives (telo) will have four divisions:

- 3.9.1 common telo roots and temporal-locative /lí/
- 3.9.2 temporal roots (te)
- 3.9.3 locative roots (lo)
- 3.9.4 place names (lo_{place})

Telo roots and words fill axis and relator slots in locative and temporal phrases. Occasionally certain temporals may be used as fillers in subject tagmemes of clauses.

3.9.1 Common telo roots and telo /lí/. Several telo roots are used with both temporal and locative meanings. The most widely used is the morpheme /lí/, which deserves special mention and must be treated separately from other telo morphemes.

Telo /lí/ has several allomorphs. After vowels, the form -lí usually occurs (the l is epenthetic), and after consonants the form -í. When suffixed to a closed syllable containing a short vowel V, it causes the doubling of the syllable-final C. The options are therefore: CVlí, CVVlí, CVCCí, and CVVCí. Double vowels V'V and VgV follow the same pattern as long vowels VV. The height of the suffix vowel assimilates partially to the height of the preceding vowel; see Table 1.7 and the associated text.

Examples:

kíilí in the compound mènèné in the afternoon

Following certain morphemes, however, telo /lí/ may be realized as a duplicate of the preceding vowel. Since in each of these cases the initially final consonant is a 'g', the suffix along with the Vg forms a 'double' vowel VgV:

hág	ground	hágá	on the ground
hóg	bush	hógó	in the bush
nag	hand	nagá	in the hand
yag	mouth	yagá	in the mouth

In two instances, telo /lí/ is realized as nothing, possibly from the influence of a dialect other than mam be':

bəgəm	shoulder/on the shoulder
yúkaa	foreign country/in a foreign country

In still other cases, this suffix /lí/ may be preceded by a shortened form of the noun (n_{1d}) involved. See 3.4.1 for more examples.

nóó	eye	nólé	in the eye
vee	fire	velí	in the fire

Telo /lí/, like the verbal noun suffix /lí/, when it occurs immediately before the interrogative marker /a/, loses the vowel í which is supplanted by the interrogative /a/, giving -lá or -á.

When reference is made to ‘telo roots’ in this grammar, only such as the following common telo morphemes (and not telo /lí/) are meant:

bó’	near, close
dìgà	as of, since
háá(áá...)	until/a long time/far away (may be an ideophone, at least in its origin)
pig/pigim/pagam	behind, after
tíí	ahead of, before
tíŋ	before, in, in front of
wu(lí)	there, at that time

The distinction I make here between ‘telo /lí/’ and ‘telo roots’ is very useful in discussing locative and temporal phrases, since telo /lí/ occurs in both LoP_{lí}, TeP_{lí}, LoP_{telo}, and TeP_{telo} but ‘telo roots’ occur only in LoP_{telo} and TeP_{telo} phrases (4.8.1, 4.8.2, 4.9.1, and 4.9.2).

3.9.2 Temporal roots (te). A sample of roots used only to indicate time follows:

ká/gá	far past time
bà	past time
ká búu	day before yesterday
bán/ká bán	yesterday
bèè	today
yógó	tomorrow
búu	day after (tomorrow)
àlàd	Sunday (Ful)
àtìnì	Monday (Ful)
à’á yè	now
bá’	day
fáá(áá...)	a long time (may be an ideophone in origin)
máa/má	present, past time
mèn	afternoon, evening

sèy/zàg	time
téé/té	future time
túm	forever, always (Ful) (may be an ideophone in origin)
zàa	a bit later
zàgà	day (sun)

The word yógó ‘tomorrow’ contracts with the interrogative to form yógá.

The words ‘tomorrow, today, day after, day (sun), day, afternoon’, plus the names of the days of the week, and the names of months, may occur as subjects in clauses. The names of the days of the week and the months are usually borrowed from French or Fulfulde.

3.9.3 Locative roots (lo). Several morphemes have only locative meanings (often with a demonstrative nuance). In addition, some subcategories of locative roots aren’t completely understood. The following 4 subgroups seem to be separable, however, although a few morphemes occur in all the contexts about to be described. Note that some telo roots listed above also appear in the following lists, since they have both locative and temporal meanings.

Group 1: these occur ‘independently,’ e.g. in the sentence:
Mí hògò Ø dì... ‘I see him he is...’

bó’	near
dèn	beyond
góó/góh	outside
hágá	down, below
kàpigim	behind (the village)
ná’	(over?) there
páń	there (above)
pè (no)	down there
pì (nu)	up there
pigim/pagam	behind
tíí/tíj	inside
yúúba/yúba	above, up, upright
zógón	(down) there

Group 2: The same basic sentence (cited in the paragraph above) may be followed by a Locative Phrase (LoP_{lí}, see 4.9.1) which contains the telo morpheme /lí/ discussed above in 3.9.1. The locative and/or demonstrative roots below occur in this context. For example: Mí hògò Ø dì ka’adí, etc.

duulí (= dì + wulí) he is-there ka’ad(í) alongside

ka”(í)	alongside	kɔɔg(í)	behind
téé/té(lá)	where?	yè(lí)	here (close)
yè(lé)	there (fairly close)	zù(lí)	far away

Group 3: The locative roots below occur in the sample sentence: Mí hò nóggaa Ø di ... liggí ‘I see bird-small he is ... house-in’, and the locative root precedes the noun in the locative phrase (see LoP_{telo} in 4.9.2):

dáj	near	ka’	alongside
kìì	behind	pìg	behind
sàam	in the middle of	tíí/tíj	in
yag	very near	yúú	on

Group 4: In the same sentence as for group 3, the following locative roots may occur following the noun in the locative phrase (LoP_{telo}, 4.9.2): ... di lig... :

pè (nɔ)	near to	pì (nu)	far from
pìgim/pagam	behind	sàamé	in the middle of
tíí/tíj	in	yúba	above

3.9.4 Place names (lo_{place}). Place names, like proper names, manifest a vast array of internal structures: noun 1, compound nouns, qualifying adjectives, verb phrases, verb plus object, and verb plus adverb -- all are used as place names.

They fill only axis slots of locative phrases, ordinarily. No tagmemic formula will be given at this time.

Examples:

Noun 1:

wààg (Fr. Wack) ‘rib’

Adjective:

mbèè (Fr. Mbé) ‘robust’

Compound noun:

ság zèè (Fr. Sakje) ság ‘corral’ + zèè ‘buffalo’

gũu hẹẹg (Fr. Gorhèk) gũu ‘mountain’ + hẹẹg ‘bamboo’

Verb phrase:

vùd yè’ (Fr. Vourgné) vùd ‘he puts-out’ + yè’ ‘he dries’

Verb plus object:

ta gbùṅ (Fr. Taboum) ta ‘he ties’ + gbuṅ ‘a certain bush’
dà gòṅ (Fr Dogong) dà ‘he cuts’ + gòṅ ‘shield’

Verb plus adverb:

dàà nà’à (Fr. Déna) dàà ‘she cooks’ + nà’à ‘very well’

3.10 ADVERBS

Our discussion of adverbs (adv) will be divided into three sections:

3.10.1 adverb roots

3.10.2 -ná adverbs

3.10.3 complex adverbs

3.10.1 Adverb roots (adv). Adverb roots occur in the manner position in clauses (5.2). Four adverb roots (wòdò, ɓìd, kèd, sám) have an emphatic meaning and occur in emphatic clauses (7.5). The form bà'à occurs in qualifying phrases (4.6), and nà'à occurs in verbal noun phrases (4.3).

Examples:

bà'à	very
ɓìd	not at all
dón	only
kód	differently
kèd	(not) at all
mén	only
náá/ná'	like that
nà'à	very
pén	first
sám	(not) at all (Ful)/ emphasis
wàñî	much (Ful)
wòdò	emphasis

3.10.2 -ná adverbs (adv_{ná}). Adverbs formed by -ná have the following characteristics:

- 1) They contain the suffix -ná.
- 2) They have a noun, a qualifying adjective, or an ideophone stem.
- 3) They occur in the manner position in clauses (5.2).

Tagmemic formula:

adv_{ná} = +nuc:n/qual/ideo +advr:-ná

Read: the -ná adverb is composed of a nucleus filled by a noun, qualifying adjective, or an ideophone followed by an adverbializer -ná.

Examples:

kígi	round	kíginá	circularly
------	-------	--------	------------

kòòg	force	kòògná	forcibly
lee	free	leená	freely, of no value
líw	robbery	líwná	by stealing
sìm°	silent	simná	silently
yẹ́n	seed	yẹ́nná	truthfully
'màḥ	new	'màḥná	newly

Three other forms don't seem to have a corresponding noun or adjective:

háná	fast
vaḥná	fast
zạạná	much

3.10.3 Complex adverbs. Several adverbial expressions have a more complex structure but have become frozen as idioms. In the following glosses, 'FI' stands for FACT-IMPf.

dam pélí	without equal (neighbor is-F-I-NEG) (4-81)
dụun dón né /dón dón né	much (is-good-NEG only F-I-NEG) (3-96)
í yògɔ, í yògɔ	like this, like that (3-110&115&117)
kée né	no exceptions (lacks F-I-NEG), e.g.:
kéen (nag) né	no exceptions (lacks-NEG (hand) F-I-NEG) (3-127)
làà leená	much (goes freely)
mbàà ná'	much (sits like-that) (4-35M)
pe là velf	much (falls go fire-in) (4-81)

3.11 IDEOPHONES

Ideophones, due to their distinctive characteristics, are best studied separately from non-ideophone lexical items. Many persons have attempted to define ideophones in specific African languages or have surveyed the existing literature (Bohnhoff 1982, Courtenay 1976, Doke 1935:118, Elders 2000:205-26, Houis 1967:XIII, Moore 1968:2, Newman 1968, Noss 1973, 1984 and 1985a & b, Samarin 1965, 1970:160, 1971b, 1974:162, Welmers 1973:446-77, Wescott 1977).

The oldest definition of ideophones is evidently that of Doke 1935. He said an ideophone is: 'a word, often onomatopoeic, which describes a predicate, qualificative or adverb in respect to manner, colour, sound, smell, action, state or intensity.'

A more recent definition, reflecting study of ideophones world-wide, is the following by Samarin 1974:162. Ideophones are: 'words with attributive functions (generally adjectival or adverbial) from a class of words with open membership characterized by phonological or syntactic anomalies, or both.'

It seems most useful to treat Dii ideophones as a separate morpheme class, an open class, not a closed class. In contrast to other Dii morpheme classes, the class of ideophones does have some distinctive phonological shapes, and some distinctive semantic characteristics. It should be emphasized that the "characteristics" to be described are applicable to the class of ideophones, not to each and every ideophone.

Ideophones as a class of items occur in ideophone phrases (4.11) and in numeral phrase 2 (4.12.4). They're often difficult to translate into English, and the immediate context determines their meaning to a high degree.

Section 1.8 has already dealt in detail with the phonological characteristics that are distinctive for Dii ideophones. This section will, in addition to the definition for ideophones given above, deal with the semantic characteristics which seem distinctive.

Dii ideophones seem to fall into the following semantic domains: 1) onomatopoeia; 2) vivid description of colors, manner, movements, qualities, physical or mental states; 3) temporal or locative descriptions; and 4) (general) intensification of an idea. The symbol ° is suffixed to a phoneme that may be lengthened indefinitely. Illustrations follow:

Imitation of sounds (or absence of sound):

gug	sound of a kick with the foot,
gbùù	sound of knocking someone down,
kpɔw/kpùù°/kpúy/'wàà	gunshot,
ngàèr	sound of snoring,
sà r	sound of blowing one's nose,
sẹ́ńlẹ́ńlẹ́ń/sìm°/wódódó	completely silent,
vẹ̀ẹ̀d	sound of (sheep) drinking water,
wóy/'wée°/'wé/wóóe	cry of pain,

Color:

bẹ́ń/kpààw/mgbàń/ndàd/yèń/yèńgèń	red,
dídíg/dígín°/dín°/kòlóg/kpòd/mgbàg/vìm	black, dark,
ìg'ìg	dark red,
kẹ̀ẹ̀d/kéńkéń/kèw/tán/tós	white, clear,
kíláj	very clear (clean water),
mbíw	reddish new leaf color,
zàzà'	whitish (water),

Movement (or lack of it), manner:

alam	throwing oneself around (drunk),
buvbud/kpẹ̀kpẹ̀ẹ̀kpẹ̀ẹ̀/ziziizid	fast,
bú' bú'	turtle walking,
káj	directly, without stopping,
kpìkpìg	without stopping, with persistence,
sáásáá	very carefully, slowly,
sàw	squirting, pouring,
sím	fast, suddenly,
sèń	(sleeping) soundly,
tàd	stationary, without moving,
wəg wəg	(running) tiredly,
'yẹ̀yẹ̀	openly, without hiding,

Physical states, qualities:

bógógó	protuding (eyes),
hóm	passing (odor),
kíd/'má'	exactly alike, equal, completely level,
kpíkípíkípí/kpíkípí	very dull (knife),
kpən	exactly in the middle,
kpókópóló/kpólóló	cold (water),
mgbìgìlígìlíg/mgbəgóm	sweet,
mgbóg	inflated (stomach of a sick person),
nzàd	gluey (nasal mucus, gravy),
ngáj	very hard (stone),
pùn	empty (road),
ság/táy	very full (container, house, yard),

sà r	very bright (sun),
tụ'tụ'/ụgụd	very good (wine),
wèwèh̄/wèwèèwèh̄	new,
zúgúlú	very poor,

Mental states:

6á'/ d̄ī/ hígìgì	astonished,
6ùlúh̄	sudden understanding,
d̄ī	astonished, undecided,
f̄w̄/vew/vèw̄	angry,
mgbèw̄	without understanding,
mgbèè/mgbùè/wòò/'wèè	enormous, causing terror (buffalo)
əgəd	painful (idea),
p̄èdp̄èd	with joy, warmly,

Temporal, locative descriptions:

bùm/h̄im/p̄è/'p̄è'	very early morning,
ḏḓ	far away,
kəə	wait a long time,
ndóg	very close, near,
w̄ò rw̄ò r	(time) passes fast,
'waa'waa	everywhere,

Intensification of numeral or limiter descriptions:

kántáh̄/'mógód	(eats it) all/completely up,
kpàà/kpòò	all together, without exception,
mòò°	a lot of (dust on one's body).
sày/vq'vq'	numerous,
z̄ur	in quantity, a lot,
(dágá) kpógkpóg/'néh̄	only (one).

In addition to the above listing by semantic domain, many ideophones in the Dii language could also be grouped according to which of the five senses are involved (Alexandre 1966):

- sight - protuding, inflated, squirting, all colors, movement (or lack of it), etc.,
- hearing - cry of pain, sound of a kick, other onomatopoeia, or the absence of sound,
- taste - sweet, good (wine), etc.,
- touch - dull, hard, gluey, cold, etc.,
- smell - passing (odor).

This latter manner of classifying ideophones, since it crosscuts the semantic domains listed above, would require totally reworking the

classification, and would necessitate also adding several non-sensorial categories, as Alexandre does.

Samarin (1965:119-20) draws attention to a correlation in many African languages between certain meanings and certain phonemes ('sound symbolism' is his term). Since both the Dii language and Gbeya belong to the Adamawa-Eastern subfamily of Niger-Congo, it's interesting to note a Dii phenomenon very similar to what Samarin reports for Gbeya.

In my sample the following ideas are strongly associated with high tone:

- 1) small, thin,
- 2) empty, shining,
- 3) high,
- 4) tight,
- 5) complete.

Low tone, however, seems to be frequently associated with:

- 1) abnormal (inflated, swollen, paralyzed, stiff...),
- 2) fear (scary, big, deep, oily, frightful, terrifying...),
- 3) early.

Many of the meanings associated with low tone, therefore, have pejorative nuances.

Only 702 ideophones are in my current corpus, a relatively small number of all Dii ideophones.

3.12 NUMERALS

Dii unit numerals (num_{uni}) generally occur in numeral phrases (4.12) or quantity slots in noun phrases (4.2.1), but they can also serve as subject or object in a clause instead of a noun phrase. Unit numerals are cardinal (card) numerals, as are several of the numeral phrases (see 4.12).

Dii numerals will be discussed under the following headings:

- 3.12.1 1-9 (num_{uni})
- 3.12.2 distributive
- 3.12.3 before interrogative /a/
- 3.12.4 before the hesitation morpheme
- 3.12.5 fractions (frac)

3.12.1 1-9 (num_{uni}). Unit numerals are all roots and are listed in Table 3.11. The forms listed are used in non-final position in utterances. Several of the unit numerals have allomorphs used before pauses, as when one is counting: one, two, three, etc., or at the ends of utterances. These ‘pausal allomorphs’ double the last consonant except after a long vowel: dággá, iddú, taṣṣánó, ndaddú, nónnó.

There’s evidently some relationship between 7 and 6, with 7 meaning something like ‘six odd’; 8 means something like ‘4 beside 4’; and 9 is said to mean ‘lacking 1 finger (on 10)’. This latter is doubtless related to expressions of the type kéé idú kan vo’ taṣṣánó ‘it lacks 2 of 30’ = 28. (3-13)

numeral	cardinal	distributive	with interrogative /a/
1	dágá	dádágá	dágáa
2	idú	i’idú	idáa
3	taṣṣánó	taṣṣaṣánó	taṣṣánaa
4	ndadú	ndandadú	ndadáa
5	nónó	nónónó	nónáa
6	gúú	gúú gúú	gúúa
7	gúndem	gúgúndem	gúndema
8	ka’andadú	ka’andadú ka’andadú	ka’andadáa
9	kégdágá	kégdágá kégdágá	kégdágáa
10	wàṣṣánó’	wàṣṣánó’bó’	wàṣṣánó’’a
20	gbèg	gbèg gbèg	gbègga

Table 3.11: Numerals

3.12.2 Distributive numerals. If several objects are each modifiable by a certain number (as ‘five each’), Dii uses reduplication. Several of the unit numerals have specific changes which take place through this reduplication; others are merely repeated twice without pause. See Table 3.11.

These distributive forms occur in the distributive numeral phrase (4.12.6), but are treated here first in order to include them in Table 3.11.

3.12.3 Before interrogative /a/. Certain of the unit numerals lose their final vowel through contraction with the interrogative /a/ when it follows immediately after the numeral. Others don’t. See Table 3.11, which cites the shortest possible form of the interrogative. Context may require a lengthening of the final vowel.

3.12.4 Before the hesitation morpheme. The same unit numerals which contract their final vowel with the interrogative /a/ also contract it with the exclamative morpheme ée (5.1.2).

3.12.5 Fractions (frac). Few fractions are used in Dii. Ka’ is used in the sense of ‘half, part’. The form réétà, borrowed from Fulfulde, is used in the same sense.

3.13 EXPLETIVES

All expletives (exp) are roots, some used as responses, others as exclamations. Expletives occur in expletive and plea sentence positions and in response sentences.

3.13.1 Responses. The following expletives are used in responses. The list is not exhaustive.

àá, èé, èé, èno, ènoo, òó, all mean ‘what?’ (what did you say?)

àa, ee, èe, èè, èè, èèè, m̄m̄, ɔɔ, ɔɔ, all mean ‘yes’.

áá’á, ’m̄m̄’m̄, ’m̄’m̄, ’n̄n̄’n̄, all mean ‘no’.

tòw ‘so, OK’ (borrowed from Fulfulde).

3.13.2 Exclamations. No attempt is made here to be complete, only to present some examples with their general meanings.

surprise: bàá, hà’, h̄m̄m̄, ká’, òó’, wí (wí wí...), wúú
àsée (Pidgin), láá (Ful)

irritation: á, àá’, á’, à’, á’, bàa, háý, hè’, ká’, m, òó’, ó’, èé’, ’m̄
káy (Ful), kayya’ (Ful)

emphasis: èè, èèhèè, wòò, ȳi, lée (Ful)

praise: yow (Ful), yówwà (Ful)

sadness: áàà

to attract (or increase?) someone’s attention:
yoò, héy (Ful), ndá (Ful), ús̄n̄é (Ful)

express sympathy: á’á’á, á’’aahàà, á’’aahàà, é’’ehèè, é’’mh̄m̄m̄, ó’ó’ó,
ó’’oohòò, é’’ɔɔhèè, ’m̄m̄’m̄m̄, ’m̄’’mh̄m̄m̄, ’n̄’’nh̄n̄n̄

greetings at the door: tèè, tí’’oo, tî

3.14 RELATORS

Many temporal-locative roots also have a relating function, but only those relators (rel) will be discussed here that have no other function than relating elements of speech.

The following co-ordinating relators (roots) relate any two or more constructions of equal rank, as nouns to nouns, phrases to phrases, etc.:

kan...kan... and (used before each of several elements in a row)

ámí also, too (occurs following the last item in a row)

mà, kó, téé then...

kàd... and then...

ámáa but (Ful) (used between two contrasted constructions)

kóó...kóó... or (Ful) (used before each of 2 or more constructions; or contrasts a construction with the preceding context)

The following relator (a root) is used only in numeral phrases, 4.12):

zùù and

Several subordinating relators are roots:

bà that (in indirect quotations and indirect orders)

dìgà, dìkà from, since (Ful) (in temporal Sb clauses)

kóó...sì' even if (in concessive Sb clauses)

kó í...wəgə, móo, baà as (in comparison Sb clauses)

moo in order to, because (in result and cause Sb clauses)

tò, tòò, tòw if (Ful) (in conditional Sb clauses)

All other relators will be discussed as subordinating phrases in 4.13.

3.15 MISCELLANEOUS PARTICLES

The following Dii miscellaneous particles (roots) are difficult to classify under one of the preceding titles.

The hypothetical or contrary-to-fact particle kà occurs in both hypothetical clauses (7.1.4) and subordinate hypothetical clauses (7.2.5), but is untranslatable in English.

The interrogative morpheme /a/ occurs in all questions following the clause marker position. In this chapter the exact forms it may have cannot be discussed in detail, since the clause markers must be explained first. A fuller explanation is therefore found in 7.4.

An exclamative morpheme éé is described more fully in section 5.1.1. Its exact relation to the clause marker is as yet undetermined, but at present they are being treated together.

The exclamative morpheme á falls into the same ambiguity of relationship to the clause marker as the exclamative morpheme. See also 5.1.1.

A morpheme à is used paragraph-initially in tales to show a change of speaker in a conversation; it appears before the new speaker's name or title, which then is followed by the direct quote without the introducer verb.

Several morphemes are clause-final emphatic particles: bàa, bòy, bò, pì, pù, síló, sínná, súm, súmmà.

Láá occurs at the end of subordinate clauses in interrogative sentences; its meaning is unknown (see the dictionary for an example).

The following are used to help signal the end of subordinate clauses in affirmative sentences: na, naa, ni.

Two forms mean 'see then!...': hò sí..., hò síí...

Three emphatic particles lî, lò, and lóó occur at the end of certain sentences (see the dictionary for an example).

An interrogative particle yeý occurs at the end of some sentences, and a particle yoò has an appellative function, used to draw the attention of someone being called. Its vowel may be considerably lengthened if the person called is at a distance and doesn't hear immediately.

CHAPTER 4

PHRASES

4.0 INTRODUCTION

A Dii phrase is a grammatical construction which is potentially longer than a word but shorter than a clause. A phrase usually fills a position (slot) on the clause level and is typically composed of words and roots. A phrase may however contain another phrase (see 4.2.1, for example) or a clause (especially a relative clause or a verbal noun clause). While a phrase may consist of only one word, it must potentially contain more than one element.

Dii phrases are of two types: 1) single-centered, with a head or key position (slot) potentially modified or qualified by at least one other element (root, word, phrase, or clause); 2) double-centered, with two or more head positions usually joined by a relator (conjunction); or 3) relator-axis, where the key position of the phrase (the axis) is related to the clause by means of a relator (preposition or postposition).

Single-centered phrases may be illustrated by a ‘Noun Phrase 1’:

(intro1) dæg gbòḡ tóó (3-134)
clay-pot large a-certain (a certain large clay pot)

A coordinate noun phrase (NP_{co}) is an example of a double-centered phrase:

(intro2) kpàà wòḡ kan kəd wòḡ (4-9C)
bow his and quiver his (his bow and quiver)

Relator-axis phrases are typified by the following location phrase (LoP_{tel}):

(intro3) dæg tíḡ (3-136)
clay-pot in (in the clay pot)

It will be seen that many phrase formulas below are incomplete and must still be expanded on the basis of further data.

In the formulas given to show the structure of phrases, either a diagonal bar ‘/’ or a long horizontal bar ——— may mean ‘or’.

The symbols for words and roots are in small case letters only (n, v, num), but phrases and larger constructions are always represented by symbols using capital letters (NP, VP, NumP).

4.1 PROPER NAME PHRASES (PNP)

The PNP is a single-centered phrase with a head position filled by a proper name (first and/or last names) optionally followed by the plural morpheme (of respect) as modifier. Sometimes a modern title may be prefixed to the proper name, as àlázi in (pnp2).

The PNP fills the head slot of a coordinate noun phrase (4.2.10), or the vocative position in sentences (8.7).

Tagmemic formula:

PNP = +H:pn ±Mod:pl

Read as explained above.

An example:

(pnp1) Kadia Matío vɥ (3-86) Kadia Matthew pl

(pnp2) Alázi Bòbbò vɥ (4-106) Alhadji Bobbo pl

4.2 NOUN PHRASES (NP)

Noun phrases differ from all other phrases in the following ways:

- 1) their head position typically contains a noun or a nominalized verb construction (verbal noun clause);
- 2) the head element is modified potentially by a large number of modifiers: qualifiers, possessives, relative clauses, numerals, topicalizers, locatives, demonstratives, plural marker, limiters, etc.;
- 3) the positions where noun phrases may occur are generalizable as follows:
 - a) in clauses: subject, indirect object, O_1 and O_2 direct object, and complement 3;
 - b) in phrases: axis, or head (in NP_{co}); and
 - c) in sentences, all noun phrases except NP_{ya} occur in the vocative position.

Most nouns in spoken Dii are accompanied by a very small number of modifiers, despite the large number of potential modifiers. Most noun phrases contain only one modifier; three seems to be the most that occur with ease. Rarely are four or more seen.

Noun phrases will be discussed in the following order:

- 4.2.1 NP_1
- 4.2.2 NP_f
- 4.2.3 NP_{ya}
- 4.2.4 unpossessed (NP_2)
- 4.2.5 possessed (NP_3)
- 4.2.6 genitive (NP_{gen})
- 4.2.7 animate genitive (NP_{genan})
- 4.2.8 kinship (NP_{kin})
- 4.2.9 absolute kinship (NP_{kinab})
- 4.2.10 coordinate (NP_{co})

4.2.1 Noun phrases 1 (NP_1). Noun phrase 1 is a single-centered phrase and has the following characteristics:

- 1) Three types of noun occur in the head position: n_{1a} , n_2 , or n_{cp} , as well as the verbal noun clause, the $\acute{I}P_{mod}$, the interrogative nonpersonal pronoun, and the indefinite nonpersonal pronoun.

- 2) The list of potential modifiers is quite long. All are optional:

$qual_1, qual_2$	qualifying adjectives 1 and 2
QualP	qualifying adjective phrase
indef	indefinite adjective
num/NumP	numeral or numeral phrase
poss	possessive
Sb Rel	subordinate relative clause
$\acute{I}P_{mod}$	\acute{I} modifying phrase

dem	demonstrative
rec	recall adjective
VNP	verbal noun phrase
VN Cl	verbal noun clause
pl	plural marker
lim	limiter
LoP _{li}	locative phrase of type <u>li</u>
LoP _{telo}	locative phrase ‘telo’
top	topicalizer
adjQ	interrogative adjective
<u>àgà</u>	‘self/even’

The relative order of occurrence of these modifiers in NP₁ poses something of a problem since they are so numerous, and since only three or less modifiers are normal in any given NP. The head noun (or non-personal pronoun) is initial, followed by any modifying morpheme. The more common modifiers are listed below, the relative order of each is USUALLY as follows:

(np1) noun qual adjQ poss indef num Sb Rel rec dem pl lim

The above list is just a framework, and is much simplified.

Non-emphatic or non-limiting numerals occur before the Sb Rel, but a numeral may also serve as a limiter following the plural marker.

The recall morphemes normally find their place before or following the plural marker, but if their scope includes a limiter, they then follow the limiter.

The recall morpheme also functions as a type of demonstrative, referring often to the item it immediately follows, in addition to referring back to the head of the phrase. (The recall morpheme may also serve as the demonstrative used in closing the Sb Rel, in which case it functions inside the Sb Rel and not inside the NP being described here.)

The expanded list in (np2) shows the slots where morphemes have been found, relative to each other.

a) Four elements here are shown in all caps to indicate that the title is a position where varying items occur, items which are then listed in the column just below the title:

HEAD = head noun/non-personal pronoun

QUAL = qualifying adjective

DEF = definiteness

LIM = limiting morpheme or construction.

- b) More difficult to place are locative expressions, which are attested both before and after the normal numeral position. I temporarily place them in the same slot as Sb Rel, awaiting further co-occurrence data, although I've seen some cases where LoP occurs before the Sb Rel.
- c) The '——' below indicates 'either/or'.
- d) The scope of application of a given modifier, especially numbers, demonstratives, recall morphemes, and limiters, is not displayable in the chart (np2).

(np2)	HEAD	QUAL	adjQ	poss	DEF	num	<u>Sb Rel</u>	rec	dem	pl	rec	LIM	rec
	n _{1a}	qual ₁			indef		LoP _{lf}					lim	
	n ₂	qual ₂			ÍP _{mod}		<u>àgà?</u>					num	
	n _{cp}	QualP			top							QualP	
	NP _{kin}				<u>àgà?</u>							VNP	
	VN	CI										<u>àgà?</u>	
	npr _{indef/Q/rel}												

The full tagmemic formula is:

$$NP_1 = + \frac{H:n_{1a/2/cp}/NP_{kin}}{VN\ CI} \quad \pm Mod_1:qual_{1/2}$$

npr_{indef/Q/rel}

$$\pm Quant:adjQ \quad \pm Poss:poss \quad \pm Mod_2:indef/ÍP_{mod/top}$$

$$\pm Quant:num/NumP \quad \pm Mod_3:Sb\ Rel/LoP_{lf}$$

$$\pm Dem:rec \quad \pm Dem:dem \quad \pm Mod_4:pl \quad \pm Dem:rec$$

$$\pm Lim:lim/num/VNP/QualP \quad \pm Dem:rec$$

Read as explained above, with the slot titles added: Head, Modifier, Quantifier, Possessive, Demonstrative, Limiter.

Examples of lexical items in several categories:

(np3) head noun/pronoun:

waa 'child' (n_{1a})

hoo 'sick person' (n₂)

doo búg 'thigh' (n_{cp})

dàn sáñ 'my younger brother' (NP_{kin})

tóm kòoné 'path sweeping (weeping/cleaning of paths)' (VN CI)

tóó...tóó... 'the one...the other...' (npr_{indef}), í 'the one who' (npr_{rel})

nóo 'who' (npr_Q)

- (np4) qual₁: màh ‘new’, dì ‘dark/black/purple’, waa ‘small’
- (np5) qual₂: zígid ‘sweet’, píím ‘hot’, góe ‘broken’
- (np6) adjQ: nén(ná) ‘how many’, èn(á) ‘which/what’
- (np7) indef: tóó ‘a-certain/a-certain-one/a/other/another’
- (np8) ÍP_{mod}: í tóó ‘the other one’, í míí ‘the-one my (mine)’,
í vííí ‘the-one you-at (the one at your house)’,
í yè ‘the-one this (this one)’
- (np9) top: máa ‘as for.../that we know about’
- (np10) rec: súu ‘just-mentioned’, pèè ‘that-we-know-about’
- (np11) dem: yè ‘this (near)’, yè ‘that (over there)’, zù ‘that (far off)’
- (np12) lim: ’wààpád ‘all’, waaná ‘some’, ’wàà dón pád ‘completely all’
- (np13) other limiting constructions: buulí nà’á ‘very much’ (VNP),
gbòò bà’á ‘very big’ (QualP)

Examples of the co-occurrence of constituents of NP₁ follow.
When a position is filled by more than one Dii word, hyphens ----- are
used to show how far the position extends.

- (np14) n₁ qual₂ indef
hèn zígid tóó (3-108)
thing sweet a-certain (something sweet)
- (np15) n₁ qual₁ poss rec
wàà sèè wòò pèè (4-5)
nest old his rec (that old nest of his already mentioned)
- (np16) n₁ dem pl lim
hèn yè vu ’wààpád (3-115)
thing dem pl all (all these things)
- (np17) n₁ indef pl lim-----
nán tóó vu buulí nà’á (3-108)
person other pl be-many very (lots of other people)
- (np18) n₂ Sb Rel-----
moo ká bán kíí pa yè... (3-54I)
word past yesterday sb-you announce dem

(the word that you announced yesterday...)

- (np19) n₁ top dem
waa máa yè (3-97)
child top dem (this child that we know about)
- (np20) n₁ rec dem pl
wakéé súu yè vu (3-91&92)
woman rec dem pl (those women we know about)
- (np21) n₁ poss top Sb Rel-----
waa víi máa kíi hãã vu (3-59)
child your top sb-you give-birth them
(the children that you've given birth to)
- (np22) n₁ poss Sb Rel-----
waa míi kám hò vu ndaddú pèè (4-157)
child my sb-you see pl four rec
(my four children that you see [and know]) or:
n₁ poss num Sb Rel-----
waa míi ndaddú kám hò vu pèè
child my four sb-you see pl rec
- (np23) n₁ poss num LoP_{if}----- rec
waa míi ndaddú Ngáwndíí- lí pèè (4-157)
child my four Ngaoundéré-in rec
(my four [known] children in Ngaoundéré)
- (np24) n₁ pl lim rec
nán vu 'wààpád pèè (4-157)
person pl all rec (all those [known] people)
- (np25) n₁ poss ÍP_{mod}----- num LoP_{if}----- rec
waa míi í tóó idú Ngáwndíí- lí pèè (4-157)
child my the-one other two Ngaoundéré-in rec
(my other two [known] children in Ngaoundéré)
- (np26) n₁ ÍP_{mod}----- LoP_{if}-- rec
hããb í tóó nag- á pèè (4-9D)
wild-yam the-one other hand-in rec
(the other wild yam that we talked about in [his] hand)
- (np27) n₁ ÍP_{mod}----- dem
nag í tóó yè (3-122)
hand the-one other dem (this other hand)

(np28) n₁ ÍP_{mod}----- rec LoP_{telo}-----
 báa í tóó pèè tíj wòò-lí (3-135)
 adulterer the-one other rec inside it- in
 (the other adulterer inside of it [a huge clay pot])

(np29) n₁ ÍP_{mod}-----
 wakéé í ka kód wèè hakkilo má na (3-92)
 wife the-one sb-she do-to husband-her obedience dem sb
 (the wife who obeys her husband)

(np30) n_{pr_{rel}} poss dem
 í víí yè (3-144)
 the-one-who you dem (as for you...)

The uses of àgà are almost impossible to integrate into the fuller NP₁ structure because àgà as an emphatic is used in several different ways. So far it seems there are several positions for àgà among the other modifiers, some seemingly adverbial, others adjectival. Wherever it will eventually appear in the final analysis, I've listed it above in three positions, each with a question mark!

The following are examples of àgà when it seems to function in the DEF position, having reflexive meaning:

(np31) n_{cp}----- n_{cp}-----
 í kèé àgà (3-135) or: í wəə àgà (3-135)
 the-one wife self (husband) the-one husband self (wife)

(np32) n_{cp}-----
 bàa bo' àgà
 man potato self (the potato man himself/even)

But àgà can often be found following a numeral in NP₁, in which case it means 'even'. The second example here is even stronger than the first, and because of kóó, takes on a concessive nuance.

(np33) n₁ indef num
 nán tóó dágá àgà (Psa. 37:36)
 person other one even (not one person)

(np34) n₁ indef num
 nán tóó kóó dágá àgà (Psa. 105:37)
 person other even one even (not even one person)

Even the limiter may be modified by àgà:

(np35) n_1 qual indef lim
 hèn waa tóó waaná' àgà (Psa 103:16)
 thing small other little-bit even (not even a wee little thing)

Most interesting is a use of àgà where it precedes the nominal head position. Here is an example in clausal subject position:

(np36) n_{cp} ----- qual poss
 àgà pag nàà dání vòò vúńń... (Psa 37:15)
 self knife riches own their they-FUT...
 (their very own sword will (enter their heart))

4.2.2 Í noun phrases (NP_i). Initial analyses showed this noun phrase to be almost like NP_1 except that the í noun phrase had the $\acute{I}P_{mod}$ follow the noun head without the possibility of an intervening modifier, for example:

(np37) n_1 $\acute{I}P_{mod}$ ----- dem
 nag í tóó yè (3-122)
 hand the-one other dem (this other hand)

Counter examples have since been found where other modifiers do occur between $\acute{I}P_{mod}$ and the head, so this noun phrase has therefore been integrated into NP_1 without further problem.

4.2.3 Ya noun phrases (NP_{ya}). This type of single-centered noun phrase is distinguished by:
 1) ya 'place' which fills the head position, and
 2) its occurrence where other noun phrases occur in clauses and phrases (see 4.2), but not in the vocative position of sentences. It does, however, occur in the locative position in clauses.
 3) All modifiers so far examined are identical to those of noun phrase 1, except that when possessed, ya seems to take only the 'kinship' possessive form; see (np40).

Tagmemic formula:

$NP_{ya} = +H:ya \pm$ optional elements as in NP_1

Read: NP_{ya} consists of a head slot filled by ya with or without the optional elements found in NP_1 .

Examples:

- (np38) ya indef
ya tóó (3-138)
place a-certain/another (someplace/ another place)
- (np39) ya Sb Rel-----
ya mbìgì míí yè ka pɛ (3-139)
place hammer my dem sb-it falls (where my hammer fell)
- (np40) ya poss num rel
ya vòò idá áń (4-47E)
place their two also (both of them)
- (np41) ya poss_{kin}
ya- ga (3-54T)
place-its (its place)

4.2.4 Unpossessed noun phrases (NP₂). This single-centered noun phrase is characterized by:

- 1) its head position filled only by members of noun subclass 1b (3.4.1);
- 2) never being modified by a possessive;
- 3) its apparant restraint concerning the number of modifiers it may have--only the plural marker has been noted so far; and
- 4) its occurrence in vocative positions in sentences, as well as in the other positions occupied by noun phrases--see 4.2.

Tagmemic formula:

NP₂ = +H:n_{1b} -Poss:poss ±Mod:pl

Read: Noun phrase 2 consists of a head slot filled by a noun 1b, which is never followed by a possessive slot but may be followed by the plural marker in the modifier slot.

An example:

- (np42) n_{1b} pl
nà'á vɯ (3-128)
mother plural(-of-respect) (Mother)

4.2.5 Possessed noun phrases (NP₃). This noun phrase is single-centered and characterized by:

- 1) its head position filled only by members of noun subclass 1c (3.4.1);
- 2) always containing a possessive (poss);
- 3) its apparent restraint concerning the number of modifiers it may have--only the plural marker has been noted so far; and

4) its occurrence in the vocative position in sentences, as well as in the other positions occupied by noun phrases (4.2).

Tagmemic formula:

$$NP_3 = +H:n_{1c} + Poss:poss \pm Mod:pl$$

Read: Noun phrase 3 consists of a head slot filled by a noun 1c, an obligatory possessive slot filled by a possessive and an optional modifier slot filled by the plural marker.

An example:

(np43) n_{1c} $poss$ pl
 bà' vǐí vɯ (4-9H)
 father your plural(-of-respect) (your father)

4.2.6 Genitive noun phrases (NP_{gen}). The Dii genitive noun phrase (often called ‘associative’ by linguists) expresses possession by a person (or an animal actor in tales). It has the following characteristics:

- 1) There are two head positions, one for the object or person possessed (possd), the other for the possessor (possr). This noun phrase is thus double-centered.
- 2) The possr head may either precede or follow the possd head, which gives the two formulas below.
- 3) The second head position is followed by the possr possessive which relates possessor and possessed. The possr must evidently be a person, but the possd head may be filled by any noun or by a verbal noun clause.
- 4) When the possr head precedes, it seems the 2nd (possd) head has the potential of being a full NP₁ with other modifiers, of which the indef, pl, and lim have been observed. See examples below.

Tagmemic formula when the possd head comes first:

$$NP_{gen} = +Hpossd:\underline{VN \ Cl} \quad (+ Hpossr:\underline{pn} \quad + Poss:poss)$$

$n_{1a/2}/vn/\underline{i}$

$\underline{NP_1}$
 $\underline{n_{1a/1b}}$
 NP_{kin}/NP_{genan}

Read: The genitive noun phrase consists of a possessed head filled by a n_{1a} or n_2 , a verbal noun or a verbal noun clause, which is followed by a possessor head filled by a proper name, a noun phrase 1, n_{1a} , n_{1b} , NP_{kin} , or NP_{genan} , which in turn is followed by possr possessive slot filled by a possessive.

Tagmemic formula when the possr head comes first:

$$NP_{gen} = +Hpossr:\underbrace{pn}_{NP_{1/3}} + Hpossd:\underbrace{NP_{kin}/n_{1a/1b}}_{NP_1} + Poss:poss) \\ \underbrace{\hspace{10em}}_{n_{1a}} \\ NP_{kin}$$

Read: the possr head is filled by a proper name, an NP 1 or 3, an n_{1a} , or an NP_{kin} and is followed by a possd head which is filled by an NP_1 , an NP_{kin} or an n_{1a} or n_{1b} which is then followed by the possr possessive.

Examples when the possd head precedes the possr head:

- (np44) possd possr poss
lig gbanàà wòò (4-9F)
house chief their (pl-of-respect) (the chief's house)
- (np45) possd(VN Cl) possr poss
hẹn séné Mbùù wòò (4-9B)
thing to-gnaw Hyena his
(Hyena's thing to gnaw on (= that he's gnawing on))
- (np46) possd possr poss
í kpægád wòò (4-40C)
the-one turtle his (Turtle's)
- (np47) possd possr----- poss
yéé wǎǎ- m- òò (2-4)
name husband-your-his (your husband's name)
- (np48) possd possr----- poss
kíí dǎ- m tóó wòò (3-116)
compound neighbor-your other his (your neighbor's compound)

This type of NP_{gen} can have two coordinated possessor heads, as in the following example, not diagrammed above in the tagmemic formula:

- (np49) possd possr poss rel possr
zǎǎ Baadī wòò kan Nààná (4-35I)
heart B. their and N. (Baadī's and Nààná's hearts)

Examples when the possr head precedes the possd head:

- (np50) possr possd poss
waa idú wòò yéé wòò (2-52)
child two his name his (the name of his second child)
- (np51) possr possd poss
Bàabiig nà'á wòò (3-96)
Bàabiig mother their(pl-of-respect) (Bàabiig's mother)
- (np52) possr possd + poss(NP_{kin}) pl
waa yè pàà wəə vɛ (3-54S)
child this uncle-his husband pl(-of-respect) (this child's uncles)
- (np53) possr possd poss pl lim
waa òg wòò vɛ 'wààpád (3-54S)
child in-law his pl all (all the child's in-laws)

4.2.7 Animate genitive noun phrases (NP_{genan}). This double-centered noun phrase (also termed 'associative') is identified by:

- 1) Its two head positions, each filled by a noun referring to a person (or an animal actor in tales).
- 2) The possessor noun precedes, the possessed follows,
- 3) generally without a possessive to indicate the relationship between them.
- 4) An as yet undetermined number of modifiers may follow the heads: numeral, recall, plural marker, limiter.

Tagmemic formula:

$$NP_{genan} = +H_{possr:n_{1a}/pn/NP_1} + H_{possd:n_{1a}/NP_{kinab}/NP_1}$$

±Mod:pl ±Lim:lim

Dem:rec

Quant:num

Read: the animate genitive noun phrase consists of a possr head filled by a noun 1a, a proper name, or an NP₁, followed by a possd head filled by a noun 1a, an absolute kinship noun phrase, or an NP₁ which may be followed by one of the following tagmemes: a modifier slot filled by the plural marker, which may then be followed by a limiter slot filled by a limiter, a demonstrative slot filled by a recall morpheme, or a quantifier slot filled by a numeral.

Examples:

- (np54) possr possd pl
 B̈àb̈àam waa v̈u (4-9H)
 Rabbit child pl (Rabbit's children)
- (np55) possr possd num
 B̈àb̈àam waa d̈ágá (4-9H)
 Rabbit child one (one of Rabbit's children)
- (np56) possr possd
 B̈àabiig n̈à'á (3-96)
 B̈àabiig mother (B̈àabiig's mother)
- (np57) possr possd rec
 K̈əə waa p̈èè (4-47C)
 Lion child rec (Lion's child already referred to)
- (np58) possr possd pl lim
 gbaŋ k̈éé v̈u 'ẅààpád (4-9L)
 chief wife pl all (all the chief's wives)

4.2.8 Kinship noun phrases (NP_{kin}). The kinship noun phrase is a single-centered phrase and has the following characteristics:

- 1) It contains a head position filled by the possessed form of a kinship noun (3.4.5).
- 2) A kinship possessive (3.7.5) must occur, whose position is between the two elements of the n_{kin}. Note that in some cases, the possessive forces a tone change on the first element of the noun, instead of occurring as a separate morpheme. The plural marker or a demonstrative may terminate the phrase.
- 3) The possessor may be more fully specified by including a noun referring to this person before the initial head of this NP (see second example below).

A few kinship nouns that aren't compound nouns (ẅəə, n̈à'á, k̈éé) also may be described in this format, in which case the possessive follows the head and there is no second head; see the last two examples below.

Tagmemic formula:

$$NP_{kin} = +H: \overbrace{n_{kin} \text{ possd}} + \text{Poss: poss}_{kin} + H \quad \underline{\pm \text{Dem: dem}} \\ ẅəə/n̈à'á/k̈éé \quad \text{Mod: pl}$$

Read: The kinship noun phrase consists of an obligatory head slot filled by a possessed kinship noun (or by one of three single-headed exceptions), which is followed by a

possessive slot filled by a kinship possessive. The detail slot of the kinship noun follows the possessive as second head. In addition, one of the following may then occur: a demonstrative or a plural marker.

Examples:

- (np59) possd + possr possd pl
 à- n fàà vɯ (3-122)
 mother-my in-law plural(-of-respect) (my Mother-in-law)
- (np60) possr possd + possr possd
 Bàbààm àà fàà (3-118)
 Rabbit mother-his in-law (Rabbit's Mother-in-law)
- (np61) possr possd + possr
 wakéé waa pèè wàè (4-47L)
 woman young rec husband-her (the young woman's husband)
- (np62) possd + possr possd pl
 dà- n dòn vɯ (3-142)
 neighbor-my circumcision pl(-of-respect)(my circumcision friend)
- (np63) possd + possr
 wáá- m
 husband-your (your husband)
- (np64) possd + possr
 nà'a- m
 mother-your
 (your mother-- with insulting meaning-- see the dictionary)

4.2.9 Absolute kinship noun phrases (NP_{kinab}). Absolute kinship noun phrases are characterized as follows:

- 1) The head position is filled by the absolute (unpossessed) form of the kinship noun (3.4.5).
- 2) These single-centered phrases never contain therefore the kinship possessive (3.7.5) that NP_{kin} has. They may contain the plural marker, however.

Tagmemic formula:

$$NP_{kinab} = +H:n_{kinab} \pm Mod:pl$$

Read: The absolute kinship noun phrase consists of a head slot filled by the absolute form of the kinship noun, whose

two elements are never separated since no possessive slot occurs. The head slot may be followed by a modifier slot filled by the plural marker.

An example:

(np65) dag sáj vɯ
brother young pl (younger brothers)

4.2.10 Coordinate noun phrases (NP_{co}). Coordinate noun phrases are double- (or multiple-) centered phrases which have the following characteristics:

- 1) two or three head positions,
- 2) joined by relators, the most frequently used of which is kan ‘and’, which occurs between each head position of the phrase.

If the relator wààtò ‘or (Ful)’ or tóó tée ‘or’ occurs, only two head positions have so far been observed. The relator ám ‘also’ may close the phrase, in which case only two heads have been observed.

The elements that have been found to occur in the respective positions of this phrase are as follows:

(np66)	<u>first head</u>	<u>relator</u>	<u>second head</u>	<u>relator</u>	<u>third head</u>
	NP ₁	kan	NP ₁	kan	NP ₁
	NP ₂	wààtò	NP ₂		
	ÍP _{mod}	tóó tée	PNP		
	NP _{genan}				
	PNP				
	NP _{kin}				

Tagmemic formula:

$$\begin{aligned}
 \text{NP}_{\text{co}} = & \text{+H:NP}_1/\text{NP}_2/\text{ÍP}_{\text{mod}}/\text{NP}_{\text{genan}}/\text{PNP}/\text{NP}_{\text{kin}} \\
 & \text{+(+Rel:kan +H:NP}_{1/2}/\text{PNP) } \pm \text{(+Rel:kan +H:NP}_1\text{)} \\
 & \quad \quad \quad \text{Rel:ám} \\
 & \text{(+Rel:wààtò/tóó tée +H:NP}_{1/2}\text{)}
 \end{aligned}$$

Read as explained above.

Examples:

(np67) n₁ rel n₁
dâg kan tɔŋ (3-120)
calabash and hoe

- (np68) n_1 rel NP_1 ----- rel NP_1 -----
 néj kan wu' zẹẹ kan wu' 'wóg (3-126)
 bone and meat fresh and meat dried
- (np69) NP_1 ----- rel NP_1 -----
 siidè tèmere gúndem kan dálà wàhò' (3-112)
 money hundred seven and 5-frs ten (750 francs)
- (np70) Np_{kin} ----- rel NP_1 ----- rel
 dà- n gbòò vɛ kan súúprèfée vɛ ám (2-29)
 neighbor-my friend pl and Subprefect pl also
 (my good friends and the Subprefect also)
- (np71) PNP----- rel pn
 Fántà vɛ kan Múúsà (4-35Y)
 Fanta pl and Moussa (Fanta and Moussa)
- (np72) n_1 rel---- n_1
 sààm tóó tée siidè (3-54S)
 clothes or money

4.3 VERBAL NOUN PHRASES (VNP)

Verbal noun phrases are single-centered phrases and have the following characteristics:

- 1) They contain a head position filled by an intransitive verbal noun.
- 2) The adverb nà'à 'very' is the usual modifier.
- 3) They may modify the verb in a manner slot, or they may modify a noun in a noun phrase.

Tagmemic formula:

VNP = +H:vn_i + Mod:nà'à

Read as explained above.

Examples:

(vnp1) (dòò) ɓuulí nà'à (3-141)
wine be-much very (a lot of wine)

(vnp2) (Ø sé' [váj- ɲòò]) duulí nà'à (3-143)
he roofs granary-his be-good very
(he roofs [his granary] very well)

4.4 INDEFINITE RELATIVE PHRASES (ÍP)

The indefinite relative pronoun (npr_{rel}) $\acute{í}$ ‘the one who’ or ‘the one’ plays a distinctive rôle in this modifier $\acute{í}$ phrase ($\acute{ÍP}_{mod}$). The morpheme $\acute{í}$ has both relative and non-relative meanings which are difficult to separate.

This single-centered phrase has the following features:

- 1) its head position is filled by the indefinite relative pronoun $\acute{í}$;
- 2) it usually has only one modifier: qual, poss, LoP_{li} , indef, Sb Rel, $TeP_{ká}$, or dem, but may also be modified by the recall adjective;
- 3) it occurs in noun phrases in the ‘definiteness’ slot and also in the axis of temporal phrases (TeP).

Tagmemic formula:

$$\acute{ÍP}_{mod} = + H:\acute{í} + Mod:qual/poss/Sb Rel/dem/indef/LoP_{li}/TeP_{ká}$$

$\pm Mod:rec$

Read as explained above.

Examples:

- (íp1) $\acute{í}$ tóó (3-133)
the-one other (the other one)
- (íp2) $\acute{í}$ míí (4-47M)
the-one my (mine, my)
- (íp3) $\acute{í}$ víí- lí (3-87)
the-one you-at (the one at your house)
- (íp4) $\acute{í}$ yè (3-135)
the-one dem (this one)
- (íp5) $\acute{í}$ bà gəy pɛ zùù mam tíŋ pèè (4-9D)
the-one sb-it broken fall go-down water in rec
(the one that broke and fell into the water)
- (íp6) $\acute{í}$ ká tíŋ pèè (Luke 11:26)
the-one time-past before rec (the one before/the previous)

4.5 PRONOUN PHRASES (PrP)

Pronouns seem to be infrequently modified in Dii, but evidence of a pronoun phrase (PrP) of some type is found. The following examples indicate something of the range of possibilities. Pronoun phrases occur in object and complement positions in clauses.

(prp1) pr lim
ví 'wààpád (3-89)
you all

(prp2) (v) pr Sb Rel-----
(hò)m kám 'màà í yògò (4-48D)
(see)you sb-you are-thin like that (...you who are so thin)

(prp3) pr num
mí dágá (4-48D)
me one (only me)

(prp4) pr num dem
mí dágá yè (4-40F)
me one here (only me here)

4.6 QUALIFIER PHRASES (QualP)

The adverb bà'à 'very' may modify a qualifying adjective. The QualP modifies the head noun in NP₁.

(qualp1) gbòò bà'à (4-5)
big very (very big)

Tagmemic formula:

QualP = +H:qual + Mod:bà'à

Read as explained above.

4.7 VERB PHRASES (VP)

Verb phrases will be discussed under the following headings:

- 4.7.1 general similarities
- 4.7.2 verb phrases accepting both Pre-v and Post-v auxiliary positions
(i, tr, rcp, di, dat, stv, int, say_{di}, perc, vn)
- 4.7.3 verb phrases accepting only Pre-v auxiliary positions
(desc, lo, desid, inch, say_{tr})
- 4.7.4 durative aspect

4.7.1 General similarities. The vast similarities between the various verb phrases permit a discussion of them in general terms first. However, it should be emphasized that despite their similarities, each VP is distinct, having its own distinctive main verb, and its own distribution in a different predicate.

Verb phrases are rather easily associated with the clause types where they occur, since both the phrase and the clause usually bear the same name. Intransitive verb phrases occur in the predicate position of intransitive clauses, transitive verb phrases in transitive clauses, etc. (But note that VP_{saytr} occurs in the transitive introducer clause, and VP_{saydi} occurs in the ditransitive introducer clause.)

Verb phrases are single-centered phrases, and the head position is the only position that must be filled in any verb phrase.

Auxiliary verbs often accompany the main verb, lending motion, direction, or position to it, or changing its aspect. Some auxiliary verbs occur only preceding the main verb, others only following it, but many can occur either before or after the main verb. These positions may be called Pre-v and Post-v positions. When more than one auxiliary verb occurs, position 1 is closest to the main verb, position 2 furthest away from it:

(vp1) Pre-v₂ Pre-v₁ main verb Post-v₁ Post-v₂

In general it may be said that auxiliary verbs of motion or direction may either precede or follow the main verb, while aspectual auxiliary verbs are limited to either the Pre-v or the Post-v position, each auxiliary having its own specification. A list of these auxiliary verbs with their positions and meanings is found in 3.8.17.

One limitation should be noted. If an aspectual auxiliary verb occurs in Pre-v position, it's not often that auxiliary verbs of movement occur in Pre-v position with it, although one may follow the main verb in

such a case. An example of the more frequent construction follows; note also that the pronoun object of the verb stays ‘with the verb’ and the Post-v position follows the pronoun (here in parentheses):

(vp2) Pre-v v_{di} O₃ Post-v
 dùù p̄ən (bi) ya (4-9K)
 follow carry-to (them) come ((He) brought them [food] again.)

An example of the more rare construction, with both modal and movement auxiliaries in Pre-v positions is the following:

(vp3) Pre-v Pre-v v_i
 dùù là yaa (4-9M)
 follow go come ((He) came again.)

It’s also possible to have nominal direct and indirect objects come between the verb and the Post-v auxiliary, especially when this latter is of the modal type. An example follows, with others among the examples below.

(vp4) v_{tr} O₁ Post-v Post-v
 ḡəŋ̄ (s̄ə̀əm̄ v̄ə) dàà làn̄ (4-35B)
 carry (clothes pl) pass go-away ((He) carried away the clothes.)

4.7.2 Verb phrases accepting both Pre-v and Post-v auxiliary positions (i, tr, rcp, di, dat, stv, int, say_{di}, perc, vn). The following verb phrases may contain Pre-v and/or Post-v positions: intransitive, transitive, reciprocal, ditransitive, dative, stative/passive, intentional, ditransitive of ‘saying’, perception, and verbal noun.

Some examples:

(vp5) Pre-v Pre-v v_i
 dàà là vúd (4-48H)
 pass go come-out ((He) goes out)

(vp6) Pre-v Pre-v v_{tr}
 d̄əg- ḡà b̄ù (4-4)
 go-up-go sit-on ((You) sit on...)

(vp7) Pre-v v_i Post-v
 dàà d̄áá d̄əg (4-9H)
 pass climb-up go-up ((He) climbed up.)

- (vp8) v_{tr} O_1 Post-v
 lá (nan) 'wàa (4-35D)
 eat (couscous) finish ((He) finished eating the couscous.)
- (vp9) v_{di} I O_1 Post-v
 mbógòd (nà'- 'òò hẹn) 'wàa (4-47K)
 fix-for (mother-his thing) finish
 ((He) fixed the thing for his mother.)
- (vp10) v_{tr} O_1 Post-v
 ba' (Diinà) zùù (3-38)
 send (Diinà) go-down ((He) sent Diinà down...)
- (vp11) v_i Post-v Post-v
 ấấ dồg- gầ (4-5)
 climb-up go-up- go ((He) climbed up.)
- (vp12) Pre-v O_1 vn
 dàa (hẹn) sòòlí (3-139)
 pass (thing) to-look-for (to look for a thing)
- (vp13) vn Post-v
 ba''í zùù (3-95)
 to-send go-down (to send down)

The composite tagmemic formula for these verb phrases is as follows:

VP = \pm Pre- v_2 :aux \pm Pre- v_1 :aux

+ H: v_i /tr/rcp/di/dat/stv/int/saydi/perc/vn

\pm Post- v_1 :aux \pm Post- v_2 :aux

Read as above, with the head slot of VP_i containing v_i , etc.

4.7.3 Verb phrases accepting only Pre-v auxiliary positions (desc, lo, desid, inch, say_{tr}). The following verb phrases may contain only Pre-v positions: descriptive, locative, desiderative, inchoative, and transitive of 'saying'. Some examples will probably be found permitting some of these verb phrases to be shifted to section 4.7.2.

Only one Pre-v position has been found in these verb phrases.

Some examples:

(vp14) Pre-v v_{lo}
ya ðì (3-141)
come is-there ((They) are there.)

(vp15) Pre-v v_{perc}
là nùh̃ (4-9D)
go find ((He) finds.)

The composite tagmemic formula here is:

VP = ±Pre-v:aux + H:v_{desc/lo/desid/inch/say}tr

Read as explained above.

4.7.4 Durative aspect. One manner of expressing the duration of a verb's motion is with the auxiliary bàà (3.8.17). Another is to repeat the main verb two or more times. In the negative, the clause marker is also repeated.

(vp16) 'yém 'yém 'yém (3-120)
walk walk walk ((He) walks a long time.)

(vp17) lá lá (4-9H)
eat eat ((He) eats a long time.)

(vp18) zùh̃ zùh̃ (1B42)
pound pound ((She) pounded a long time.)

(vp19) h̃n né h̃n né (3-4)
see-NEG F-I-NEG see-NEG F-I-NEG
((He) doesn't see (it) for a long time.)

4.8 TEMPORAL PHRASES (TeP)

Temporal phrases have two characteristics in common:

- 1) their head (or axis) positions are filled by temporals, and
- 2) they occur in temporal positions in clauses; in addition, some types also occur in certain other positions, as specified below.

The following types of phrases will be discussed:

- 4.8.1 /lí/ temporal phrases (TeP_{lí})
- 4.8.2 temporal-locative root phrases (TeP_{telo})
- 4.8.3 temporal máa phrases (TeP_{máa})
- 4.8.4 temporal ká phrases (TeP_{ká})
- 4.8.5 general temporal phrases (TeP_{gen})
- 4.8.6 coordinate temporal phrases (TeP_{co})

4.8.1 /lí/ temporal phrases (TeP_{lí}). The /lí/ phrase has a central or axis position and a relator position (postposition). Its distinctive characteristics are as follows:

- 1) It contains only one temporal relator: the suffix /lí/ ‘in/on/at’, which is obligatory. Note this suffix is also used in locative constructions, not just temporal. No ‘common telo root’ (3.9.1) is used as a relator in this construction.
- 2) Its axis contains either a temporal root (3.9.2) as minimal expression, or a general temporal phrase (TeP_{gen}) for the expanded construction.
- 3) In factative clauses it occurs in the Te₂ position, but in subordinate TeLoC clauses it occurs in Te₁ position. It may also modify a noun in a noun phrase, or occur in the temporal máa phrase.

Tagmemic formula:

$$\text{TeP}_{\text{lí}} = +\text{Ax}:\text{TeP}_{\text{gen}} + \text{Rel}:/\text{lí}/$$

Read as explained above.

Examples:

(tep1) te rel
záḡa-lé (4-9H)
day- in (during the day...)

(tep2) TeP_{gen}----- rel
yḡ mèn- né (4-9H)
mouth afternoon-in (in the afternoon)

(tep3) TeP_{gen}---- rel
 zàgà àlàd- dí (2-38)
 day Sunday-in (on Sunday)

(tep4) TeP_{if}----- rel
 sèy tóó- lí (4-9D)
 time other-in (at one time...)

(tep5) TeP_{gen}----- rel
 sèy yàgà sálí- lí (4-9D)
 time hill building-up- in
 (at the time of building up hills/rows [in the field]...)

4.8.2 Temporal-locative root phrases (TeP_{telo}). The following are characteristics of this relator-axis phrase type:

- 1) It contains one ‘common telo root’ (3.9.1) as relator (either as preposition or as postposition), and may also contain the temporal-locative relator suffix /lí/.
- 2) Its axis position contains a noun phrase 1, a temporal root or phrase (TeP_{gen}), or an emphatic mí pronoun.
- 3) It occurs as axis in the temporal máa phrase, or in the Te₂ position in clauses.

Tagmemic formula:

TeP_{telo} = + Rel:telo + Ax:NP₁/TeP_{gen}/mí_{emph} ± Rel:/lí/
↑

Read as explained above.

Examples:

(tep6) telo TeP_{gen}---
 háá zàgà ɓ̀̀̀̀ (4-48J)
 until day today (right up to this day...)

(tep7) telo n₁ rel
 dìgà náásáj-ńé (3-117)
 since youth- in (since my youth...)

(tep8) telo NP₁---(with Sb Rel)-----
 háá sèy à màà- wọ tée,... (4-40H)
 until time it is-enough-for-him dem,... (until it’s enough for him)

(tep9) telo TeP_{gen}-----
 háá ve’ wàńńó’ zùù idú (3-54S)
 until year ten and two (for 12 years...)

- (tep10) telo TeP_{gen}-----
 háǵ túm túm (3-117) -- all 3 words borrowd from Fulfulde!
 until always always (forever)
- (tep11) telo TeP_{gen}--- rel
 dìgà sèy wòò-lí (4-40E)
 since time it- at (since that time...)
- (tep12) telo mí_{emph}
 pig wòò (4-47H) or contracted to: piggòò (4-2)
 after it (after that...)
- (tep13) telo mí_{emph} rel
 pig wòò- lí (3-135)
 after it- in (after that...)
- (tep14) te telo rel
 zǵǵ sǵǵm- é (4-9H)
 day middle-in (at noon...)

4.8.3 Temporal máa phrases (TeP_{máa}). Temporal máa phrases are relator-axis in type and their distinctive characteristics are as follows:
 1) an axis containing a temporal root (as minimal form) or in expanded form, one of the following phrases: TeP_{lí}, TeP_{gen}, or TeP_{telo},
 2) a relator (postposition) máa (or má naa or má ni) ‘time past’, or tée ‘time future’; this relator may also have focus or topicalizer functions.
 3) This phrase type occurs only in Te₁ position in clauses.

An outstanding question is in what way the form máa as used here is related to the topicalizer máa, especially since the Te₁ position occurs clause-initially. Boyd (pers. comm.) thinks all of these uses of máa are as topicalizers. If so, then is tée also a topicalizer? Another question: is the sense of ‘time’ in these forms neutralized when or if these morphemes are used as topicalizers?

Tagmemic formula:

TeP_{máa} = + Ax:TeP_{lí/telo/gen} + Rel:máa/tée

Read as explained above.

Examples:

- (tep15) te rel
yógó máa (4-48C)
tomorrow time-past (the day after...)
- (tep16) te rel
yógó téé (3-54I)
tomorrow time-FUT (the next day.../tomorrow...)
- (tep17) TeP_{lí}----- rel
sèy tóó- lí máa (4-9D)
time other-in time-past (once upon a time...)
- (tep18) TeP_{lí}----- rel
yag kà'ám- é máa (4-47L)
mouth morning-in time-past (in the morning...)
- (tep19) TeP_{gen}- rel
à'á yè máa/má niì/má naa (4-44)
now dem time-past (now.../at that time...)
- (tep20) TeP_{gen}----- rel
yógó yag kà'ám-é àlà rbà-lí zamdi ka'andaddú kana réetà téé
tomorrow mouth morning-in Wed.-on hour 8 and a-half time-FUT
(tomorrow morning at 8:30...) (1B35b)
- (tep21) TeP_{gen}--- rel
ve' tóó máa (4-47K)
year other time-past (in another year...)
- (tep22) TeP_{telo}----- rel
tíj waaná' máa (4-47D)
after little time-past (a little while later.../soon afterwards...)
- (tep23) te rel
zàa téé (4-40I)
a-little-while time-FUT (a little later...)
- (tep24) TeP_{telo}-- rel
sèy tíj máa (3-134)
time before time-past (later...)
- (tep25) TeP_{gen}---- rel
bá' tããó téé (3-54I)
day three time-FUT (3 days later...)

(tep26) TeP_í----- rel
 yógó yag kà'əm- é máa (4-9G)
 tomorrow mouth morning-in time-past (the following morning...)

4.8.4 Temporal ká phrases (TeP_{ká}). Temporal ká phrases are single-centered, and have the following characteristics:

- 1) the optional head position is filled only by ká 'time past',
- 2) the modifiers of ká are also optional and are quite limited in number, including bán 'yesterday', búu 'the next day', vèè 'next year', and tín 'before'. Although both head and modifier are optional, one of them must occur.
- 3) Further modifiers found have been the indefinite tóó, the recall pèè, and the expressions à'ə yè 'now' and səə dágá 'stay one'; see the examples below.
- 4) This phrase occurs in the Te₁ position in clauses, and in the modifier position of í phrases.

Tagmemic formula:

TeP_{ká} = + (± H:ká ± Mod:bán/búu/vèè/tín)
 ± Mod:indef/rec/ à'ə yè/səə dágá

Read as explained above.

Example:

(tep27) bán (1B44)
 yesterday (yesterday)

(tep28) ká bán (4-1)
 time-past yesterday (yesterday)

(tep29) ká bán à'ə yè (4-30)
 time-past yesterday now (exactly yesterday...)

(tep30) ká bán tóó (4-14)
 time-past yesterday other (a certain day in the past...)

(tep31) ká búu (4-14)
 time-past day-before (the day before yesterday...)

(tep32) ká bán səə dágá (4-15)
 time-past yesterday stay one (the day before yesterday...)

(tep33) ká vèè (2 Cor 8:10)
time-past year-before (last year)

(tep34) (í) ká tíń (pèè) (Luke 11:26)
(the-one) time-past before (rec)
(the previous (one we all know about))

4.8.5 General temporal phrases (TeP_{gen}). General temporal phrases are single-centered and
1) bear many similarities to NP₁ except that:
2) the head position is filled by a temporal element, which may be a temporal root or a compound expression, and
3) the general temporal phrase occurs in Te₁ and Te₂ positions in clauses as well as in subject position; it also occurs as axis in TeP_{lf} and TeP_{máa}.

Several modifiers have been noted, each generally occurring alone, so that little order can be seen in their respective positions within the phrase: poss indef ÍP_{mod} num npr_q Sb Rel dem te lim IdeoP

Doubtless the following expression should be added to this group, but it has an irregular structure:

(tep35) te te? v_{lo} cm
zàg zàa pé- lí (3-54B)
time a-little is-NEG-F-I-NEG (a short time later...)

Tagmemic formula:

TeP_{gen} = +H:te ± Mod:indef/te/Sb Rel/IdeoP/npr_q
Mod:ÍP_{mod}/foc ± Dem:dem
Poss:poss
Quant:num
Lim:lim

Read as explained above, with the addition of the slot titles: Limiter, Modifier, Quantifier, Possessive, and Demonstrative. Only ÍP_{mod} (or foc) and the demonstrative occur together in the current data, which reveals their order of occurrence, but not that of the other elements.

Examples:

(tep36) te lim
zàgà 'wààpád (4-9H)
day all (every day)

- (tep37) te te
zàgà bə̀̀̀ (4-48J)
day today (today)
- (tep38) te lim-----
bá' bə̀̀lí nà'̀̀à (4-47K)
day be-many very (many days)
- (tep39) te-----
yàg kà'̀̀am (4-9I)
mouth morning (morning)
- (tep40) te Sb Rel-----
sèy Bə̀̀bə̀̀am ka fíí ya hòg- í (4-9N)
time Rabbit sb-he returns come bush-in
(the time when Rabbit returned from the bush)
- (tep41) te num
bá' tǎ̀̀nó (3-54I)
day three (three days)
- (tep42) te foc dem
sẹ̀ ́ máa yè (3-54U)
moon then dem (in that month...)
- (tep43) te lim
sèy waaná' (1A35b)
time little (a little time)
- (tep44) te ÍP_{mod}----- dem
zàgà í tóó yè (3-137)
day the-one other dem (this other day...)
- (tep45) te npr_q
àl̀̀ad nén(ná) (1A31)
Sunday/week how-many (how many weeks...)

4.8.6 Coordinate temporal phrases (TeP_{co}). Coordinate temporal phrases are

- 1) double-centered,
- 2) contain two head positions, each filled by a temporal or TeP_{gen} or probably also by TeP_{ká} (data here is incomplete),
- 3) joined by kan 'and', or tóó tée 'or'.
- 4) This phrase occurs in the Te₂ position in clauses.

Examples:

(tep46) te----- rel te lim
yag kà'əm kan vîd 'wààpád (3-107)
mouth morning and night all (every morning and night)

(tep47) TeP_{gen}--- rel----- TeP_{gen}-----
sẹẹ idú tóó tée sẹẹ tẹ̀ẹ́nó (3-54T)
moon two or moon three (2 or 3 months)

4.9 LOCATIVE PHRASES (LoP)

Locative phrases

- 1) contain a locative in their head or axis position; and
- 2) they may occur in the locative position in clauses; whenever a locative phrase may occur elsewhere as well, this will be noted under that phrase type below.

The following types will be discussed:

4.9.1 /lí/ locative phrases (LoP_{lí})

4.9.2 temporal-locative root phrases (LoP_{telo})

4.9.3 double-centered locative phrases (LoP_{dblc})

4.9.1 /lí/ locative phrases (LoP_{lí}). The distinctive characteristics of this relator-axis phrase are as follows:

- 1) Its single relator position contains only the obligatory locative relator suffix: /lí/ ‘in/on/at’, not a ‘common telo root’ (3.9.1).
- 2) Its obligatory axis position contains any one of several items: NP₁, NP_{ya}, NP_{gen}, lo_{place}, a locative, a mí_{emph} pronoun, or one of several locative demonstrative roots: wu ‘there’, yè ‘here’, yè ‘there’, etc.
- 3) Limiters and the locative pì from the noun phrase have been found to follow the suffix /lí/; see the last three examples below.
- 4) Besides occurring in the locative position in clauses, it may occur as a modifier in NP₁ and íP_{mod}.

Tagmemic formula:

$$\text{LoP}_{lí} = + \text{Ax:NP}_{1/ya/gen/lo_{place}/lo/mí_{emph}/dem} + \text{Rel:}/lí/ \pm \text{Mod:lim}/pì$$

Read as explained above.

Examples:

- (lop1) NP₁----- rel
kóə wòò-lí (4-9G)
sack his- in (in his sack)
- (lop2) NP₁----- rel
lig í wòò-lí (3-137)
house the-one his- at (to his own house)
- (lop3) NP₁----- rel
dəg gbòò tóó- lí (3-134)
big-pot big a-certain-in (in a certain big pot)

- (lop4) NP₁----- rel
 bəd yó”í- lí (4-48J)
 mud to-dig-in (in digging in the mud)
- (lop5) NP₁----- rel
 nóo wòò- lí (lá?) (3-35)
 who him/her-at (Q) (at whose house?)
- (lop6) NP_{ya}----- rel
 ya tóó- lí (3-138)
 place a-certain-in (in a certain place)
- (lop7) NP_{gen}----- rel
 hḡg Mbùù wòò-lí (4-47I)
 stomach Hyena his- in (in Hyena’s stomach)
- (lop8) NP_{gen}----- rel
 lig náá gḡb waa pèè vòò- lí (4-47E)
 house young girl small rec their-in (in the young girls’ house)
- (lop9) lo_{place} rel
 mbàà- lí (3-110)
 Mbé- in (in Mbé)
- (lop10) mí_{emph} rel
 vòò- lí (3-96)
 them- at (at their house)
- (lop11) dem rel
 wu- lí (3-123)
 dem- at (there)
- (lop12) dem rel
 yè- lí (4-6)
 here-at (here)
- (lop13) NP_{ya}----- rel lim
 ya vòò- lí ’wààpád (3-54S)
 place their-among all (among them all)
- (lop14) NP_{ya}----- rel lim-----
 ya tóó vu- lí dḡlḡl nà’à (3-56)
 place other pl- at be-far very (at other places, far away)

(lop15) NP₁ rel lo
 dəə- lí pì (4-40G)
 hole-in back-there (way back there in the hole)

4.9.2 Temporal-locative root phrases (LoP_{telo}). This relator-axis phrase type has the following characteristics:

- 1) A locative or a ‘common telo root’ (3.9.1) is used as relator, with or without the temporal-locative suffix /lí/ as additional relator. The common telo root may precede or follow either the axis position or the other relator position containing /lí/. Some common telo roots evidently have occurrence restrictions and appear only in one or in two of these positions.
- 2) Its obligatory axis position contains an NP₁, an emphatic mí pronoun, or a locative place name.
- 3) As in LoP_{li} above, a few modifiers may follow the final relator, for ex. a limiter or the dem yè or yè. See the last three examples below.
- 4) In addition to its occurrence in the locative position in clauses, it occurs as a modifier in NP₁ or ÍP_{mod}.

Tagmemic formula:

$$\text{LoP}_{\text{telo}} = + \text{Rel:lo/telo} + \text{Ax:NP}_1/\text{lo}_{\text{place}}/\underline{\text{mí}}_{\text{emph}} \quad \pm \text{Rel:}/\text{lí}/$$

± Mod:lim/dem

Read as explained above.

Examples:

(lop16) lo NP₁ rel
 yəg dəə- lí (4-40G)
 mouth hole-at (at the edge of the hole)

(lop17) telo NP₁----- rel
 tíj huu gbòò tóó- lí (4-47K)
 inside forest big a-certain-in (inside a certain big forest)

(lop18) lo_{place} lo
 Sasaa páń (3-89)
 Sasaa up-there ([the village of] Sasaa up there)

(lop19) telo mí_{emph} rel
 tíj wòò- lí (3-135)
 in it- in (in it)

- (lop20) lo NP₁ lim
 dáj zìh waaná' (4-40E)
 near river little-bit (near the river a little bit)
- (lop21) NP₁ telo
 váj tíh (4-9N)
 granary in (in the granary)
- (lop22) NP₁ telo rel
 bab sàqam- é (3-120)
 field middle-in (in the middle of the field)
- (lop23) mí_{emph} rel telo
 wòdò- lí tíh (4-9E)
 it- in inside (inside it)
- (lop24) NP₁ telo lo
 huu tíh yè(lá?) (3-54K)
 forest inside here(Q) (inside the forest here?)
- (lop25) NP₁----- rel lim
 yàgà vu-lí 'wààpád (3-54Q)
 field-row pl-along all (along all the planting rows)
- (lop26) NP₁ telo lim-----
 hóg tíh dīlí nà'á (3-54S)
 bush in be-far very (far away in the bush)

4.9.3 Double-centered locative phrases (LoP_{dblc}). This phrase type has the following distinctive characteristics:

- 1) It has two head positions: LoP_{lf} may occur in either position, and LoP_{telo} may occur in the second head position.
- 2) The relator suffix /lí/ is evidently obligatory in each of the two head positions, even when one of them contains LoP_{telo} where /lí/ is usually only optional.
- 3) Certain of the items occurring in the two axes are evidently restricted with respect to each other. One such restriction treats mí_{emph} plus /lí/ plus a noun plus /lí/ as a variant of a corresponding LoP_{lf}: NP₁ (with poss) plus /lí/. For example, the following two examples have almost identical meaning:

- (lop27) mí_{emph} rel n rel
 wòdò- lí lig- í (3-140)
 him/his-in house-in (in his house)

(lop28) NP₁----- rel
lig wòdò- lí (3-137) [can also be contracted to liggòdòlí]
house his- in (in his house)

Tagmemic formula:

LoP_{double} = +H:LoP_{lí} +H:LoP_{lí/te_{lo}} (with +Rel:/lí/)

Read as explained above.

Examples:

(lop29) LoP_{lí}-- LoP_{lí}---
wòdò-lí ka'ad-í (3-122)
him-to side- to (to his side)

(lop30) LoP_{lí}----- LoP_{lí}---
à- n fàà vòdò- lí bab- bí (4-9P)
mother-my in-law their-in field-in (in my mother-in-law's field)

(lop31) LoP_{lí}----- LoP_{lí}---
hág- á yè- lí (4-4)
ground-on dem-on (here on the ground)

(lop32) LoP_{lí} LoP_{lí}--
víí- lí yè- lí (3-144)
you-at dem-at (at your house here)

(lop33) LoP_{lí}----- LoP_{te_{lo}}---
bà' wòdò-lí la' yúba (3-54M)
egg her-on tree up (on her eggs up in the tree)

(lop34) LoP_{lí}----- LoP_{te_{lo}}-----
dæg- gí tíj wòdò-lí (3-135)
big-pot-in inside it-in (inside the big clay pot)

4.10 OTHER RELATOR-AXIS PHRASES (RAP)

Three types of relator-axis phrases will be discussed:

4.10.1 relator-axis kan phrases (RAP_{kan})

4.10.2 relator-axis yúú phrases (RAP_{yúú})

4.10.3 relator-axis simile phrases (RAP_{sim})

4.10.1 Relator-axis kan phrases (RAP_{kan}). This type of phrase is single-centered and has the following characteristics:

- 1) It's introduced by kan 'with, by, and', which is followed by
- 2) an axis filled by one of a large variety of nominal and pronominal elements. The following have been found to occur here: NP₁, NP₂, NP_{kin}, NP_{gen}, NP_{genan}, VN Cl, and the free (i.e., non-suffixed) mí_{obj} pronouns (or the bi_{obj} forms when the referential condition REF COND is met, see 7.3).
- 3) The additional relator ám 'also' may follow the axis.
- 4) This type of phrase occurs in the instrumental-accompaniment position in clauses.

Tagmemic formula:

RAP_{kan} =
+ Rel:kan + Ax:NP_{1/2/kin/gen/genan}/VN Cl/free mí_{obj} ± Rel:ám

Read as explained above.

Examples:

(rap1) rel NP₁-----
kan vbóó í wòò (3-128)
with stick the-one his (with his stick)

(rap2) rel NP₂ rel
kan nà'á ám (4-47C)
with mother too

(rap3) rel NP_{kin}-----
kan dàg- à síg fàq (3-90)
with neighbor-her co wife

(rap4) rel NP_{gen}-----
kan yég Abdù wòò (3-36)
in name Abdù his (in Abdu's name)

(rap5) rel NP_{genan}----- rel
 kan Kəə waa pèè ǵm̩ (4-47C)
 with Lion child rec too (with the Lion child too)

(rap6) rel VN Cl-----
 kan zǒǒ də”ǵ (3-54J)
 with heart to-clean (with joy)

(rap7) rel VN Cl-----
 kan yaalí vóó-lí sàǵm- é (3-54A)
 with to-come us- to among-to (with coming among us)

(rap8) rel free mí_{obj}
 kan mí (3-144)
 with me

4.10.2 Relator-axis yúú phrases (RAP_{yúú}). These phrases are composed of three elements:

- 1) an initial relator yúú ‘on, concerning, because of’,
- 2) an axis filled by a NP₁ or a mí_{emph} pronoun (and possibly by several other noun phrases--our list is not exhaustive), and
- 3) a final relator, the temporal-locative suffix /lí/.
- 4) These phrases occur in the ‘locative’ position in clauses, which is a rather formal designation for a slot with a semantic range including ‘concerning’, as seen by the examples below.

Tagmemic formula:

$$\text{RAP}_{yúú} = +\text{Rel:}yúú + \text{Ax:NP}_1/\underline{mí}_{emph} + \text{Rel:}/lí/$$

Read as explained above.

Examples:

(rap9) rel NP₁----- rel
 yúú bǵ’ wòò-lí (3-54M)
 on egg her- on (on her eggs)

(rap10) rel NP₁ rel
 yúú hǒǒ- lǵ (3-112)
 concerning sickness-on (concerning sickness...)

(rap11) rel mí_{emph} rel
 yúú wòò- lí (3-112)
 concerning him/it- on (concerning him/it...)

(rap12) rel NP₁----- rel
 yúú h̄ɛn bíd kólí vòò v̄u-lí (Mat. 1:21)
 concerning thing bad doing their pl-on (concerning their sins)

4.10.3 Relator-axis simile phrases (RAP_{sim}). Similes are expressed by two different types of phrase. Both occur in the simile (Sim) position in clauses.

The most frequently used of the two types has three parts:

- 1a) It's usually introduced by the relator kó í 'like, as'. Whether this and the final relator together form a discontinuous morpheme is probably true synchronically. At any rate, this structure is unusually complex.
- 1b) The initial kó is probably verbal in origin since it takes the negative suffix -n̄ by agreement in a negative context, but the meaning is not negative; see the second example below.
- 1c) Occasionally we find í used alone; see the fourth example below.
- 2) Its axis may contain: NP₁, NP_{gen}, certain locative or temporal phrases LoP/TeP, or a mí_{emph} pronoun, and possibly other noun phrases.
- 3) A final relator wɔgɔ 'like' closes the construction.

Tagmemic formula:

RAP_{sim} = Rel:kó í/í + Ax:NP_{1/gen}/LoP/TeP/mí_{emph} + Rel:wɔgɔ

Read as explained above.

Example:

(rap13) rel NP₁----- rel
 kó í nán ȳɔm v̄u wɔgɔ (3-54D&E)
 as person blind pl as (like blind persons)

(rap14) (VP_{desc}) rel NP₁----- rel
 V̄u dùù mbàan kón í zaga v̄u wɔgɔ né.
 They follow are-NEG like-NEG uncircumcized pl like F-I-NEG
 (They are no longer like uncircumcized [boys].)

(rap15) kó í be'- 'í wɔgɔ (Lord's prayer)
 as sky-in as (as in heaven)

(rap16) í ḡà' nàà wɔgɔ (Rev. 4:1)
 as horn rich as (like a trumpet)

The other construction used in similes places the relator(s) before the axis. Either of two relators can be used: móo or baà, or the

combined baà móo. Baà seems to require a clause marker to close its structure.

Examples:

- (rap17) rel NP₁-----
móo nóó dii yè (3-88)
like eye mouse dem (like the eyes of a mouse)
- (rap18) rel n₁ cm
baà la''- ì (dictionary in the kó í...wɔgɔ entry)
like tree-F-I (like a tree)
- (rap19) rel rel TeP_{ká}----- cm
baà móo ká vèè pèè nɔ (4-86G)
as as time-past year rec F-I (like last year)

4.11 IDEOPHONE PHRASES (IdeoP)

All ideophone phrases are double- (or multiple-)centered phrases. They have the following characteristics:

- 1) They occur in ideophone positions in clauses, object 4 positions in transitive introducer clauses, and possibly in Te₂ positions in clauses.
- 2) They contain one or more head positions without being joined by a relator. The ideophone is simply reduplicated, sometimes only two or three times, sometimes an indefinite number of times.

Three examples from a clause ideophone position:

- (ideo1) bád bád bád bád (4-9B) imitation of a hyena chewing on bones
- (ideo2) sáá sáá sáá (3121&122) softly, very carefully
- (ideo3) wù r, wù r, wù r wù r (3-92) imitation of grinding grains

An animal's cry may fill the object 4 position of a transitive introducer clause:

- (ideo4) iiyà iiyà iiyà (3-146) imitation of a lion roaring

It may be that the roots háá 'a long time (Ful)', fáá 'a long time', and túm 'forever (Ful)' are ideophones filling Te₂ positions in clauses:

- (ideo5) háá háá háá háá (3-141) a very long time

Tagmemic formula:

IdeoP = +H:ideo ± Hⁿ:redup

Read as explained above. Hⁿ stands for an indefinite number of heads reduplicating the initial head.

4.12 NUMERAL PHRASES (NumP)

The following types of Dii numeral phrases are isolable:

- 4.12.1 10-99 decade numeral phrase (NumP_{dec})
- 4.12.2 100-999 centenary numeral phrase (NumP_{cent})
- 4.12.3 1000-9999 millennial numeral phrase (NumP_{mil})
- 4.12.4 numeral phrase 2 (NumP₂)
- 4.12.5 ordinal numeral phrase (NumP_{ord})
- 4.12.6 distributive numeral phrase (NumP_{dist})
- 4.12.7 coordinate numeral phrase (NumP_{co})

Decade, centenary, and millennial numeral phrases are all cardinal (card) numerals.

Numeral phrases generally modify nouns in noun phrases (but cardinal numerals may also occur in the subject and direct object clause positions). Any cardinal numeral may occur in ordinal, distributive, or coordinate numeral phrases.

4.12.1 10-99: decade numeral phrases (NumP_{dec}). These numeral phrases are potentially double-centered and have the following characteristics:

- 1) The numerals 10 and 20 are found in Table 3.11.
- 2) The -ty numerals 30 to 90 are formed by adding the numbers 3 to 9 to vo' '-ty'.
- 3) Any of these numerals may then be followed by a unit (1-9), linked to the rest of the numeral by zùù 'and'; this latter morpheme seems to be the verb 'descend', like in adding an object to a pile of objects being counted-- or going down to start counting on the toes when there aren't enough fingers.

See Bohnhoff and Kadia 1990, chapters 6 and 8 for more examples.

Tagmemic formula:

NumP_{dec} = +H:10/20/(vo' + Mod:3-9)

± (+ Rel:zùù + H:num_{uni})

Read: decade numerals are composed of a head slot filled by 10, 20, or a morpheme vo' modified by one of the unit numerals 3-9. The first head slot may be followed by the linking word zùù which is then followed by another head slot filled by any unit numeral.

Examples:

(nump1) wàñbó' zùù tajaanó (3-109) Ten and three (13)

(nump2) vo' ka'andadú zùù gúndem -ty eight and seven (87)

4.12.2 100-999: centenary numeral phrases (NumP_{cent}). These phrases are potentially double-centered and have the following characteristics:

- 1) They're all formed on the base word tèmere '100', a word borrowed from Fulfulde, with the units 1-9 added for the hundreds.
- 2) Any numeral between the even hundred figures is obtained by adding a unit numeral (1-9) or a decade numeral phrase (as defined above), but always linked to the preceding portion of the phrase by kan 'and'.

See Bohnhoff and Kadia 1990, chapter 11 for more examples.

Tagmemic formula:

NumP_{cent} = +H:100 ± Mod:num_{uni}

± (+ Rel:kan + H:num_{uni}/NumP_{dec})
Read as explained above.

Examples:

(nump3) tèmere gúú (1B27b) hundred six (600)

(nump4) tèmere kan dágá hundred and one (101)

(nump5) tèmere gúú kan tajaanó hundred six and three (603)

(nump6) tèmere gúndem kan vo' tajaanó zùù dágá
hundred seven and -ty three and one (731)

4.12.3 1000-9999: millennial numeral phrases (NumP_{mil}). These phrases have the following characteristics:

- 1) They contain the base morpheme ùzineere 'thousand (Ful)'.
2) The numeral 1000 may then be followed by either a unit numeral, a decade numeral phrase, or a centenary numeral phrase.
3) Any of the figures in even thousands may then be followed by a link kan 'and' which is followed by either a unit numeral, a decade numeral phrase, or a centenary numeral phrase.

Tagmemic formula:

$$\text{NumP}_{\text{mil}} = +\text{H}:1000 \pm \text{Mod}:\text{num}_{\text{uni}}/\text{NumP}_{\text{dec/cent}} \\ \pm (+\text{Rel}:\underline{\text{kan}} + \text{H}:\text{num}_{\text{uni}}/\text{NumP}_{\text{dec/cent}})$$

Read as explained above.

Examples:

(nump7) ùzineere t̩aṅnó thousand three (3,000)

(nump8) ùzineere vo' gúú thousand -ty six (60,000)

(nump9)
 ùzineere t̩emere t̩aṅnó kan t̩emere idú kan vo' ndadú z̩ùù gúndem
 thousand hundred three and hundred two and -ty four and seven
 (300,247)

4.12.4 Numeral phrase 2 (NumP₂). Numerical phrase 2 consists of
 1) the numeral dágá 'one' plus
 2) one or two ideophones as modifier(s): 'néń and kpógkpóg, each
 meaning 'only'.

Tagmemic formula:

$$\text{NumP}_2 = +\text{H}:\underline{\text{dágá}} + \text{Mod}:\underline{\text{'néń}} \pm \text{Mod}:\underline{\text{kpógkpóg}}$$

Read as explained above.

(nump10) ...dágá 'néń kpógkpóg, tóó Ø pé- lí (3-25)
 ...one only only other it is-NEG-F-I-NEG
 (... absolutely only one (pencil), there are no others!)

4.12.5 Ordinal numeral phrases (NumP_{ord}). These phrases are
 composed of:
 1) any cardinal numeral (unit, decade, centenary, or millennial numeral
 phrase) followed by
 2) what appears to be the third singular possessive wòò as modifier.

Tagmemic formula:

$$\text{NumP}_{\text{ord}} = +\text{H}:\text{card} + \text{Mod}:\underline{\text{wòò}}$$

Read as explained above.

Example:

(numpl1) ɬaŋó wòò (3-54J)

three his (third)

(numpl2) wàñbó' zùù idú wòò (Rev. 21:20) ten and two his (twelfth)

4.12.6 Distributive numerals (NumP_{dist}). Any cardinal numeral may be rendered distributive, usually by using the distributive forms of unit numerals (see Table 3.11). Their characteristics are as follows:

- 1) Their head position contains any cardinal numeral.
- 2) The whole numeral is considered distributive but only the final unit numeral is reduplicated.
- 3) They fill only Quantifier slots in noun phrases.

Examples:

(numpl3) tèmere kan vo' gúú gúú hundred and -ty six six (160 each)

(numpl4) vo' gúndem zùù ɬaŋó -ty seven and three-three (73 each)

(numpl5) dálà dálágá (see dictionary) [dálà dálágá dálágá is also found]
5-francs one-one (five francs each)

(numpl6) dálà i'idú (1A44) 5-francs two-two (10 francs each)

Exceptions: gbèg '20', tèmere '100 (Ful)', and ùzinεere '1000 (Ful)' may be rendered distributive through repetition of the full morpheme (e.g., gbèg gbèg), but it's also possible to render 100 and 1000 distributive by adding a reduplicated dágá following them.

4.12.7 Coordinate numeral phrases (NumP_{co}). One type of coordinate numeral phrase is antithetical: 'two or three'. In Dii this is expressed by juxtaposing the two unit numerals involved, or by inserting tóó tée 'or' between them:

(numpl7) idú ɬaŋó [or: idú tóó tée ɬaŋó (3-54S)]
two three (two or three)

When a numeral phrase is involved, only the final relator and the final head position are juxtaposed:

(numpl8) wàñbó' zùù ɬaŋó zùù ndadú (3-109)
ten and three and four (13 or 14)

4.13 SUBORDINATING PHRASES (SbP)

The main types of Dii subordinating phrase are the following:

- 4.13.1 temporal-locative-conditional (SbP_{te loc})
- 4.13.2 relative (SbP_{rel})
- 4.13.3 manner (SbP_{man})
- 4.13.4 simile (SbP_{sim})
- 4.13.5 hypothetical (SbP_{hyp})
- 4.13.6 concessive (SbP_{con})
- 4.13.7 cause (SbP_{cau})

Most of the subordinating phrases in Dii are discontinuous. There may be an ‘initial’ position containing an element that introduces the clause, a head position immediately preceding the PN-ML subject pronoun position, and a ‘terminal’ element that is close to the end of the clause (two clause types may have two ‘terminal’ positions). There may actually be as many as five different elements that signal subordination, spread out from the beginning to the end of the clause, and the subject pronoun is either from the mí, the àñ, or the hypothetical series, predictable for each subordinate type.

The ‘terminal’ elements are a type of demonstrative ‘binder’ noted by Kay Williamson (in Bendor-Samuel 1989:34) as a widely spread characteristic of Niger-Congo languages for closing noun phrases or relative clauses. In Dii, ‘binders’ of this sort are found in several types of subordinate clause, but not in noun phrases, and are not limited to morphemes with strictly demonstrative meaning. Other frequent ‘binders’ in these phrases are recall morphemes or ná ‘like that’, of which ‘demonstrative’ is only one element of their meanings. See below for each phrase.

4.13.1 Temporal-locative-conditional subordinating phrases (SbP_{te loc}). This phrase has the following characteristics:

- 1) It may be introduced by a temporal root, e.g. sèy ‘time (Ful)’, piɔ ‘after’..., a locative root, e.g. ya ‘place’, or a conditional root tò/tòw ‘if (Ful)’; note two of these elements have been borrowed from Fulfulde.
- 2a) The head position itself is optional, but two subordinating elements may occur: ká and/or ka (in that order).
- 2b) Ká ‘far past’ is in principle NOT a subordinator but seems to assume subordinating functions here; when ká occurs alone, it sometimes contracts with the subject pronoun as in the far right columns in Table 3.3b, repeated below as Table 4.1.

- 2c) When the subordinator ka occurs, it may contract with the following subject pronoun as in Table 4.1 below.
- 3) Either a demonstrative (especially máa or tée), a recall morpheme, or the adverb ná ‘like that’ or ‘so’ may occur in the phrase’s ‘terminal’ position. The phrase is thus composed of three optional elements, but one of them must occur; as indicated by the signs: $+(\pm \dots \pm \dots \pm \dots)$.
- 4) The demonstrative just above may be followed by na, naa, no, or ni, any of which seem to increase focus on the subordinate clause involved; in which case tée becomes té, and máa becomes má before the focus item: té na, etc.
- 5) The SbP_{teloc} occurs only in TeLoC subordinate clauses (7.2.1).
- 6) The subject pronoun occurring in Sb TeLoC clauses is of the àñ series; see the columns labelled àñ_{sbsubj} and àñ_{sbemph} in Table 4.1 just below.

person, number	unmarked	independent			<u>ká</u> far	<u>ka</u> sb	<u>ka</u> sb
	<u>àñ_{subj}</u>	<u>àñ_{sbsubj}</u>	subject <u>àñ_{emph}</u>	subject <u>àñ_{sbemph}</u>	past + <u>àñ_{subj}</u>	+ <u>mí_{subj}</u> or <u>àñ_{sbsubj}</u>	+ <u>ì_{subj}</u>
1 s	<u>àñ</u>	<u>àñ</u>	<u>àñno/a mí</u>	<u>àñno</u>	<u>kán</u>	<u>kán</u>	<u>kán</u>
1 + 2 d	<u>ba</u>	<u>àa</u>	<u>à baà</u>	<u>à baà</u>	<u>káa</u>	<u>kaa</u>	<u>kaa</u>
2 s	<u>àñ¹</u>	<u>àñ</u>	<u>à móo</u>	<u>àñmo</u>	<u>kám</u>	<u>kám</u>	<u>kii</u>
3 s	<u>à</u>	<u>à</u>	<u>à wu</u>	<u>à wu</u>	<u>ká</u>	<u>ka²</u>	<u>kii</u>
1 + 1 ple	<u>òo</u>	<u>òo</u>	<u>à vóo</u>	<u>à vóo</u>	<u>kóo</u>	<u>kóo</u>	<u>kóo</u>
1 + 2 pli	<u>ba...ví</u>	<u>àa...ví</u>	<u>à baà...ví</u>	<u>à baà...ví</u>	<u>káa...ví</u>	<u>kaa...ví</u>	<u>kaa...ví</u>
2 pl	<u>ì¹</u>	<u>ì</u>	<u>à víi</u>	<u>à víi</u>	<u>kíi</u>	<u>kíi</u>	<u>kii</u>
3 pl	<u>ùu</u>	<u>ùu</u>	<u>à vuù</u>	<u>à vuù</u>	<u>kúu</u>	<u>kuu</u>	<u>kii</u>

Table 4.1: àñ series pronouns, and contractions with ká and ka

Notes on Table 4.1:

1. These pronouns are optional in the 2 s and 2 pl when the context is clear, so contrary to almost all other Dii pronouns, these 2 forms are not strictly obligatory.
2. Three contractions occur between bà, ka and the 3 s future forms:
bà wún = bàn
ka wún = kan
ka ìi = kii

Tagmemic formula:

$SbP_{teloc} =$
 $+(\pm \text{Init:te/lo/tòw} \dots \pm \text{H:}(\pm \text{ká} \pm \text{ka}) \dots \pm \text{Ter:dem/rec/ná'})$

Read as explained above.

Examples (overt subject pronoun forms are in parentheses):

- (sbp1) sèy... ka... té (4-9G)
time sb-he dem (when (he)...)

(sbp2) pig... k(uu)... máa (2-64b)
after sb-they dem (after (they)...)

(sbp3) (à)... té naa (3-111)
he dem foc (when (he)...)

(sbp4) ya... ka... pèè (4-5&6)
place sb-he rec (where (he)...)

(sbp5) tòw ká (àh)... té (Luke 19:8)
if far-past I... dem (if (I) have...)

4.13.2 Relative subordinating phrases (SbP_{rel}). This phrase has the following characteristics:

1a) The head position can be filled by one or two of the following three subordinators, or by none:

ká ‘far past’ which may be followed by bà,
ká ‘far past’ may be followed by ka, although
ka usually occurs alone;
bà may precede ka, and
rarely bà may occur alone.

It should be noted that ká is usually NOT a subordinator, since it occurs also in main clauses, but in several subordinate clauses it does seem to assume some subordinating functions.

1b) When ká ‘far past’ immediately precedes the subject pronoun, it almost always takes a mí series form; when this pronoun is not elided with ká (e.g.: ká vù...), it seems the speaker puts more emphasis on the pronoun, but it may elide: káú..., which seems to indicate no particular emphasis on the subject pronoun.

1c) In the combinations ká + ka, or ka alone immediately preceding the subject pronoun, the àh series form may elide with ka, e.g.: ká kuu...

1d) When bà immediately precedes the subject pronoun, it usually takes a future or non-future mí form.

1e) Résumé for which subordinator occurs with which subject pronoun:

ká + mí

ka + àh

bà + mí_{fut} or mí_{nonfut}

Contractions in the first two cases are as in Table 4.1 above.

2) If none of the 3 subordinators above occurs, the subject pronoun is from the àh series (although a couple cases of the mí_{nonfut} pronoun have been found to occur without a subordinator...).

- 3) The optional ‘terminal’ position of the phrase contains a demonstrative, a recall morpheme, or ná ‘like that’.
- 4) The demonstrative just above may be followed by na, naa, no, or ni, which seems to increase focus on the subordinate clause involved; in which case tée becomes té, and máa becomes má before the focus item: té na, etc.
- 5) This phrase occurs in relative subordinate clauses (Sb Rel), see 7.2.2.

Tagmemic formula:

SbP_{rel} = ± H:(ká ± bà/ka, or bà + ka, or bà)... ± Ter:dem/rec/ná’

Read as explained above, also with co-occurrence limitations concerning which pronoun occurs with which subordinator.

Examples (with overt subject pronoun forms in parentheses):

- (sbp6) ká (mí)... pèè (Mark 6:16)
far-past I rec (which (I)...)
- (sbp7) ká k(ɛɛ)... máa (Luke 23:53)
far-past sb-they dem (which (they)...)
- (sbp8) bà k(óó)... (3-55)
sb sb-we-excl (that (we)...)
- (sbp9) k(íí) ... yè (3-54I)
sb-you dem (which (you)...)
- (sbp10) ka... ná’ (3-134)
sb-he like-that (which (he)...)
- (sbp11) bà... pèè (3-135)
sb-he rec (who ...)
- (sbp12) (vɛ̀)... pèè (3-121)
they rec (that (they)...)
- (sbp13) (à)... máa (4-9N)
he dem (who...)

4.13.3 Manner subordinating phrases (SbP_{man}). This phrase has the following characteristics:

- 1) Its initial position contains a manner morpheme or expression (kó née/kó née pɛ̀n/nee/dɛ̀n née ‘do how/ do how first/ how/ begin how’); since

kó means ‘do’, and dəŋ means ‘begin’, this construction might also in some cases be analysed as consisting of two clauses, the first consisting of ‘...do how...’ or ‘...begin how...’, and the second exhibiting characteristics 2 and 4 in this list.

- 2) Its head position may be filled by the subordinator ka, in which case the PM is usually contracted with ka as in Table 3.3b, column 6; the subject pronoun is from the mí series.
- 3) It occurs only in the subordinate manner clause (Sb Man), see 7.2.9.
- 4) The sentence (not the Sb Man clause itself) often ends in what appears to be the interrogative morpheme /á/, but the meaning of the sentence is not interrogative. I assign this to a projected ‘terminal’ position despite its distance in speech from the manner morpheme or expression that seems to trigger it.

Tagmemic formula:

SbP_{man} = +Init:man ... ±H:ka ... ±Ter:Q

Read as explained above.

Due to the complex nature of the possible subordinating signals, see section 7.2.9 for sentences illustrating manner subordinate clauses.

4.13.4 Simile subordinating phrases (SbP_{sim}). This phrase, translated as ‘like’ or ‘as’, occurs in subordinate comparison clauses (Sb Comp, see 7.2.10), and is illustrated by two similar constructions which have the following characteristics:

Construction 1:

- 1) Its initial position usually contains kó í.
- 2a) Its head position usually contains the subordinator ka;
- 2b) however, sometimes bà is found instead of ka, especially when the verb in the subordinate clause is a verb of saying (ò, mòò, etc.); but bà itself may be suppressed if the subordinate subject pronoun is from the mí_{nonfut} set;
- 2c) if ká ‘far past’ occurs before the subject pronoun, it seems to have some subordinating character as well, since ka does not often occur in addition to ká;
- 2d) more rarely yet, a fourth possibility is found: bà ka see Mark 15:8.
- 2e) This set of subordinators parallels in several ways those structures described above for relative subordinating phrases.
- 3) Its terminal position contains wɔgɔ.
- 4) A demonstrative or the recall morpheme may precede wɔgɔ, forming a second ‘terminal’ position.
- 5) The subject pronoun series depends on which subordinator occurs immediately preceding the pronoun:

ká or bà: mí series

ka: àh series

6) Before the interrogative morpheme /a/, wɔɔɔ is replaced by nénná ‘how’, or may become wɔga(a) by contactation.

Construction 2:

- 1) If the verb in the main clause is mbàà ‘sit/be’, then the initial subordinate position may contain baà ‘like’.
- 2) The subject pronoun seems to be of the mí_{nonfut} set in the absence of the subordinator bà, but it is any mí pronoun if bà is present.
- 3) A demonstrative may precede wɔɔɔ -- see zù in Rev. 13:3.
- 4) The terminal position has either wɔɔɔ or nothing.

Tagmemic formulas:

SbP_{sim} type 1 =

+ Init:kó í... + H:ká/ka/bà/bà ka... ± Ter:dem/rec + Ter:wɔɔɔ

or type 2: + Init:baà ... ± H:bà ± Ter:dem ± Ter:wɔɔɔ

Read as explained above.

Examples of construction 1 (overt subject pronouns are put in parentheses):

(sbp14) kó í ká (vɔ)... máa wɔɔɔ (Mat. 26:24)
like far past they dem like (like (they)...)

(sbp15) kó í ka... wɔɔɔ (2-64b)
like sb-he like (like (he)...)

(sbp16) kó í k(ɔɔ)... wɔɔɔ (Mat. 17:12)
like sb-they like (like (they)...)

(sbp17) kó í bà... pèè wɔɔɔ (Mat. 21:30)
ike sb-he rec like (like (he)...)

(sbp18) kó í (vɔh)... pèè wɔɔɔ (Mat. 28:15)
like they rec like (like (they)...)

Examples of construction 2 (overt subject pronouns are again in parentheses):

(sbp19) baà (vɔh)... (Mat. 28:4)
like they (like (they)...)

(sbp20) baà (vàn)... zù wɔgɔ (Rev. 13:3)
like they dem like (like (they)...)

4.13.5 Hypothetical subordinating phrases (SbP_{hyp}). This phrase has the following characteristics:

- 1) An optional initial conditional root tò or tòw ‘if’, borrowed from Fulfulde.
- 2) An optional ká ‘far past’ may occur before the hypothetical marker, but it’s unclear whether this ká has any subordinating function like it seems to have in the subordinating phrases described above.
- 3) An obligatory hypothetical marker kà in the head position (note this marker also occurs in the main clause, so it’s not a subordinator as such).
- 4) A final obligatory demonstrative tée in terminal position.
- 5) This phrase occurs in hypothetical subordinate clauses (see 7.2.5).

Tagmemic formula:

$SbP_{hyp} = \pm \text{Init:}\underline{t\grave{o}}/\underline{t\grave{o}w} \dots + H: \pm \underline{k\acute{a}} + \underline{k\grave{a}} \dots + \text{Ter:}\underline{t\acute{e}e}$

Read as explained above.

Example:

(sbp21) tòw kà... tée (2-77h)
if hyp dem (if...)

(sbp22) kàn... tée (3-130)
hyp-he dem (if (he)...)

(sbp23) ká kà (vón)... tée (Mat. 23:30)
far-past hyp we-excl dem (if (we)...)

4.13.6 Concessive subordinating phrases (SbP_{con}). This phrase type has the following characteristics:

- 1) Its optional initial position is filled by: kóó ‘even if’.
- 2) It may have the subordinator ka in head position, and this may be preceded by ká ‘far past’, which may or may not also have a subordinating function.
- 3) The pronoun subject is from the àn series.
- 4) Its terminal position is filled by: sì ‘even if’, which may be preceded by a demonstrative in a second ‘terminal’ position.
- 5) It occurs in subordinate concessive clauses in sentences (see 7.2.7).

Tagmemic formula:

$SbP_{con} = \pm \text{Init:}\underline{k\acute{o}o} \dots \pm H: \pm \underline{k\acute{a}} \pm \underline{k\grave{a}} \dots \pm \text{Ter:dem} + \text{Ter:}\underline{s\grave{i}}$

Read as explained above.

Examples:

(sbp24) ka... yè sɪ̀' (4-9N)
sb-he dem even (even if (he)...)

(sbp25) kóó... sɪ̀' (3-139)
even even (even if...)

4.13.7 Cause subordinating phrases (SbP_{cau}). This type of phrase has two forms, both occurring in sentence-initial and sentence-final position. See also 7.2.8. 'Type 1' is virtually identical with the temporal-locative-conditional, but lacks an 'initial' position.

'Type 2' has the following characteristics:

- 1) Its initial position is filled by moo 'because' or moo wòdò nɔ 'for it cm' = 'because'.
- 2) The head position may be filled by either ká 'far past' or the subordinator ka.
- 3) The pronoun subject is taken from the mí series.
- 4) There may be two terminal positions, the first filled by a demonstrative or a recall morpheme, the second filled by péń 'first' or the insistent form of the /ú/ clause marker.

Tagmemic formula:

Type 1 = ±H:ká ±ka ±Ter:dem/rec/ná'

Type 2 = ±Init:moo/moo wòdò nɔ ... ±H:ká/ka ...
±Ter:dem/rec ±Ter:péń/insistent /ú/

Read as explained above.

Example:

(sbp26) moo ... k(íí) ... yè (3-54A)
because sb-you dem (because (you)...)

(sbp27) moo ka... (3-116)
because sb-he (because (he)...)

(sbp28) moo wòdò nɔ... ka... (4-9H)
for it F-I? sb-he (because (he)...)

(sbp29) moo... ká... má (nɔ) (4-40E)
 because far-past-he dem (F-I) (because (he)...))

The following is a résumé of SbP signals:

name of SbP	init. position	Head	(Pr)	ter. position
teloc	+ (± te/lo/tòw	± ká ± ka	(à̀n)	± dem/rec/ná')
relative		± [+ ká ± ká... + bà ± ká + ka ± bà + ka + bà (none)	[(mí) (mí _{fut/nonfut}) (à̀n) (à̀n) (mí _{fut/nonfut}) (à̀n)	± dem/rec/ná'
manner	+ man ¹	± ka	(mí)	± Q
type 1 simile	+ kó í	[+ ká/bà ± bà + ka (none)	[(mí) (à̀n) (mí _{fut/nonfut})	± dem/rec + wɔgɔ
type 2 simile	+ baà	[(none) ± bà	[(mí _{nonfut}) (mí)	± dem ± wɔgɔ
hypothetical	± tò/tòw	± ká + kà	(hyp)	+ téé
concessive	± kóó	± ká ± ka	(à̀n)	± dem + sɪ'
type 1 cause:		± ká ± ka	(à̀n)	± dem/rec/ná'
type 2 cause:		± moo/moo wòd nɔ... ± ká/ka	(mí)	± dem/rec ± pɛ́n/insistent /ú/

¹man = kó née pɛ́n/née/kó née/dɔ̀n née

CHAPTER 5

FACTATIVE CLAUSES, IMPERFECTIVE AND PERFECTIVE

5.0 DII CLAUSE DEFINITIONS AND DISTINCTIONS

This introductory section treats the following topics:

- 5.0.0 clause structure parameters
- 5.0.1 definition of a clause
- 5.0.2 optional and obligatory positions
- 5.0.3 nuclear and peripheral positions
- 5.0.4 position and filler
- 5.0.5 clarification of position boundaries

5.0.0 Clause structure parameters. The following parameters are here used to describe Dii clause structures and their combinations:

- 1--transitivity,
- 2--mood/aspect,
- 3--independence, and (often also)
- 4--a set of semantic roles such as agent, patient, etc.

1. Transitivity. This term is applied to the cohesive set of relationships that hold between a given set of verbs and the kinds of subjects, objects, and/or other complements that may occur with them (see Pike and Pike 1980:35-42). Looking at clauses from this perspective, the following terms are some of those relevant in describing Dii structures. The full set of transitivity options is presented in section 5.1.2, with Dii examples.

- | | | |
|-----|---------------|--------------------------|
| (1) | intransitive: | I talk. |
| | transitive: | I see the boy. |
| | ditransitive: | I told the girl a story. |
| | locative: | I am-in the house. |
| | reciprocal: | They beat-each-other. |
| | descriptive: | The flour sits/is dry. |

2. Mood/aspect. There are six moods and aspects in Dii (see Comrie 1976, Grimes 1975:232-7):

- | | |
|----------|--|
| moods: | factative, imperative, hypothetical, verbal noun |
| aspects: | perfective, imperfective. |

Not all the moods/aspects occur together, but each will be explained in the chapter or subdivision which deals with it. The following sentences can nevertheless serve as a temporary illustration of the phenomena.

- (2) factative-imperfective: I go to the market.
 factative-perfective: I have gone to the market.
 imperative(-imperfective): Go to the market! (or: I must go...)
 hypothetical-imperfective: If I went to the market, ...
 hypothetical-perfective: I might have gone to the market.
 verbal noun (infinitive): to go to the market.

The term ‘factative’ is from Welmers (1973:346-7), as is ‘hypothetical’ (1973:361ff). Welmers prefers ‘hortative’ for what I call ‘imperative’ (1973:367-9). The terms ‘perfective’ and ‘imperfective’ are from Comrie 1976 and are widely used in the literature. The factatives (perfective and imperfective) are more fully defined and illustrated in chapter 5, the other moods/aspects in chapter 7.

3. Independence. This parameter is used to describe whether the clause may stand alone as a sentence, or whether it’s in a subordinate, coordinate, or serial relationship to another clause or other clauses. Section 3.6.1 makes it clear that the subject pronoun found in a given Dii clause depends to a high degree on the independence (or dependence) of the clause in relation to other clauses in the context. Several types of sentence exhibit intricate inter-clausal relationships that will be treated in chapter 8. In addition to the just mentioned possibilities, here is an overview of the independence and interdependence factors as they intersect with transitivity and mood/aspect:

- (3a) independent clauses
 factative (imperfective, perfective): chapter 5
 imperative, hypothetical: see (2) and chapter 7
- (3b) dependent/subordinate clauses (chapter 7)
 verbal noun to go to town,
 temporal-locative-conditional when/where/if he goes to town,
 indirect quotation that I went to town,
 indirect order that he must go to town,
 purpose in order to go to town,
 cause because he went to town.
 (see chapter 7 for the full list of subordinate clauses)
- (3c) serial-verb clauses (chapter 6)
 I go take broom bring come put in kitchen.

4. Roles. The types of roles associated with grammatical subjects, objects, and other complements has been much investigated in

languages (see Pike and Pike 1980:12,15,35,42,48-57, Grimes 1975:112-38, Longacre 1996:153-66). It has now become standard practice to refer to such roles as the following: Agent, Experiencer, Patient, Range, Measure, Instrument, Locative, Source, Goal, etc.

The grammatical subject might be the agent, the experiencer, the patient, or.... I won't be using these roles as thoroughly or as consistently as many writers do, but they're useful and will appear from time to time in the discussions of clauses in chapters 5 through 7.

5.0.1 Definition of a clause. A clause in the Dii language is a unit of the grammatical hierarchy ranking above phrase units and below serial clauses and sentence units. Dii clauses are of two types, verbal and non-verbal, so the verb is not seen as the essential core for clauses. The real core for the Dii clause is the subject pronoun, which occurs in all clauses, verbal and non-verbal; any subject noun occurs in addition to (not in place of) the subject pronoun.

Verbal clauses contain:

1. a person-number (PN) position,
2. a mood-logophoricity (ML) position,
3. a tense (T) position,
4. one and only one predicate position, and
5. a clause marker in certain cases.

NB: This is not meant to deny embedding or nesting of clauses and/or sentences into the clause level. Also, 'predicate' in my terminology refers only to the verb or verb phrase, and doesn't therefore include objects, temporal or location constructions, etc.

The first three positions just mentioned are fused into what is called the PN-ML-T composite position, where the subject 'pronoun' (3.6.1) occurs. There's always an overt pronoun in the PN-ML-T composite position except in the following two cases. 1) In the third singular of non-emphatic factative (perfective or imperfective) clauses, a zero morpheme 'occurs.' A zero morpheme in this work is a significant lack of a form where we would expect one. See the 3 s zero morpheme in 3.6.3. The zero is signaled by 'Ø' in the Dii texts.

2) In the second person singular and plural in imperative clauses, the subject pronoun is optional in that it may be omitted if the meaning is clear in context.

The predicate position always contains a verb or verb phrase except in the transitive introducer clause where occasionally \hat{q} 'he says' is implicit before a direct or indirect quotation.

The following positions are obligatory in certain clause types, but they're not essential to the clause definition: indirect object (I), direct objects (O_{1,2,3,4,5}), complements (C_{1,2,3,4}), complement-as-goal (CG), or locative (Lo).

The sole non-verbal clause is labelled equative and contains the usual PN-ML-T composite position (as above), followed obligatorily by a complement position (filled by a noun phrase, demonstrative, or a cardinal numeral).

Most clauses, verbal or non-verbal, contain a clause marker position to be discussed in detail in 5.1.1. Certain forms (perfective, negative) have obligatory cm forms. Imperfective affirmative clauses, however, don't have obligatory clause markers, and this will require a long explanation.

From the point of view of distribution, clauses generally occur in positions on the serial clause or the sentence levels.

5.0.2 Optional and obligatory positions. Certain positions (slots) in each clause type must occur, while others are optional. Two lists could, therefore, be provided for each clause type, one of only the obligatory positions, another of the largest possible number of positions that may occur in each clause type.

While 'optional' and 'obligatory' are useful distinctions, a still more useful distinction is that between nuclear and peripheral positions. Obligatory positions will be shown with a + before them, optional positions with a ±.

5.0.3 Nuclear and peripheral positions. In general, certain positions are seen to be 'more important' or 'essential' than others in a clause type. Obviously those that are obligatory are of this category, but some positions are optional while simultaneously being 'diagnostic' of a particular clause type. For example, the object 1 position in the Dii transitive clause is optional, but it's certainly 'essential' to speak of a direct object in transitive clauses.

These 'more important' or 'essential' positions are termed nuclear (and together constitute the nucleus of that type), and the 'less important' and 'non-essential' positions are called peripheral.

5.0.4. Position and filler. It's essential to speak of the position (i.e. the function and position, or slot) of a unit in a clause in relation to the filler or element which occurs in that position. A transitive predicate

position is said to contain a transitive verb phrase. This relationship may be symbolized by inserting a colon between the position and filler symbols, for example: +P_{tr}:VP_{tr}.

Thus the symbol $\pm O_1$:NP/pr would refer to an optional Object 1 position which contains either a noun phrase or a personal pronoun.

5.0.5 Clarification of position boundaries. Position boundaries are clarified in examples by a solid line over the Dii words occurring in each distinct position. Where suffixes could cause difficulty, a hyphen separates the elements involved in order to facilitate the use of these solid lines. These hyphens, however, aren't written in Dii literature meant for popular audiences.

5.1 NUCLEI OF INDEPENDENT FACTATIVE IMPERFECTIVE CLAUSES

The nuclei of the independent factative imperfective clauses will be discussed under the following headings:

5.1.0 definitions of factative, perfective, imperfective

5.1.1 clause markers

5.1.2 discussions of the nuclei of specific factative imperfective clauses

5.1.3 summary table of the nuclei of factative imperfective clauses

5.1.0. Definitions of factative, perfective, imperfective. The term ‘factative’ is defined by W. Welmers (1973:346-7); it ‘expresses the most obvious fact about the verb in question, which... is that the action is observed or took place, [or]... that the situation obtains at present.’ Factatives in Dii usually refer to an action or a state as such, are atemporal (i.e., unless a suffix on the subject pronoun forces a future or non-future meaning), aren’t imperative or hypothetical, etc. They refer thus to ‘the act as act’ or to ‘the state as state.’ Factative will be abbreviated FACT in this work.

‘Imperfective’ (IMPF) contrasts with ‘perfective’ (PERF), and both are defined in detail by Comrie (1976). In the Dii language, ‘perfective’ indicates the view of an act or state as a single whole, and as complete (even completed), since a future action put in the perfective asserts that the speaker is fully sure of that action’s future realization. Thus, yógó míń lúú sú’ú ‘tomorrow I-will leave FACT-PERF’ means: ‘I’ve decided to leave tomorrow.’

‘Imperfective’ in the Dii language looks at some internal aspect of a situation’s structure; it’s atemporal unless a suffix on the subject pronoun forces a future or non-future meaning; it’s neutral in terms of an act or a state’s completedness; auxiliary verbs are used to show that an act or state is habitual, that it continues through time (durative), that it’s in a state of process (progressive), that it’s being repeated (iterative), etc. The main thrust of the imperfective in the Dii language is its aspectual ‘neutrality,’ the ‘uncompletedness’ of the act or state being described.

5.1.1 Clause markers. Dii clause markers are so important that this introductory section is devoted to them before discussing the individual clauses themselves. Welmers (1973:343-415) refers to these clause markers as ‘construction markers.’ The clause marker (CM) position, when it occurs:

1. signals polarity (affirmative, negative);
2. helps to signal the mood (factative, imperative, hypothetical, verbal noun) and aspect (perfective, imperfective) of the clause;

3. helps to signal the end of the clause;
4. helps to signal that a discourse (a speech, a long quotation, a story) is not finished when certain affirmative forms are suppressed in independent clauses; the affirmative forms are also absent in many subordinate clauses (see the introductory paragraphs in 7.2); and
5. can signal hesitation and exclamation or strong affirmation, and sometimes focus.

For factative imperfective clauses, there are two relevant cm morphemes: /ú/ ‘affirmative’ and /né/ ‘negative.’ The form /né/ is obligatory and occurs in each negative clause. The /ú/ morpheme is not obligatory, and most of the rest of the section 5.1.1 will be devoted to a description of the many complications the analyst encounters.

The cm is usually the last morpheme in a clause, but certain emphatic morphemes may follow it in the negative, for example:

(5)	$\overbrace{\text{PM P}_i \quad \text{Te} \quad \text{CM}}^{\text{c}}$	Emph
	$\text{---} \quad \text{---} \quad \text{---} \quad \text{---}$	
	Mí nən ɓàà né kàd. (4-110)	
	I sleep-NEG today F-I-NEG at-all	
	(I didn't sleep at all last night.)	

The symbol $\overbrace{\quad\quad\quad}^{\text{c}}$ attached to the predicate and CM positions above indicates there is negative agreement or ‘concord’ between the verb and the cm. The cm is the main negative signal, and the suffix on the verb ‘agrees’ with the cm; when a verb of non-Dii origin is used (i.e., bínda ‘he writes’) the negative suffix on the verb is not present, and the cm is the only signal for negativity in that clause.

In anticipation of a detailed discussion of clause elements in Table 5.2 and section 5.2, a cursory listing of certain clause positions will give the reader a foundation upon which to build the rest of the structure. The following order of elements is strongly respected in the ‘neutral’ verbal clause. By ‘neutral’ I mean to exclude a) those sentences where one element has been put in focus (and therefore doesn’t occur in its normal position in the sentence); and b) those sentences where one element is strongly stressed or receives strong affirmation.

(6) ±Te ±S +PM +P ±I ±O ±Lo ±IA ±Man ±Sim CM

Te	temporal	S	nominal subject
P	verbal predicate	I, O	indirect, direct objects
Lo	locative	IA	instrument, accompaniment
Man	manner	Sim	similitude (comparison)

PM person-number-mood-tense (= pronoun subject)

Only one non-verbal clause exists, and only in the affirmative; the neutral order of elements for this clause is as follows. In the negative this clause requires a verb in an unusual position, as indicated here.

(7) $\pm Te \pm S + PM + C \dots \pm P_{neg} CM$

C complement

P_{neg} the verb in the negative

Contextually conditioned variants of the cm forms: each of the morphemes /ú/ and /né/ is realized by more than one allomorph (see the definition in 3.1). In neutral clauses, the precise allomorph to be used in a given sentence varies according to the grammatical category of the word immediately preceding the cm. Table 5.1 gives the relevant context morphemes and the clause marker allomorph(s) used following each. There are nine different conditioned variants for /ú/ in neutral clauses, as listed in column 1, and only 2 for /né/ in column 2. The cm used with affirmative and negative locative verbs is special, using the same form in both contexts, as listed at the bottom of the table.

It isn't possible to illustrate all the possibilities, but the following examples are given in the order of the contextual forms as listed in Table 5.1.

(8) PM P_{tr} CM
--- --- --
Mí híí ú. (3-126)
I want F-I (I want to, or: I agree.)

(9) PM P_{tr} O₁ CM

Mín yùgu-m- ó. (3-142)
I-FUT hide-you-F-I (I will hide you.)

(10) PM P_{desid} O₃ CM^c
-- ----
Ø sén làlǎf bab- bí né. (3-89)
She likes-NEG going field-to F-I-NEG
(She doesn't like going to the field (to work).)

- (11) PM P_{tr} O₁ CM
 --- --- ----- ---
 Ø kó kɛbb- ì. (3-134)
 She does trick-F-I (She's inventive.)
- (12) S PM P_{tr} O₁ IA CM
 ----- -- ---- - - - - -
 Nà'á Ø kán nag kan à'á wɛ. (4-70A)
 Mother she holds hand with grandmother F-I
 (Mother holds grandmother's hand.)
- (13) S PM P_{tr} O₁ IA CM
 ----- -- ---- - - - - -
 Nà'á Ø kán nag kan Ìnà wɛ. (4-70A)
 Mother she holds hand with Ina F-I
 (Mother holds Ina's hand.)
- (14) PM P_{tr} O₁ CM
 --- --- ----- ---
 Mí hò waa wɛ yɛ.
 I see child pl F-I (I see the children.)
- (15) PM P_{desid} O₃
 --- --- -----
 Vɛ híí bi vì wɛ yɛ. (4-174)
 They want they-LOG ask him F-I
 (It's him they want to ask a question of.)
- (16) PM P_{desid} O₃
 --- --- -----
 Vɛ híí bi vì mí- w. (4-174)
 They want they-LOG ask me-F-I
 (It's I they want to ask a question of.)
- (17) S PM P_{saytr} O₄

 Bà'á_i Ø ò bà vúń_j híí bi_j vì bi_i- w. (4-178)
 Papa he says that they want they-LOG ask him-LOG-F-I
 (Papa says that it's him himself they want to ask a question of.)
- (18) PM P_{desid} O₃
 --- --- -----
 Vɛ híí bi vì mọ yọ. (4-174)
 They want they-LOG ask you F-I
 (It's you they want to ask a question of.)

- (19) PM C₂ CM
 -- -----
 Ø waa zóó mí nu. (3-24)
 He child heart my F-I (He's the child I love.)
- (20) PM P_{tr} O₁
 --- ---- -----
 Mí lùù dágá dágá. (3-18)
 I remove one one (I remove one (from) each (pile).)
- (21) S PM P_{tr} O₁ Man
 ----- -- ---- -----
 Zóó Ø nàm mí wàànnî. (3-86)
 Heart it shakes me much (I'm very troubled.)
- (22) PM P_{tr} Lo
 ----- -----
 Món zùù bùù wu-lí. (4-4)
 You-FUT descend sit-on (eggs) there
 (You'll go down sit on (your eggs) there.)
- (23) S PM P_{tr} O₁ Ideo
 ----- -- ---- -----
 Bàbààm Ø úú gà' tæəd. (4-9G)
 Rabbit he blows horn toot.
- (24) S PM P_{tr} O₁ lim
 ----- -- ---- -----
 Tayii waa vu hò- gò 'wààpád. (3-54J)
 God child they see-him all (All the gods see him.)
- (25) S PM P_{lo} CM
 ----- -- ----
 Bà'á Ø di- lí.
 Papa he is-there-F-I (Papa is here.)
- (26) S PM P_{lo} CM
 ----- -- ----
 Moo Ø pé- lí. (3-12c)
 Word it is-NEG- F-I-NEG
 (There's no reason for a quarrel.)

preceding word:	allomorph of FACT-IMPF /ú/	allomorph of /né/ FACT-IMPF-NEG
verb	ú	
personal pronouns <u>mí</u> _{obj} , <u>bi</u> _{obj} , <u>mí</u> _{emph} , <u>bi</u> _{emph}		

noun	-ì	né
qualifying adjectives 1, 2		
verbal noun (infinitive)		

final emphatic proper name	wu/-u	
kinship term		

plural marker <u>vu</u>	yu	
final emphatic personal pronouns:		
<u>wu</u> , <u>ba</u> , <u>vó</u> , <u>vu</u>	yu	
<u>mí</u> , <u>ví</u> , <u>ba ví</u> , logophoric <u>bi</u>	-w	
<u>mó</u>	yɔ	

indefinite adjective	nɔ	
possessive (<u>mí</u> series)		
logophoric possessive (<u>bi</u> series)		
demonstrative		
focus morpheme		
recall morpheme		
<u>àgà</u> ‘-self’; <u>ɓ̀d̀d̀</u> ‘today’;		

cardinal numeral	(none)	
ordinal numeral		
adverb, - <u>ná</u> adverb		
temporal, locative, telo suffix -lí		
limiter (<u>wààpád</u> ‘all,’ <u>waaná</u> ‘a little’)		
<u>kó</u> í... <u>wɔgɔ</u> ‘as’; <u>ám</u> ‘also’		
ideophone		

<u>dí</u> ‘he is-there’	-lí	
<u>pé</u> ‘he isn’t-there/isn’t’		-lí

Table 5.1: Contexts and allomorphs of clause markers in factative imperfective clauses

NB: in specific contexts, the following variants occur:

ú may be realized as: -ú, -ú, ú, ú, -ú, -ó, ú, ó;

-ì may be realized as: -ì, -ì, -è, -è, -ì, -ì, -è;

né may be realized as: ní, né;
nɔ may be realized as: nu, nɔ.

Assimilations automatic in context: the height of the cm vowel tends to agree with the height of the immediately preceding vowel (see Table 1.7 and the listing at the bottom of Table 5.1).

When the allomorph -ɪ is suffixed to a morpheme ending in a consonant, that consonant is doubled if it in turn is preceded by a short vowel: kɛb + ɪ → kɛbbɪ (ex. 11).

When the allomorph ɛ is suffixed to a morpheme ending in a consonant, that consonant is doubled if it in turn is preceded by a short vowel: hɪ' + ɛ → hɪ''ɛ, in this case also with assimilation to the nasalization of ɪ. Following a morpheme which ends in a vowel, ɛ is realized by ɛ, ɛ̃, ɛ̄, ɛ̅, with an unwritten initial glottal stop, and is therefore a separate word in popular literature: hɪí + ɛ → hɪí ɛ (ex. 8).

The wɛ form following final proper names and kinship terms occurs if the name ends in a vowel: à'á + wɛ → à'á wɛ (ex. 12). If the proper name ends in a consonant, however, the final consonant is doubled and the vowel used is ɛ̄: Abél + wɛ → Abéllɛ̄.

To suffix or not to suffix the cm: clearly the actual form the cm takes in a given context depends on several characteristics of the immediately preceding morpheme. Such a high degree of assimilation to preceding elements in the speech chain might cause the analyst to attempt to write all cm's as suffixes. Phonologically this is a tempting solution, and in certain cases, the cm is suffixed to the preceding morpheme in the accepted Dii orthography, as is seen in the numerous examples cited above.

Grammatically, however, the cm functions in a separate position on the clause level, and this fact can best be stressed by writing the cm as a separate orthographic unit in the clause, i.e., as a separate 'word.' Especially when the cm begins with a consonant, this solution has been adopted.

Exclamations and the cm: exclamations utilize a clause-final exclamative morpheme a, which replaces any final vowel which would have occurred otherwise. An example follows (the ordinary locative ending would be yɛ́ɪ):

- (27) PM P_{di} I O₁ Lo CM
 --- -- -- ----- ---- -----
 V_{ti} sà- n ðàm kin yè- l- a! (3-119)
 They dig-me peanut Bambara here-F-I-EXCL
 (They've dug all my Bambara peanuts up!)

Another exclamative morpheme *-fi*, when it closes a clause, also occurs instead of ('replaces') any other final clause vowel. It's used in both affirmative and negative clauses. As with the *cm* allomorph *-i* 'affirmative,' and *né* 'negative,' the height of the hesitation morpheme vowel varies according to that of the preceding vowel (see Table 1.7). Examples follow (the ordinary endings would be tàanó and pélí):

- (28) Í yògò pé- lí! (2-31b)
 Like that is-NEG- F-I-NEG-EXCL
 (It's like that, isn't it!?)
- (29) Bá' wàhèbó' zùù tãan- ée! (2-2)
 Day ten and three-F-I-EXCL
 ((Was it) 13 days (that I worked)!?)

When to use the *cm* (and when not!): it's easiest to describe the negative /*né*/, because it's obligatory. On the other hand, the analyst is faced with a highly complex set of uses for the affirmative /*ú*/. If the analyst expects to find a *cm* after every clause-final verb, noun, possessive,... then suddenly in many cases no affirmative form occurs! Both the presence and the absence of /*ú*/ have meanings.

First, it's clear that dialogues differ greatly from monologues in /*ú*/ use. It's possible for a whole tale or story to contain not a single case of /*ú*/ (as, for ex., the tale examined in chapter 9) but in conversations, the /*ú*/ forms are frequent. To return to the beginning of section 5.1.1, we can restate the first part of item 4: the lack of /*ú*/ forms helps to signal the ongoing cohesion of a continuous text (a speech, a long quotation, or a story).

For the same reason, most sentence-initial subordinate clauses don't end in an /*ú*/ morpheme (see the introductory paragraphs of 7.2).

In the body of the folktale cited in section 9.2, no /*ú*/ forms are found. When I examined a larger sample of texts (the 10 tales listed in Table 9.1), I counted a total of 1,084 clauses, of which 821 could potentially be marked by a clause marker. Of those actually marked by a factative imperfective *cm*, 64 were negative /*né*/, and 86 were /*ú*/.

However, 70 (81%) of those 86 uses of /ú/ were in direct or indirect quotations, which reflects the monologue-dialogue differences just mentioned above. The remaining 16 uses of /ú/ will now be examined.

In summary fashion, a continuous text is not expected to display many (any?) affirmative /ú/ cm's. When they do occur, however, they seem to do so in the following types of clauses:

a) in direct and indirect quotations (i.e. dialogue);

b) at the end of titles (and subtitles)--see e.g., the title of the tale in section 9.2;

c) at the end of equative clauses--see section 5.1.2, subsection c) and the following example:

(30) PM C CM
 ----- ----- ---
 Ba ví zig wòd vư yư. (Catechism, no. 66)
 We incl tribe his pl F-I
 (We're (members of) his tribe);

d) in cases where the clause is of a 'strong' or 'insistant' nature (imperative, indirect order, subordinate concessive, sentence-final subordinate purpose clause, etc.), or where the sentence-final element is a demonstrative (as in relative or temporal clauses).

A few occurrences of /ú/ seem to be linked to only one element WITHIN a clause, not to the clause as a whole. In these cases, the marker places focus and stress on that element. For example:

a) in the introductory expression: moo wòd nɔ 'that's why...';

b) as seen above in b), titles and subtitles in written form receive a cm, even though they're not whole clauses; without doubt their occurrence with titles is also linked to focus;

c) these focus forms may co-occur with a normal cm at the end of the clause, for example:

(31)	PM	P _{di}	I	O	Sb Cause	CM-FOC	CM				
	---	---	---	---	-----	---	---				
	...	Ø	kón	mí	hẹn	yẹ	moo ba'ad dũũ	mí	vư	yư	né.
	He	does-NEG	me	thing	dem	for	work	good	my	pl	/ú/
								/ú/			/né/

(He doesn't do this for me because of my good deeds!)
 (Catechism no. 56a)

		┌──────────────────────────────────┐					c
(32)	PM P _{tr}		O	Man	CM-FOC	Man	CM
	---	-----	---	-----	---	-----	---
	Ø yìm		vũ	yìmné-	è	dágá né,	ámáa...
	He creates-NEG them creating-/ú/			only F-I-NEG but...			
	(He doesn't only create them, but...) (Catechism, no.62)						

(33)	S	PM	P	I	CM-FOC	limiter	
	-----	---	---	-----	---	-----	
	Dòóká yè	Ø	òd	ba ví-	w	'wààpád.	
	Law	dem	it	speaks-to us incl /ú/		all	
	(This rule applies to <u>us</u> all.) (Catechism, no. 36b)						

These last 3 illustrations of /ú/, whether as modifiers of the whole clause or of only one clause element, show forms of the cm as they are conditioned by the contexts cited in Table 5.1.

Illustration of the focus function of the cm in dialogues is clear in questions. If a question has the form: ‘What do you see?’ (a normal dialogue question), then the answer contains the normal factative imperfective cm allomorphs as indicated in Table 5.1.

But if the question asked (or understood) is specific enough to include the object, and if that object is repeated literally in the answer (and not replaced by a pronoun), then strong focus may be signaled by a form ú or ó (instead of -ì, yũ, nò, or one of the other forms in Table 5.1). In addition to strong focus, here there is insistent affirmation that can be translated in English by ‘indeed.’ See (34a-b) and (35a), as contrasted to the example in (35b).

- | | | |
|-------|---|--|
| (34a) | Q: M3 hò ligga?
A: M3 hò liggú! | You see (the) house? (5-125)
(Yes,) I (do) see (the) house! |
| (34b) | Q: M3n z8 mamma?
A: M3n z8 mammó! | Will-I drink water?
(Yes,) you-will (indeed) drink water! |
| (35a) | Q: M3 hò waa v8 áa?
A: M3 hò waa v8 ú. | You see the children? (5-125)
(Yes,) I (do) see the children! |
| (35b) | Q: M3 hò waa v8 áa?
A: M3 hò v8 y8. | You see the children? (5-125)
(Yes,) I see them. (normal cm form) |

The same insistent affirmation is seen in the following sentence, in which the initial clause is topicalized:

- (36) I-TOP S PM P_{di} I O CM

 Nán kuu kó hẹn... máa, Tayii wún kóđ vu zóó yéé ó.
 Person sb-they do thing...TOP, God he-FUT do-to them heart
red /ú/
 (The persons who do (certain) things, God will (indeed) be angry
 with them.) (Catechism no. 12b)

The ‘strong’-natured clauses cited above under d) i.e., imperatives, indirect orders, sentence-final purpose clauses, and clauses with a sentence-final demonstrative, all seem to exhibit the ú/ó-only clause marker strategy that’s being described here. This very strong affirmation is sometimes also seen in sentence-initial conditional clauses, for example:

- (37) PM P_{tr} O CM sb
 --- ---- ----- -- ----
 Aa híí Tayii ú téé,...
 If-we love God /ú/ dem
 (If we (really do) love God,...) (Catechism, no. 14)

5.1.2 Discussions of the nuclei of specific factative imperfective clauses. All clause types have at least two characteristics unique to themselves which contrast them with all other types. These characteristics will be given below in the discussion of each clause type.

The subject pronoun of each factative imperfective clause may be either a mí_{subj}, a mí_{fut}, or a mí_{nonfut} pronoun (3.6.3), and it occurs in the PN-ML-T (person number mood logophoricity tense) position, here generally abbreviated simply PM. In the discussion of the individual clause types below, no further mention will be made of these subject pronouns.

The existence of an optional CM position in each clause type will also be assumed unless specifically mentioned to the contrary.

The subject pronoun is given a separate position PN-ML-T (or PN-ML-TE) in contrast to the noun phrase subject (S) for the following reasons. (The E in the formula PN-ML-T(E) stands for emphasis.)

1) Certain non-nominal morphemes may occur between the noun phrase and the pronoun:

ká ‘time far past,’

ka and bà (subordinators used in several types of subordinate clause),

ám ‘also,’ and

kà ‘hypothetical.’

2) The subject pronoun can accept certain tense suffixes which the plural morpheme in the noun phrase cannot (e.g., vún ‘they-FUT’). See the remark by Welmers on subject pronouns and construction markers (1973:380-1).

3) It’s possible to have the plural vɛ contiguous to a pronoun subject vɛ, both therefore in a single clause, as in the following example:

(38) Nán í tóó vɛ kan gbanàà vɛ, kan dọ̀n nàà
 Man the-one other pl and chief pl and circumcizer chief

vɛ, vɛ vé’ ’wàa ya lig- í pád. (3-54T)

pl they return finish come house-to all

(The other people, the chief, and the chief circumcizers, all return home.)

In the above example, there is a pause (potentially, at least), between the two vɛ’s.

The above arguments are sufficient to establish a separate PN-ML-T(E) position in contrast to the noun phrase subject (S) position. But contrast must still be established between the PN-ML-T(E) position and the verb, since the subject pronoun might be a prefix always attached to the verb structure in the clause, as in Fulfulde (Stennes 1967, section 171).

There are two arguments that require the postulating of a PN-ML-T(E) position separate from the verb predicate position (P): 1) As many as two auxiliary verbs may come between the subject pronoun and the verb it's linked with. 2) Even if there is no verb in a given clause (see 5.0.1), there still must be a pronoun subject, as in the following example. Therefore the subject pronoun is not uniquely attached to the verb of the clause.

(39) Vúń nónó. They-FUT 5. (There'll be five of them.)

I would like to argue, from the above evidence, that it's the pronoun subject that is the true nucleus of the Dii clause, not the verb. This is especially clear in the non-verbal clause just mentioned, and is upheld also by the fact that it's the subject pronoun that receives tense suffixes and certain aspectual modifications in the clause. Such a subject pronoun is much more central to the clause than what Grimes calls the 'reprise' of an NP subject (1975:342).

Factative imperfective clauses will be treated in the following order, according to the specific type of transitivity found in each. The simpler forms structurally are treated before the more complex. A résumé of the nuclear structures will be presented in Table 5.2.

SIMPLE CLAUSES--no verbal suffixes in the affirmative

- a) intransitive
- b) descriptive
- c) transitive
- d) object complement
- e) equative
- f) locative

SIMPLE CLAUSES--requiring verbal suffixes in the affirmative

- g) reciprocal
- h) ditransitive
- i) dative = 'psychological'
- j) stative/passive

COMPLEX CLAUSES:

- k) desiderative

- l) inchoative
- m) intentional
- n) introducer (transitive)
- o) introducer (ditransitive)
- p) perception

a) INTRANSITIVE:

The predicate of the intransitive clause contains an intransitive verb phrase, and is followed by no post-predicate nuclear position other than the optional CM position.

Tagmemic formula for the intransitive clause nucleus:

+ PM:mí_{subj/fut/nonfut} + P_i:VP_i ± CM:cm

Read: The intransitive factative imperfective clause nucleus consists of a mí pronoun (subject, future, or non-future) in the obligatory PN-ML-T slot, an intransitive verb phrase in the obligatory predicate slot, and an optional clause marker tagmeme.

Examples:

- (a1) PM P_i Te Ideo
 --- -----
 Mí tá'ád yàg kà'ám hím. (3-54N)
 I rise mouth morning early
 (I get up very early in the morning.)

- (a2) PM P_i Lo CM^c
 --- -----
 V_H mbàan yigid- í ní. (3-93)
 They sit-NEG shade-in F-I-NEG
 (They don't sit in the shade.)

- (a3) Te PM P_i Lo

 Ká bán mó dó kíi dà- m tóó wòò-lí. (3-116)
 Past yesterday you enter concession friend-your one his-in
 (Yesterday you entered the concession of a friend.)

The accompaniment suffix may occur on only one intransitive verb, so I note this exception and give the following example:

- (a4) PM P_i IA Lo
 --- -----
 Ø kée doo dágá 'néŋ, mí mbàan kan- nɔ yò. (3-124)
 It remains foot one only, I sit-with with-it here
 (I've got only one foot left here.)

b) DESCRIPTIVE:

Descriptive clauses have only a noun or qualifying adjective occurring in their obligatory complement (C₁) position. Their predicate position contains a descriptive verb.

Tagmemic formula for the descriptive clause nucleus:

+ PM: mí_{subj/fut/nonfut} + P_{desc}: V_{desc} + C₁: n/qual ± CM: cm

Read as explained above, adding the usual factative imperfective PM and CM tagmemes.

Examples:

- (b1) S PM P_{desc} C₁

 Hààb tèè Ø tii gâ' nan. (4-9D)
 Yam rec it changes horn dough
 (The yam has changed into a horn of food.)

- (b2) S PM P_{desc} C₁

 Zum Ø mbàà háàdná. (4-35C)
 Flour it sits/is damp (The flour is damp.)

- (b3) S PM P_{desc} C₁ CM^c

 Gà' tóó vù tiin gâ' nan né. (4-14)
 Horn other they turn-NEG horn couscous F-I-NEG
 (Other horns don't turn into horns of food.)

The accompaniment suffix may occur with the descriptive verb:

- (b4) PM P_{desc} C₁

 Vù mbàan dag gbòò... (4-86B)
 They are-with neighbor friend (They became good friends.)

c) TRANSITIVE:

The transitive and reciprocal clause types contain an optional direct object position while not permitting an indirect object position. The transitive type, however, may have a pronoun (mí_{obj}) in the object (O₁) position, but the reciprocal object (O₂) cannot. In addition, the transitive may have a cardinal numeral as object, while the reciprocal cannot. Either may have a noun phrase as object.

The predicate position of the transitive factative imperfective clause is filled by a transitive verb phrase. The post-verbal auxiliary in the verb phrase often follows the (pronoun) object, resulting in a discontinuous phrase (the two elements of the discontinuous phrase are here joined by the symbol $\overline{\quad}$):

(c1)

PM	$\overline{\text{P}_{tr} \text{ O}_1 \text{ P}}$
--	-----
Ø...	màà vɛ̃ là... (3-126)
He...	finds them goes... (He... finds them...)

When the object is a pronoun, the auxiliary verb generally follows it, as above. A noun object, however, follows the post-verbal auxiliary verb:

(c2)

PM	P _{tr}	O ₁
--	-----	----
Ø	sòò	dàà hɛ̃n. (4-9H)
He	searches	passes thing (He searches around for the thing.)

(c3)

PM	$\overline{\text{P}_{tr} \text{ O}_1 \text{ CM}}$
---	-----
Mí	ta'an púg né. (1B32b)
I	shoot-NEG animal F-I-NEG (I didn't shoot an animal.)

An example of a verbal noun clause (7.1.3) filling the object position:

(c4)

PM	P _{tr}	O ₁
---	---	-----
Mí	kó hɛ̃n	lálí. (3-142)
I	do thing to-eat	(I'm giving a banquet.)

(c5) PM P_{tr} O₁ CM^c
 --- ---
 Ø gàan nan yúúlí né. (4-35C)
 She knows-NEG couscous turning F-I-NEG
 (She doesn't know how to make couscous.)

The accompaniment suffix may occur on a transitive verb root:

(c6) PM P_{tr} O₂ CM
 --- ---
 (V_{tr} kàb vee) v_{tr} ùun púgg-ì. (4-35E)
 (They light fire) they dry-with meat-F-I
 (They light a fire and dry meat (i.e., with the fire).)

Tagmemic formula for the transitive clause nucleus:

+ PM:mí_{subj/fut/nonfut} + P_{tr}:VP_{tr} ± O₁:NP/card/mí_{obj}/lim ± CM:cm

Read as explained above, adding the usual factative imperfective PM and CM tagmemes.

d) OBJECT COMPLEMENT:

The object complement clause differs from all other factative clauses in that it requires two direct objects (O₂) containing noun phrases or mí_{obj} pronouns referring to the same person or object. The only verbs occurring in the object complement predicate (P_{oc}) are 'elect,' 'call,' etc.

Tagmemic formula for the object complement clause nucleus:

+ PM:mí_{subj/fut/nonfut} + P_{oc}:call + O₂:NP/mí_{obj} + O₂:NP/mí_{obj} ± CM:cm

Read as explained above, adding the usual factative imperfective PM and CM tagmemes.

An example:

(d1) PM P_{oc} O₂ O₂ CM
 --- ---
 V_{tr} yèè Bòbózi gbanàà-ì. (They elect Bobozi chief.)

e) EQUATIVE:

The equative clause has no predicate in the affirmative but contains an obligatory complement (C₂) position filled by a noun phrase, a demonstrative, or a cardinal numeral (root or phrase). In the negative, the verb pé ‘is-NEG’ occurs just before the clause marker, whose form following pé is -lí (see Table 5.1). A similar structure exists for Gbaya (Noss 1981:69-70), Pere (Raen 1981:161), and Mundang (Elders 2000:282-6).

It’s very important to realize that the equative clause is not simply a ‘descriptive clause with the verb mbàà understood but suppressed.’ Clause (e3) below is equative and needs the verb ‘be’ only in the English translation. The corresponding sentence with mbàà added is found in (e4), but its meaning is radically different, as shown in the translation.

Tagmemic formula for the equative clause nucleus:

+ PM:mí_{subj/fut/nonfut} + C₂:NP/dem ± P_{eq}:pé ± CM:cm
card

Read as explained above, adding the usual factative imperfective PM and CM tagmemes.

Examples:

(e1) PM C₂ CM

--- ----- --

Mí gǎ’ lòò- ì. (4-9K)

I horn stick-F-I (I’m a horn of sticks.)

(e2) PM C₂ P_{eq} CM

-- ----- --

Ø híílí míí pé- lí. (2-29b)

It will my is-NEG-F-I-NEG (It’s not my will.)

(e3) S PM C₂ CM

----- ----- --

Bààbá wún nán gbòò- è.

Baaba he-FUT person important-F-I

(Baaba will (be) an important person.)

(e4) S PM P_{desc} C₁ CM

----- ----- --

Bààbá wún mbàà nán gbòò- è.

Baaba he-FUT sit person important-F-I

(Baaba will be an important person! (whether he wants to or not))

f) LOCATIVE:

Locative clauses must contain a locative verb phrase followed by either a locative phrase or by a Complement 3 position containing a cardinal numeral (root or phrase), and/or a unique allomorph -lí of the clause marker /ú/. When the temporal-locative expression wulí ‘there’ occurs immediately following dí, a contraction occurs: duulí ‘is-there.’

The negative form of this verb is pé ‘isn’t-there’, occurring just before the clause marker position, whose form is -lí, identical to that accompanying the affirmative verb dí.

This type of locative verb is common across sub-Saharan Africa (Welmers 1973, chapter 11; Pike 1970:4-15; Noye 1974:72-5; Tsende 1993:54; Noss 1981:71-2; Wilson 1995), where they are cited for Igbo, Yoruba, Shona, Swahili, Fulfulde, Gbaya, Cameroonian Pidgin English, Krio, Mandinka, Dagbani, and Temne; this list is of course not exhaustive. Mundang has only an affirmative form (Elders 2000:292-4). The form of the negative is often a different root than for the affirmative, as is also the case for Dii.

Tagmemic formula for the locative clause nucleus:

$$+PM:mí_{\text{subj/fut/nonfut}} \pm P_{lo}:VP_{lo(\text{aff})} \pm Lo:LoP \pm C_3:\text{card} \uparrow P_{lo}:VP_{lo(\text{neg})} \pm CM:\text{cm}$$

$\underbrace{\hspace{10em}}_{+}$

Read: The locative clause nucleus consists of the usual obligatory PM tagmeme, a locative verb phrase in the obligatory locative predicate slot (which follows the PM tagmeme in the affirmative but precedes the CM tagmeme in the negative), and may have one of the following: a locative slot containing a locative phrase or a complement 3 slot filled by a cardinal numeral; the usual factative imperfective CM tagmeme closes the construction.

Examples:

(f1)	S	PM	Lo	P _{lo}	CM	
	-----	---	----	---	--	
	Nà'	mí	Ø	yè-lí	pé-	lí. (2-35b)
	Mother	my	she	here	is-NEG-F-I-NEG	
	(My mother isn't here.)					

(f2) S PM P₁₀ Lo
 ---- - - - -
 Gà' Ø di váń- ńí. (4-9N)
 Horn it is-there granary-in.

(f3) S PM P₁₀ C₃
 ----- - - - -
 Sìg wayée Ø di tãąńó. (4-36)
 Luck man it is-there three
 (The good luck number for men is three.)

g) RECIPROCAL:

The transitive and reciprocal clauses share several characteristics as already outlined above in c). In addition to those points mentioned above, the predicate position of the reciprocal clause is filled by a reciprocal verb phrase which has a verbal suffix that the transitive verb phrase doesn't have.

Tagmemic formula for the reciprocal clause nucleus:

+ PM: mí_{subj/fut/nonfut} + P_{rcp}: VP_{rcp} ± O₂: NP ± CM: cm

Read as explained above, adding the usual factative imperfective PM and CM tagmemes.

Examples:

(g1) PM P_{rcp} Relator
 ---- - - - -
 Vóń lńń áń. (4-9B)
 We-FUT destroy-each-other also (We'll destroy each other.)

(g2) PM P_{rcp}
 ---- - - - -
 V_u vá'án. (4-40B)
 They greet-each-other.

(g3) PM P_{rcp} O₂
 ---- - - - -
 V_u mbógon hęń lálí. (4-15)
 They fix-for-each-other thing eating
 (They fix food for each other).

h) DITRANSITIVE:

The ditransitive clause type contains an obligatory ditransitive verb phrase as predicate followed by an obligatory indirect object which is followed optionally by a direct object (O₁). If the indirect object is a pronoun (mí_{obj}), it's attached to the main verb and thus precedes the post-verbal auxiliary, as was seen above with the transitive clause. The indirect object may also be a noun phrase. A noun phrase, a cardinal numeral, a limiter, or a mí_{obj} pronoun may occur as direct object.

Tagmemic formula for the ditransitive clause nucleus:

$$+ \text{PM} : \underline{\text{mí}}_{\text{subj/fut/nonfut}} + \text{P}_{\text{di}} : \text{VP}_{\text{di}} + \text{I} : \underline{\text{NP}}_{\text{mí}_{\text{obj}}} \pm \text{O}_1 : \underline{\text{card/lim}}_{\text{mí}_{\text{obj}}/\text{NP}} \pm \text{CM} : \text{cm}$$

Read as explained above, adding the usual PM and CM tagmemes.

Examples:

- (h1) S PM P_{di} I O₁ CM

À- n fàà vɛ pú- n gò'òy máa yè nɔ. (3-125)
Mother-my in-law they give-me horse foc dem F-I
(My Mother-in-law gave me this horse here.)

- (h2) PM P_{di} I O₁ Lo

Vɛ dɔd- dɛ dɔɲ wɛ-lí. (4-47E)
They circumcize-him circumcision there
(They circumcized him there.)

- (h3) S PM P_{di} I O₁ CM

Bà'á Ø là hòd à'á gàn-n-è. (4-35S)
Father he goes consults-for grandmother seer- F-I
(Father goes and consults the seer for grandmother.)

- (h4) PM P_{di} I O₁ CM

Mín vùn mɔ fɔ́ó né. (4-1)
I-FUT expose-NEG you body F-I-NEG
(I won't embarrass you!)

i) DATIVE:

The dative clause is very close in form to the ditransitive, but its predicate contains a dative verb phrase, and there is no direct object following the indirect object.

The noun subject is usually inanimate, while the indirect object is usually animate, and the verb very often (but not always) could be termed ‘psychological,’ i.e., describing an emotional state or attitude (cf. Clements 1975:162). This type of verb in Mundang is labelled ‘objet d’expérience’ by Elders (2000:322-3).

Tagmemic formula for the dative clause nucleus:

+ PM:mí_{subj/fut/nonfut} + P_{dat}:VP_{dat} + I:NP/mí_{obj} ± CM:cm

Read as explained above, with a dative VP in the dative predicate, an indirect object like the ditransitive, and the usual PM and CM tagmemes.

Examples:

(i1) PM P_{dat} I Man
 --- -----
 Ø tɔɔd vó mbàà ná'. (3-55)
 It pleases us sits like-that (It pleases us very much.)

(i2) S PM P_{dat} I
 ----- -- ----- --
 Hóɔd Ø mbààd- ɛ... (4-21)
 Grass it sits-for-him (Grass is (in) his (eye).)

(i3) S PM P_{dat} I CM
 ----- --- ----- ---- ---
 Kəm síń gèen mó né. (3-140)
 Meat it-FUT lack-for-NEG you F-I-NEG
 (You'll never lack meat.)

j) STATIVE/PASSIVE:

This clause type closely resembles the intransitive, but its predicate contains a stative/passive verb. Occasionally it's also possible to have an indirect object following this type of predicate, in addition to the normal optional CM position.

The term ‘stative/passive’ here is used to mean that the action of the predicate is self-contained. For example, it can be said in Dii: Bab báyyú, ‘(the) field cultivates-itself.’ This corresponds quite closely to the passive meaning of the French reflexive personal pronoun: *le champ se cultive*. It’s not possible to refer to the real agent performing the action in the predicate, which therefore brings a ‘stative’ or what can be called a ‘non-agentive’ meaning (cf. Grimes 1975:97, 332-3, 353). Welmers (1973:341) uses the term ‘stative’ to refer to this type of verb in Niger-Congo languages.

Tagmemic formula for the stative/passive clause nucleus:

+ PM:mí_{subj/fut/nonfut} + P_{stv}:VP_{stv} ± I:NP/mí_{obj} ± CM:cm

Read the same as for the intransitive nucleus except for the stative/passive verb phrase in the stative/passive predicate, and the possibility of an indirect object (noun or pronoun).

Examples:

(j1) S PM P_{stv} CM
 ---- -- ----- --
 Zè’ Ø ma’ay- ú. (4-35L)
 Fish it is-caught-F-I

(j2) S PM P_{stv} I Lo
 ---- -- ----- --- -----
 Néj Ø vbáy- yu væg- í. (4-68)
 Bone it is-stuck-for-him throat-in
 (The bone is stuck in his throat.)

(j3) PM P_{stv} Emph Lo CM
 ---- -----
 Vu nə’əyn vòò tíj tayii Ba’ál wòò-lí né. (Rom. 11:4)
 They bow-NEG they before god Baal him-to F-I-NEG
 (They didn’t bow down before the god Baal.)

(j4) S PM P_{stv} CM
 ----- ---
 Hààb Ø gəy né. (4-9I)
 Wild-yam it breaks-NEG F-I-NEG
 (The wild yam didn’t break.) Note the -n normally with the verb is absorbed by the following n here in the flow of speech.

COMPLEX CLAUSES

At this point a question in analysis and levels of structure is raised, since many linguists automatically assign multi-clausal structures to the ‘sentence level.’ Longacre, for example, (1964:131, 1980:156) would evidently prefer assigning all the complex clauses in this subsection to the sentence level.

Pike (1970:9-11) refers to structures such as my ‘simple clauses’ a to j above as ‘independent’ clauses, and terms such structures as my ‘complex clauses’ below as ‘dependent basic clause types.’ Pike and Pike (1980:354-6) also allow direct and indirect quotations and other clausal non-quotation ‘undergoers’ of the main verb to be treated as terms within clauses, while still referring to ‘the total--quotation plus setting--... as a unitary clause root’ for example (p. 355).

I have a special reason for (at least temporarily) retaining these complex clause types in the clause level, since a CM slot in these clause types is tied to the main clause verb despite the presence of an intervening direct or indirect quotation (or other object clause or complement). This is true at least when the embedded clause is rather short, so I think the basic argument for retaining these complex clauses in their current position is valid.

However, when the direct quotation becomes longer, any CM position occurring at the end of the (set of) constructions will refer to its own local clause, not to the Introducer clause. It’s not yet clear, however, where the break comes in the Dii language between ‘short enough’ and ‘too long’ in the clauses embedded in these complex clause structures.

Among these complex clauses, the perception clause is the only one seemingly without a CM position. This will be discussed further below.

k) DESIDERATIVE:

Desiderative clauses contain either a subordinate desiderative clause, a verbal noun clause, or an imperative clause or sentence, one of which must fill the obligatory object (O₃) position. The predicate position contains a desiderative verb (3.8.9).

Tagmemic formula for the desiderative clause nucleus:

$$+ PM: \underline{m\acute{i}}_{\text{subj/fut/nonfut}} + P_{\text{desid}}: V_{\text{desid}} + O_3: \underline{VN \text{ Cl/Sb Desid}} \pm CM: \text{cm} \\ \text{Impv Cl/Sent}$$

Read as explained above, adding the usual PM and CM tagmemes.

Examples:

(k1) PM P_{desid} O₃
 --- ---- -----
 Mí híí ì dùù ɔ- n tóó. (3-54I)
 I want you-IMPV follow tell-me other (I want you to repeat that.)

(k2) PM P_{desid} O₃
 --- ---- -----
 Mí híí àm̄ yaa mó là mbàà míí-lí. (3-142)
 I want you-IMPV come you go sit me- at
 (I want you to come remain at my house.)

(k3) PM P_{desid} O₃ CM
 --- ---- ----- --
 Mí híí sààm telí- ì. (4-35B)
 I want clothes to-wash-F-I (I want to wash clothes).

(k4) PM P_{desid} O₃ CM^c
 --- ---- -----
 Mí dùù sèn- nɔ hòlɛ né (4-47L)
 I follow want-NEG him seeing F-I-NEG
 (I don't want to see him ever again.)

1) INCHOATIVE:

Inchoative clauses contain an obligatory complement (C₄) position containing a verbal noun clause. The predicate contains an inchoative verb phrase, and occurs only in the affirmative. Dii inchoative clauses express either a progressive or an incipient action: 'he's drinking' or 'he's about to drink.' In the example below, however, the auxiliary verb bàà makes only the former sense possible.

Tagmemic formula for the inchoative clause nucleus:

+ PM:mí_{subj/fut/nonfut} + P_{inch}:VP_{inch} + C₄:VN C1 ± CM:cm

Read as explained above, adding the usual PM and CM tagmemes.

Examples:

- (11) PM P_{inch} C₄
 --- -----
 Ø bàà dì dòò zòlí. (3-143)
 He continues is-in-process-of wine to-drink
 (He's drinking wine.)
- (12) PM P_{inch} C₄ rel
 ----- ---
 Míń dī- gī nòóné ǵm. (4-47E)
 I-FUT am-in-process-of-him killing also (I'll also kill him.)
- (13) S PM P_{inch} C₄
 ----- --- ---
 Dà- m tóó vɛ dī hɔ́ Mbùù wòò kààlẹ́. (4-47I)
 Neighbor-your other they are-in-process-of stomach Hyena his
 squeezing
 (Some of your neighbors are squeezing Hyena's stomach (to
 get some honey out).)
- (14) Te₁ PM P_{inch} C₄ CM
 ----- ---
 Sèy 'wààpád Ø bàà did- du púg ma"é- è. (3-141)
 Time all he habitual is-in-process-for-him animal catching-F-I
 (He [Lion] was habitually catching animals for him [a man].)

m) INTENTIONAL:

The intentional clause type has a unique obligatory complement-as-goal (CG) position containing a verbal noun clause. The 'goal' shows the purpose or intention behind the motion expressed by the intentional predicate (which contains an intentional verb phrase).

Tagmemic formula for the intentional clause nucleus:

+ PM:m_{subj/fut/nonfut} + P_{int}:VP_{int} + CG:VN C₁ ± CM:cm

Read as explained above, adding the usual PM and CM tagmemes.

Examples:

- (m1) PM P_{int} CG CM
 --- ---
 Mí làà vɛ nɛné- è. (3-141)
 I go them to-chase-F-I
 (I go (in order) to chase them.)

(m2) PM P_{int} CG
 --- ---
 Ø dɔ̀g waa kɔ̀lɛ́. (2-73)
 She goes-up child giving-birth
 (She goes up to give birth (at the hospital).)

(m3) PM P_{int} CG CM^c
 --- ---
 Mí làan ba'ad kólí né. (4-14)
 I go-NEG work doing F-I-NEG
 (I'm not going to work.)

n, o) INTRODUCER (TRANSITIVE AND DITRANSITIVE):

Transitive introducer clauses have an optional predicate containing a transitive 'verb of saying' phrase. This is followed by a direct quotation, an indirect quotation, or an indirect order as direct object (O₄). In this clause and the ditransitive introducer clause type, optional manner, locative, simile or instrumental-accompaniment positions precede the quotation or speech.

The ditransitive introducer clause has an obligatory indirect object identical with that of the ditransitive and dative clauses, followed by a direct object (O₄) position identical with that in the transitive introducer clause. Its obligatory predicate contains a ditransitive 'verb of saying' phrase.

Tagmemic formula for the transitive introducer clause nucleus:

+PM:mí_{subj/fut/nonfut} ± P_{saytr}:VP_{saytr} + O₄:Dir/Ind Quo + CM:cm
 Ind Ord

Read as explained above, adding the usual PM and CM tagmemes.

Tagmemic formula for the ditransitive introducer clause nucleus:

+PM:mí_{subj/fut/nonfut} + P_{saydi}:VP_{saydi} + I:NP/mí_{obj} + O₄:Dir/Ind Quo + CM:cm
 Ind Ord

Read identically with the transitive introducer type except that the predicate is obligatory and contains a ditransitive

verb of saying phrase, and that there is an obligatory indirect object slot filled by a noun phrase or a mí_{obj} pronoun.

Examples:

- (n1) PM P_{say}tr O₄
 ---- -- -----
 V_{tr} ò: «Vó nòò púg...» (3-54I)
 They say, ‘We kill animal...’
- (n2) PM P_{say}tr O₄
 ---- ---- -----
 V_{tr} tàà bà biñ dùù nùh nan tóó. (4-9J)
 They think that they-nonfut-LOG follow find dough other
 (They thought they would get more food.)
- (o1) S PM P_{say}di I O₄
 ---- -- ---- ---- -----
 Gâ’ Ø òd- ða «Mí gâ’ nann- è.» (4-9E)
 Horn it says-to-him, ‘I horn dough-F-I’
 (The horn said to him, ‘I’m a horn of food.’)
- (o2) PM P_{say}di I O₄ CM^c
 ---- ---- -----
 Mí òn mó: «Àm yaan mí-lí» ní. (4-15)
 I say-NEG-to you: ‘You-IMPV come-NEG me-to’ F-I-NEG
 (I didn’t say to you: ‘Come to my house.’)
- An interesting feature tying the direct quotation to the introducer clause above is the automatic negative agreement of the verb yaa in the embedded clause despite the imperative construction and despite the affirmative meaning retained by the embedded verb!
- (o3) PM P_{say}di I Lo IA O₄
 ---- -- ---- -----
 Mí òd v_{tr} kaa- lí kan kété ùu lúú là ú. (4-17)
 I say-to them village-in and wife they-IMPV leave go IMPV
 (I told him and his wife in the village that they should leave.)
- (o4) PM P_{say}di I O₄
 -- ---- -----
 Ø òd Kəə mbìgì wòò bà w_{tr} yè nɔ. (3-140)
 He says-to Lion hammer his that it here F-I
 (He tells Lion that his (i.e. Lion’s) hammer is here.)

p) PERCEPTION:

The perception clause type contains an obligatory predicate filled by a perception verb phrase followed by an obligatory object (O₅) position containing a factative (imperfective or perfective) clause. The clause marker position occurs only in the subordinate object clause, not in the independent introducer clause. In addition, the perception predicate is always affirmative, never negative.

Tagmemic formula for the perception clause nucleus:

+ PM:mí_{subj/fut/nonfut} + P_{perc}:VP_{perc} + O₅:Fact (Perf,Impf) Cl

Read as explained above, adding the usual PM tagmeme.

An example of the perception clause:

(p1) PM P_{perc} O₅
-- ---- -----
Ø nùh̃ Kpoo Ø nɔɔ sú'ú. (4-9N)
He finds Baboon he dies F-P
(He found Baboon dead already.)

(p2) PM P_{perc} O₅
--- --- -----
Mí h̃ò bà'á Ø bínda h̃enn- è.
I see father he writes something-F-I
(I see father is writing something.)

 SIMPLE CLAUSES--no verbal suffixes in the affirmative

Intr	= +PM +P _i	± CM
Desc	= +PM +P _{desc} +C ₁ :n/qual	± CM
Tr	= +PM +P _{tr} ±O ₁ :NP/card/lim/ <u>mí</u> _{obj}	± CM
Obj Comp	= +PM +P _{oc} +O ₁ : <u>NP/card</u> lim/ <u>mí</u> _{obj} +O ₁ : <u>NP/card</u> lim/ <u>mí</u> _{obj}	± CM
Eq	= +PM +C ₂ :NP/dem/card	±P _{eq} ± CM
Loc	= +PM ±P _{lo(aff)} ±(±Lo:LoP ±C ₃ :card) †P _{lo(neg)}	± CM

SIMPLE CLAUSES--requiring verbal suffixes in the affirmative

Rcp	= +PM +P _{rcp} ±O ₂ :NP	± CM
Ditr	= +PM +P _{di} +I:NP/ <u>mí</u> _{obj} ±O ₁ :NP/card/lim/ <u>mí</u> _{obj}	± CM
Dat	= +PM +P _{dat} +I:NP/ <u>mí</u> _{obj}	± CM
Stv	= +PM +P _{stv} ±I:NP/ <u>mí</u> _{obj}	± CM

 COMPLEX CLAUSES

Desid	= +PM +P _{desid} +O ₃ : <u>VN Cl/Sb Desid</u> Impv Cl/Impv Sent	± CM
Inch	= +PM +P _{inch} +C ₄ :VN Cl	± CM
Int	= +PM +P _{int} +CG:VN Cl	± CM
Intro _{tr}	= +PM ±P _{saytr} +O ₄ :Dir Quo/Ind Quo/Ind Ord	± CM
Intro _{di}	= +PM +P _{saydi} +I:NP/ <u>mí</u> _{obj} +O ₄ : <u>Dir/Ind Quo</u> Ind Ord	± CM
Perc	= +PM +P _{perc} +O ₅ :Fact (Perf/Impf) Cl	

 Table 5.2: Nuclear positions in independent factative imperfective clauses

The following is a sample ‘quickie’ listing of factative imperfective clauses illustrating the contents of Table 5.2:

SIMPLE CLAUSES--no suffixes in the affirmative:

- | | | |
|-------------|---------------------------------|--|
| a) Intr | Waa vu lúú ú. | The children leave. |
| | Mí tá’ád yag kà’ám hím. | I get up very early in the morning. |
| b) Desc | Hààb tèè Ø tii gà’ nan. | The yam has changed into a horn of food. |
| | Zum Ø mbàà háàdná. | The flour is damp. |
| c) Tr | Mí kó hèn lálí. | I’m giving a banquet. |
| d) Obj Comp | Vu yèè Bòbòzì gbanààì. | They elect Bobozi chief. |
| e) Eq (aff) | Mí --- gà’ lòdì. | I’m a horn of sticks. |
| | (neg) Mii --- pélí. | It’s not me! |
| f) Loc(aff) | Gà’ Ø di váhíí. | The horn is in the granary. |
| | (neg) Gà’ tóó Ø --- váhíí pélí. | There’s no horn in the granary. |

SIMPLE CLAUSES--requiring suffixes in the affirmative:

- | | | |
|---------|--------------------------|--------------------------------|
| g) Rcp | Vón lín ám. | We’ll destroy each other also. |
| h) Ditr | Vu kóò bà’á ba’adì. | We work for Papa. |
| | Vu pún gò’òy máa yè nɔ. | They gave me this horse here. |
| i) Dat | Yéé vu tɔɔd vó mbàà ná’. | Songs please us very much. |
| j) Stv | Zè’ Ø ma’ayú. | The fish is caught. |

COMPLEX CLAUSES:

- | | | |
|------------------------|-----------------------------------|---|
| k) Desid | Mí híí ì dùù ɔn tóó. | I want you to repeat that. |
| | Mí híí bi làà kaalí. | I want to go to town. |
| | Mí híí yéé tóó vu mbóggî. | I want to create more songs. |
| l) Inch | Bà’á Ø di dòò zòlí. | Papa is drinking wine. |
| | Vu káñ ba’ad kólíí. | They just simply began working. |
| m) Int | Mí làà vu nenéè. | I’ll go chase them. |
| n) Intro _{tr} | Vu ò: «Vó nòò púg...» | They say: ‘We’ve killed an animal...’ |
| | Bà’á Ø ò yógó bà bín làà kaalí. | Papa says that tomorrow he’ll go to town. |
| | Bà’á Ø ò bà ùu nàà nábbì. | Papa says that they should dance. |
| o) Intro _{di} | Gà’ Ø ɔddu: «Mí gà’ nannè.» | The horn said to him: ‘I’m a horn of food.’ |
| | Vu ɔd bà’á mbìgì wòò bà vu yè nɔ. | They told Papa that his hammer was here. |
| | Vu ɔd nán vu ùu nàà nábbì. | They told the people to dance. |
| p) Perc | Vu nùh Kpoo Ø nɔɔ sù’ú. | They found the baboon had died. |
| | Mí hò bà’á Ø bínda hennè. | I see Papa writing. |

5.1.3 Summary table of the nuclei of factative imperfective clauses. The following simplifications have been incorporated into Table 5.2 to avoid using space for redundant information:

1. +PM stands everywhere for the composite: +PN-ML-T:m_{subj/fut/nonfut}
2. ±CM stands everywhere for: ±CM:cm
3. +P_{tr} (or whatever transitivity subscript) stands for the fuller:
+P_{tr}:VP_{tr}, since the subscript is identical for both P and VP.
4. Clause titles on the left side of the table are all abbreviated.

5.2 PERIPHERAL POSITIONS

The following peripheral positions are to be added to the consideration of factative imperfective clauses. (Several other possible peripheral positions have not yet been fully documented and so aren't yet included here, e.g. the 'cause' and the 'topicalization' positions.)

Temporal 1 (Te ₁)	Subject (S)
Temporal 2 (Te ₂)	Locative (Lo)
Manner (Man)	Simile (Sim)
Ideophone (Ideo)	Instrumental-Accompaniment (IA)

All of these peripheral positions are optional, and are marked with a \pm . For ' \pm emph', see section 5.1.1, example (5) and discussion there.

Factative imperfective clauses may be divided into three categories:

- 1) those which may contain pre-PM and post-P (post-predicate) peripheral positions,
- 2) those which may contain pre-PM peripheral positions, but only a limited number of post-P peripheral positions,
- 3) those which may contain only pre-PM peripheral positions.

Following is the list of clauses belonging to each category:

- (a) Category A (pre-PM, post-P):
intransitive
descriptive
locative
transitive
reciprocal
ditransitive
dative
stative/passive
- (b) Category B (pre-PM, limited post-P):
introducer_{tr}
introducer_{di}
- (c) Category C (pre-PM only):
equative
desiderative
inchoative
intentional
perception

Each of the above categories will now be discussed in detail.

Category A: The following is a compilation of the positions in these clauses (the Te₁ and Te₂ positions are marked especially to show that only one may occur in any given clause, not both):

(a) $\pm Te_1 \pm S + PM + P I O/C \uparrow Te_2 \pm Lo \pm IA \pm Man \pm Ideo \pm Sim$
└──────────┬──────────┘ └───/───┘↑
± CM ± emph

The ideophone position may occur before or after the simile position.

Category B: As already noted in 5.1.2 under the discussion of the introducer clauses, Man, IA, Sim, and Lo positions are found to precede the object 4 position, i.e. precede the direct or indirect quotation, or the indirect order. A composite chart of occurring positions is thus as follows:

(b) $\pm Te_1 \pm S + PM P I \pm Lo/Man/IA/Sim + O + CM \pm emph$

Category C: When no post-predicate peripheral positions are possible, the composite chart is as follows:

(c) $\pm Te_1 \pm S + PM P + CG/C/O \pm CM \pm emph$

In category C, the post-predicate peripheral positions occur within the verbal noun clause (in the C or O positions), not in the independent introducer clause.

Table 5.3 shows all the peripheral positions and the phrases which have been found to occur in each.

Some examples of factative imperfective clauses containing peripheral positions follow, all from category A.

Te ₁	S	Te ₂	Lo	IA	Man	Ideo	Sim
TeP _{máa}	PNP	TeP _{lí}	LoP _{lí}	RAP _{kan}	RAP _{kan}	IdeoP	RAP _{sim}
TeP _{ka}	any NP	TeP _{gen}	LoP _{telo}		adv		
TeP _{gen}	ÍP _{mod}		LoP _{dble}		adv _{ná}		
	ÍP _{aga}		RAP _{yúú}				
	TeP _{gen}		NP _{ya}				
	card						
	te						

Table 5.3: Phrases and roots occurring in peripheral positions in factative imperfective clauses

- (a1) S PM P_{tr} O₁ IA Ideo
----- -- ---- -----
Bàbàqam Ø vòò kíd kan yúú kpàg. (3-123)
Rabbit he hits tar with head kpàg.
- (a2) Te₁ PM P_{di} I O₂
----- ---- ---- ----
À'q yè máa mó mà'a-n doo. (3-123&4)
Time dem foc you grab- me foot
(Now you've grabbed my foot!)
- (a3) PM P_{tr} O₁ Man Ideo
-- --- ----
Ø kè ðug í yògò wəg wəg wəg wəg wəg wəg. (3-146&4-1)
He runs race like that w.w.w.w.w.w. (He runs tiredly.)
- (a4) PM P_{tr} O₁ Sim CM^c
----- ----
Ø m̀on moo kón í nánán wəgə né. (3-51)
He speaks-NEG word like-NEG the-one man like F-I-NEG
(He doesn't speak like a man.)
- (a5) PM P_{tr} Te₂ O₁ CM-Q
--- --- ---- --- --
Ví kó b̀òò ̀n- á? (4-40A)
You do today what- Q (What did you do today?)
- (a6) PM P_{di} I Lo
----- ---- ----
Mín p̀- g̀ nag- á. (3-110)
I-FUT give-to- him hand-in (I'll give (it) to him in (his) hand.)
- (a7) PM P_{tr} O₁ P Lo IA
----- ---- ---- ----
V̀ gb̀ v̀ là hòg tíj-g̀-lí kan nán t̀lí v̀ò v̀. (3-54T)
They leave them go bush in-it- in with man guard their pl
(They leave them in the bush with their guardians.)

5.3 ENCODING IDEAS IN STRUCTURES

At point after point in this work I've tried to explain the ideas encoded in the structures of the Dii language. This has usually been done by positive, descriptive techniques rather than by negative comparisons with other languages. It may be useful at this point to back off and get an overview of how certain ideas are structuralized in Dii compared to other languages. In this section I'll assume that the reader is already familiar with the contents of chapters 3 and 5, so technical terms won't be redefined here.

Some major ideas will now be tied to the nuclear clause positions in Dii that encode them:

subject pronoun: 1) person
 2) number
 3) tense (atemporal, future, non-future)
 4) mood FACT, IMPV
 5) mood HYP (present, past)
 6) (in)dependence of the clause
 7) emphasis
 8) logophoricity

verb (or lack of one!):
 1) polarity (affirmative, negative)
 2) transitivity (i.e. reciprocity,
 presence/absence of an indirect or direct object
 or other complement,
 repetitivity,
 stativity/passivity, etc.)

object or complement (noun or pronoun):
 1) person
 2) number
 3) emphasis
 4) logophoricity

clause marker: 1) mood/aspect FACT, IMPV, PERF, IMPF
 2) polarity (affirmative, negative)
 3) question-answer context
 4) clause ending (spoken punctuation)
 5) position within larger context

The ideas above are like threads woven here and there through various sections of the preceding chapters; they're drawn together in the

above list to show succinctly at what point(s) each is encoded in Dii nuclear clause positions.

Only one of the four nuclear clause positions listed above has a comparable function in Indo-European structures: the object (or complement) position. The other three nuclear positions in the clause must be redefined in major ways when compared to Indo-European structures. The following contrasts should be noted.

1. Many grammarians and linguists today assume that mood/aspect is usually signaled by the verb. In Dii, however, mood/aspect is almost entirely signaled by the subject pronoun and the clause marker. The subject pronoun indicates not only the person and number of the subject, but tense (atemporality, future, non-future), mood (factive, imperative, hypothetical), and the dependence or independence of the whole clause.

2. It's also often assumed that the central element around which a clause is formed is the verb. In Dii it's the subject pronoun, and many clauses are verbless. The verb, when present, signals polarity (affirmative, negative); and in conjunction with the various types of objects and complements, it signals the different types of transitivity.

3. Subject noun phrases are often treated as highly important to the description of clauses; in Dii they're relegated to the role of an optional expansion of the subject pronoun, and again it's subject pronouns that are syntactically prominent.

4. The passive voice is hardly used at all in Dii, and is not a separate voice; it's treated as one of the subcategories of transitivity, and is linked tightly to stativity.

5. The clause marker is unknown in Indo-European languages, but bears a heavy syntactic and discourse load in Dii. It's the main signal of polarity (affirmative, negative) in the clause, helps to signal mood/aspect, signals certain contextual question-answer relationships, helps to signal the continuous cohesion of an ongoing story, and often serves as a sort of 'spoken punctuation' in its clause.

If the reader wishes to examine any of these threads more in detail, the following list of section references will be useful. To be more complete, some references here are to portions later in this work, not just to preceding sections.

clause ending--3.15, 5.1.1, 7.4

clause marker--3.15, 5.1.1, 5.4, 7.1.2, 7.2, 7.4

emphasis--3.6.1, 3.15, 7.5
(in)dependence of the clause--3.6.1, 4.13, 5.0, 7.2, 8.1, 8.4
logophoricity--3.6.1, 3.7.5b, 7.3
mood/aspect--3.6.1, 5.0, 5.0.1., 7.0
negativity--3.8.1., 3.8.3, 5.1.1
number--3.6.1, 3.8.8, 3.8.10, 8.1
person--3.6.1, 3.8.8, 3.8.10, 8.1
question-answer context--5.1.1
subject pronoun--3.6.1, 5.1.2, 5.4, 7.1.2, 7.1.4, 7.2, 7.3, 8.1, 8.4
tense--3.6.1
transitivity--3.8, 5.0.0, 5.0.1
within a continuous text--5.1.1

5.4 FACTATIVE PERFECTIVE CLAUSES

The entire set of factative imperfective clauses as laid out in sections 5.1 and 5.2 may be used as a basic set from which whole new sets of clauses may be rather easily and efficiently described by means of a few rules. The ‘other half’ of the factatives (i.e. the perfectives) is very easily described via reference to the imperfective set.

The following transitivity categories from factative imperfective (left column) have been attested in the factative perfective (right column). An ‘x’ means the clause is attested in unelicited text, while a ‘z’ means it was in elicited material.

<u>FACT IMPF</u>	<u>FACT PERF</u>
Intransitive	x
Descriptive	x
Transitive	x
Object Comp	z
Equative	x
Locative	x
Reciprocal	x
Ditransitive	x
Dative	x
Stative/passive	x
Desiderative	x
Inchoative	x
Intentional	x
Introducer _{tr}	x
Introducer _{di}	z
Perception	x

The following are the characteristics of the factative perfective mood/aspect:

- 1) its perfective clause marker;
- 2) the distinctive order in which certain allomorphs of this clause marker occur;
- 3) its obligatory clause marker which is also always retained in subordinate clauses derived from it, in contrast to the cm of the factative imperfective forms (5.1.2 and 7.2).

The meaning of this mood/aspect is the completedness of an action or state. Often this action took place in the recent past, but completedness here must not be confused with tense (atemporal, or future vs. non-future), which is expressible in the PN-ML-T composite position.

See section 5.1.0 for a full definition of perfective in contrast to imperfective.

Since it's the viewpoint of the Dii speaker that determines what is 'completed,' even a future event may be spoken of by using the perfective. Thus: 'Tomorrow I'll leave on the bus already,' where the perfective clause marker is, as often, translated 'already' by informants (or 'déjà' in French).

There are two factative perfective clause markers: /sú'ú/ 'affirmative' and /sí...né/ 'negative.' These forms are chosen as 'titles' for these morphemes because they're the most frequent allomorphs attested in unelicited text for each of the two morphemes in question.

The morpheme /sú'ú/ has several allomorphs: sú'ú, sí, and sí...±/ú/. In several hundred pages from my data notebooks and published Dii texts, sú'ú was found 401 times, sí alone 121 times, and sí.../ú/ only 55 times. Only a little can be said at present about when or why one of these allomorphs is chosen in any given context rather than another. Compared to the rather tight contextual rules tied to the imperfective affirmative clause markers, a speaker seems to have much more freedom to choose which perfective forms to use in any given context. The three tendencies formulated below seem, however, to be valid generalizations.

1) The allomorph sí (alone) is almost never used at the end of the clause in the CM position; it usually appears clause medially and is thus followed by one or more other clause components.

2) The form sú'ú (or its interrogative variant sá'áa) appears only clause-finally, and although virtually any clause component may be found immediately before it, there's a clear preference for sú'ú to appear:
a) just after a verb (\pm negative or pronominal suffixes), or
b) just after a noun phrase (i.e., an I or O).
In the hundreds of pages from my data notebooks and texts just referred to above, I counted 416 cases of sú'ú (sá'áa), of which 363 (87.2%) were used following a verb or object noun phrase.

3) In the same data notebooks and texts, the form sí.../ú/ (or its interrogative variants) appears 63 times, of which 29 instances (46%) occurred with an intervening noun object phrase. Many other morphemes may appear between the two parts of this discontinuous form, but locative expressions are the most frequent. When sí.../ú/ is used, the /ú/ portion shows allomorphs in context like the factative imperfective clause marker /ú/ as summarized in Table 5.1. The '...' here means: 'there

must be some intervening morpheme between these elements for this allomorph to be used.’

A full listing of the number of sú’ú and sí.../ú/ forms collated with their contexts follows. The left column lists the constructions immediately preceding sú’ú or intervening in sí.../ú/, and the second and third columns cite the number of instances found.

	<u>sú’ú</u> (<u>sá’áa</u>)	<u>sí.../ú/</u> (<u>-áa</u>)
verb ±NEG ±pr	292	0
noun object (I, O)	71	29
locative (Lo)	16	15
±O, inchoative ±Lo	10	4
emphatic pronoun	0	7
change speaker in cited dialogue	7	0
instrument accompaniment (IA)	6	1
temporal (Te)	5	2
CM FACT-IMPF affirmative	4	0
similitude (Sim)	0	3
manner (Man)	3	1
limiter	2	1
	416	63

Two more forms (mà, mày) are used especially in exclamations. These forms were only found 20 times in the hundreds of pages of notebooks and text referred to in the preceding paragraphs.

The negative perfective clause marker morpheme /sí...né/ has the following frequently used allomorphs: sí...né, lá...né, ná...né, and ndé...né. The meaning of these forms is as follows: sí...né may mean either ‘not yet’ or ‘not...any longer,’ but the other three can only mean ‘not yet.’ The form ndé...né is from the eastern dialect mam nà’à, but is now often heard in the Mbé area.

The remaining 2 forms lá...né and ná...né occur in complementary distribution, ná...né occurring only when immediately preceded by an -n or -m, and lá...né occurring elsewhere. The examples (fp5) and (fp7) below show that even when the normal negative suffix -n on the verb is absorbed by the first consonant of the cm, the ná...né variant is used, the -n having conditioned its appearance ‘before being absorbed’ in the rapidity of the speech act. The form lá...né is seen in (fp25) below.

The ‘...’ used in the negative forms means: ‘an intervening morpheme may occur here,’ but if there’s no intervening morpheme, then the two parts of the form occur one after the other: sí né, etc. Note the

differences of meaning for the ‘...’ symbol in the descriptions of the affirmative and negative constructions here!

Examples of factative perfective (fp) clauses follow. An $\overline{\quad}$ is used to help the reader identify cases where the elements of this clause marker are discontinuous. The reader is also alerted that the symbol $\overline{\quad}^c$ signals concord between the negative clause marker and the automatic negative suffix on the verb.

INTRANSITIVE:

(fp1) S PM P_i CM
 ---- --- ---- -----
 Vid Ø sà’ sú’ú. (4-6)
 Night it darkens F-P (It’s already night.)

(fp2) PM P_i CM
 --- ---- ----
 Mí lúú mà (or mày)!
 I leave F-P (I (have decided to) leave!)

(fp3) PM P_i CM Emph Lo
 --- ---- -- ---- ---
 Mí lúú sí mí yò!
 I leave F-P me here
 (I (have decided to) leave!)

(fp4) S PM P_i CM Emph
 ----- -- ----- ---- ----
 Wamndè Ø dàà fíí ya sí wòò. (4-40G)
 Donkey he passes returns come F-P emphasis
 (Donkey returns, he does!)

(fp5) PM P_i $\overline{\text{CM PME CM}}$
 --- ---- --- ----- ---
 Mí lúú ná mí ní.
 I leave F-P me F-P-NEG
 (I haven’t left yet.)

(fp6) S PM P_i $\overline{\text{CM}}^c$ Relator
 ---- --- ---- ----- ----
 ...sùd Ø zàun sí né ám. (4-89X)
 ...saliva it goes-down-NEG F-P NEG also
 (...his saliva doesn’t go down, either(=he’s afraid).)

(fp7) S PM P_i CM^c
 ---- - - - - -
 Víd Ø sà'ą ndé né.
 Night it darkens-NEG F-P NEG
 (It isn't night yet.)

DESCRIPTIVE:

(fp8) S PM P_{desc} C CM
 ----- - - - - -
 Hàąb tèè Ø tii gą' sú'ú. (4-9I)
 Yam that it becomes horn F-P
 (That yam became a horn.)

TRANSITIVE:

(fp9) PM P_{tr} CM O₁ CM
 ---- - - - - -
 Mó vùd sí fọ́ọ ọ. (3-122)
 You show F-P body F-P
 (You've 'exposed' = embarrassed yourself.)

(fp10) PM P_{tr} CM
 -- - - - -
 (Ø gbàga púg máa,) Ø mà' sí. (4-48E)
 (He stalks animal dem,) he catches F-P
 (He stalks an animal, catches it.)

(fp11) PM P_{tr} CM PME O Relator
 ---- - - - - -
 Mí híjı́ sí mı́ siidè ám. (3-46)
 I want F-P I money too
 (Me, I want money too!)

(fp12) PM P_{tr} O₁ CM Te₂ CM
 --- ----- - - - - -
 Mı́ màà- wọ́ sí bđđ ń. (3-127)
 I find- him F-P today F-P
 (I found him today.)

(fp13) PM P_{tr} O CM^c
 -- - - - -
 Ø pìn wu' ndé né. (2-27)
 She removes-NEG sauce F-P NEG

(She hasn't removed the sauce (from the fire) yet.)

(fp14) PM P_{tr} CM O₁ CM^c

 Mí hòn sí lig wòò né. (3-54A)
 I see-NEG F-P house his F-P-NEG
 (I haven't seen his house yet.)

(fp15) S PM P_{tr} O₁ CM^c

 Nán tóó Ø dùù mban- nɔ sí né. (2-44b)
 Man other he again overcomes-NEG him F-P NEG
 (No man could overcome him.)

(fp16) S PM P_{tr} O CM

 Hẹn nii nàà...Ø ta' đug mà! (4-89AA)
 Monster ...it takes race F-P
 (The monster flees!)

OBJECT COMPLEMENT:

(fp17) PM P_{oc} O₁ O₁ Lo CM

 V_{tt} 'yé Bậậm gbanàà kaa vòòlí sú'ú. (5-35)
 They make rabbit chief village their-in F-P
 (They made Rabbit chief in their village.)

EQUATIVE:

(fp18) Te PM CM C CM^c

 À'ạ yè vó sí đub figg-ì. (3-103)
 Now here we F-P yam old- F-P
 (We're now old (i.e. planting) yams.)

(fp19) PM CM C P_{eq} CM^c

 Ø sí hậậb pé- lí. (5-35)
 It F-P yam is-NEG-F-P-NEG
 (It isn't a yam any more [it has become a horn].)

LOCATIVE:

(fp20) PM P_{lo} CM Lo IA
 --- --- -----
 Ø di sí bó' kan kaa wakéé... (3-54F)
 He is-there F-P near and village woman...
 (He's now near the woman's village...)

(fp21) S PM CM P_{lo} CM
 ----- --- --- ---
 Moo tóo Ø sí pé- lí. (3-57)
 Word other it F-P is-NEG-F-P-NEG
 (There's no longer a cause for a problem.)

RECIPROCAL:

(fp22) Te₁ PM P_{recp} CM O₂ CM
 ----- --- ----- ---
 À'á yè máa ba kón sí dag gbòò ú. (3-140)
 Time this foc we-2 do-together F-P neighbor friend F-P
 (We're now good friends.)

(fp23) PM P_{recp} CM PME CM
 ----- ----- --- ---
 Bán dùù hí'ín sí bàà né. (4-86R)
 We-2-FUT again separate F-P we-2 F-P-NEG
 (We'll never be separated ever again.)

DITRANSITIVE:

(fp24) PM P_{di} I CM
 --- ----- ----- -----
 Mó ya pú kété- m sú'ú. (3-116)
 You come give wife-your F-P
 (You gave (it) to your wife.)

(fp25) PM P_{di} I CM O₁ CM^c
 --- --- --- ---
 Mí ɓèn mó lá la' né. (5-32)
 I take-NEG you F-P wood F-P-NEG
 (I haven't cut you wood yet.) OR: Mí ɓèn mó lá lá né. (5-32)

DATIVE:

(fp26) S PM P_{dat} I CM
 ----- -- --- --- ---
 Sɛ́m Ø kó- gɔ sí. (4-7)
 Shame it does-him F-P (He was ashamed.)

(fp27) S PM P_{dat} I CM
 ----- -- --- --- -----
 Dúú Ø kó- gɔ sú'ú. (4-2)
 Fear it does-him F-P (He was afraid.)

STATIVE/PASSIVE:

(fp28) S PM P_{stv} CM
 ----- --- -----
 Nóó Ø ɓàý sú'ú. (4-11)
 Eye it is-put-out F-P
 (The eye is put out (blind).)

DESIDERATIVE (+ interrogative):

(fp29) PM P_{desid} O CM CM-Q
 ----- --- -----
 Mó híí òo nòo bi sí yè- láa? (3-54J)
 You want we-IMPV kill you F-P here-F-P-Q?
 (Do you want us to kill you here?)

INCHOATIVE:

(fp30) PM P_{inch} C₄ CM-Q
 --- --- -----
 Ví dì lúúlí sá'áa? (3-54A)
 You are-in-process-of leaving F-P-Q
 (Are you leaving already?)

Another seemingly exceptional characteristic of the perfective is that from time to time an ‘excess’ of perfective signals may be found in a single clause. These might be edited out if a native speaker were preparing a speech, but it’s certain that they can occasionally be heard as people speak. Two examples follow.

PERCEPTION:

(fp31) Te PM P_{tr} CM O CM
 ----- --- -----
 À'ą yè máa mó nùj sí béég òo dð- mm-úlí máa sú'ú.(3-54J)
 Now here foc you find F-P grave we bury-you-there dem F-P
 (Now you’ve found the grave where we’ll bury you.)

INTRANSITIVE:

(fp32) S PM P_i CM

 Hɛn mí Ø líd 'wàa sí mà! (5-32)
 Thing my it ruined finish F-P F-P-EXCL
 (My thing is completely ruined!)

Another two allomorphs are rare (sú'ú né, and né sú'ú), but have been attested a few times in the data I've collected. They seem to occur only in sentence-initial subordinate clauses, where I've found them in subordinate temporal (Sb TeLoC), and hypothetical (Sb Hyp) clauses. An example follows:

(fp33)

PM	P _{tr}	┌	c	└	CM	Te	Sb	

Àh hɔ̀n né sú'ú pɛ́n tée, mín yaa di- lí. (5-32)
 If-I see-NEG NEG F-P first dem, I-FUT come am-there-F-I
 (If I don't see it, I'll come.)

Factative perfective clauses aren't transformable into the verbal noun mood, but can be transformed into hypothetical clauses. Factative perfective clauses may be transformed into any of five subordinate clause types: temporal-locative-conditional (Sb TeLoC), relative (Sb Rel), desiderative (Sb Desid), indirect quotation (Ind Quo), or hypothetical (Sb Hyp). They may also be made emphatic and/or interrogative. They may have variants which serve as serial component clauses. See chapters 6 and 7 for further details on constructions mentioned in this paragraph.

The distinctive order mentioned above at the beginning of 5.4 for these clause markers concerns the allomorphs whose first component is sí, lá, ná or ndé, for unlike other Dii clause markers, this first component seldom occurs at the end of its clause. In previous sections we've seen a verbal clause structure whose essentials can be summarized as follows, using abbreviations found in section 5.2:

(1) ±Te ±S +PM +P ±I ±O ±Lo ±IA ±Man ±Sim CM

With an indirect object, Dii speakers prefer to place the first element following a pronoun (Ipr) but preceding a noun (In); the XX's in the following two lines show these placement preferences:

(2a) ±Te ±S +PM +P Ipr XX ±O ±Lo ±IA ±Man ±Sim CM
 ±Te ±S +PM +P XX In ±O ±Lo ±IA ±Man ±Sim CM

If there is no indirect object, then speakers prefer using the first element of the cm following a pronoun O (Opr), since the pronouns are attached tightly to the verbal complex. If, however, the O is a noun (On), the first cm element is usually placed before the noun, but it may also be used following the On. In unelicited text I've found almost no cases of this latter 'unpreferred' order, despite the insistence of my informants that it's a fully acceptable usage.

- (2b) ±Te ±S +PM +P Opr XX ±Lo ... CM
 ±Te ±S +PM +P XX On ±Lo ... CM

Of course it's not difficult to combine (2a) and (2b) if we use "/" to put options side by side.

- (3) ±Te ±S +PM +P Ipr/Opr XX ±Lo ... CM
 ±Te ±S +PM +P XX In/On ±Lo ... CM

The equative clause is non-verbal in the affirmative, so must be described separately. The first perfective cm element appears between the PM and C positions.

- (4a) ±Te ±S +PM XX +C ... CM

Both the equative and locative have special verbs in the negative which occur just before the CM clause-finally.

- (4b) ±Te ±S +PM XX +C ... +P:pé- +CM:-lí

It's possible to combine the affirmative and negative structures in a single (oversimplified) description:

- (5) ±Te ±S +PM XX +C ... ±P:pé- CM

The following chart combines what has been explained so far about the various allomorphs of the clause markers found in factative clauses, both perfective and imperfective. The CM titles are between bars // and the allomorphs are in parentheses.

mood	aspect	negative	affirmative
factative (subject) (pronoun) (= <u>mí</u> series)	perfective	/sí...né/ (= <u>sí...né</u> , <u>lá...né</u> , <u>ná...né</u> , <u>ndé...né</u> , <u>sú'ú né</u> , <u>né sú'ú</u>)	/sú'ú/ (= <u>sú'ú</u> , <u>sí</u> , <u>sí...ú</u>) + exclamative (= <u>mà</u> , <u>mày</u>)
	imperfective	/né/ <u>né</u>	/ú/ (= <u>ú</u> , <u>-ì</u> , <u>wu</u> , <u>yu</u> , <u>-w</u> , <u>yQ</u> , <u>nQ</u> , none)
		sí ... - <u>lí</u>	- <u>lí</u>

For a more complete version of the above chart, see Table 7.2.

CHAPTER 6

SERIAL CLAUSES

6.0 SERIAL CLAUSE DEFINITION

Serial clauses (or clause clusters) rank above regular clauses and below sentences. They're composed of non-serial clauses, but like non-serial clauses, they typically fill positions on the sentence level; see Pike 1970:33-51.

Serial clauses will be described in terms of initial (Init), medial (Med), and terminal (Ter) positions, each of which contains a serial-component clause. One or more of the serial-component clauses contains elements (positions) which are 'shared' with the other serial-component clauses, but each of the component clauses must have its own predicate. Any element that is 'shared' by the other component clauses, including the subject pronoun position, generally occurs only once in a serial clause. See the end of section 6.2 for several examples of serial clauses. One is presented here which has an initial, a medial, and a terminal component, each containing a transitive verb.

- (1) PM P_{tr} O₁ P_{tr} P_{tr} Lo
 ---- - ---- - - - - - - - - - - - - - - - -
 V_H kéé dǎg gǎŋ gbò zùù wu-lí... (3-136)
 PM-----
 O₁-----
 -----Lo
 They leave pot carry leave go-down there
 (They carry the pot and leave it there.)

This type of serial clause is called 'unmarked' by Williamson (in Bendor-Samuel 1989:30), who comments: 'the first verb (in SVO languages)... is fully marked for aspect/tense/polarity, while the others occur as bare stems.' The Dii mood/aspect markings only occur on the subject pronoun; this pronoun is then the 'fully marked' element and is 'shared' by all the verbs in the serial construction.

6.1 SERIAL-COMPONENT VARIANT RESTRICTIONS

The serial-component clauses will be treated as variants of independent clauses which are modified by the fact that they occur in a serial clause. We can thus speak of a transitive factative imperfective clause and of its ‘serial-component variant,’ for example.

We must now specify which positions are not used (and when) in serial-component clauses, and give a set of rules relating a given independent clause to its serial-component variants.

While most of our attention in this chapter is focused on factative imperfective clauses and their serial-component variants, it should be noted that the factative perfective and imperative moods/aspects also occur (but more rarely) in serial clauses. When they do occur, they follow the same rules that will be outlined in 6.2. Examples are given at the end of section 6.2.

Before discussing which clauses appear in which positions of a serial clause, we must isolate the beginning and the end of each clause. At this point the structure of the Dii clause, especially the subject pronoun and clause marker positions, pose some difficulty for the analyst.

First, the clause marker has no overt form in certain affirmative factative imperfective clauses, whereas its presence would help locate the end of the clause. In addition, when the subject pronoun is in the third singular, it’s a zero morpheme, which means that the absence of any other subject pronoun is to be interpreted as ‘third singular!’ Locating the subject pronoun (person number mood logophoricity tense = PN-ML-T) form is essential for determining where the clause begins. (When the boundaries of a clause are unclear, they may be located more easily by asking a Dii informant to switch the subject to the third person plural, where there is always an overt subject pronoun form.)

Table 6.1 outlines the occurrence limitations of factative imperfective clauses entering into the serial relationship. Some have no corresponding serial-component variants in one or more of the three serial clause positions. Where I found a given serial-component clause in unelicited text, I’ve marked it on the chart with an x. Many holes on the chart were filled by clauses elicited from informants. These elicited occurrences are marked by a z. A blank space indicates I haven’t yet verified that that clause type has a serial-component variant in that position. Insufficient data on the dative clause type cause it to be omitted from Table 6.1 at this time.

clause type	initial	medial	terminal
Intransitive	x	x	x
Descriptive	z	z	z
Equative			
Locative			x
Transitive	x	x	x
Reciprocal	z	z	z
Object complement			
Ditransitive (Dative)	x		x
Stative/passive			
Desiderative			z
Inchoative	z	z	z
Intentional	x	z	z
Introducer _{tr}			z
Introducer _{di}			x
Perception			z

Table 6.1 Occurrence restrictions on serial-component variants of factative imperfective clauses

6.2 RULES FOR SERIAL-COMPONENT VARIANT CLAUSES

The following set of rules are posited for relating factative imperfective clauses and their serial-component variants. The following positions are most frequent and are presented in a single line to show more concisely the structure of the typical imperfective Dii clause:

Te₁ S PN-ML-T P I O Te₂ Lo IA Man Sim CM

Te	temporal	S	noun subject
PN-ML-T	pronoun subject	P	verbal predicate
I	indirect object	O	nominal object
Lo	locative	IA	instrument accompaniment
Man	manner	Sim	similitude
CM	clause marker		

1. Te₁, S and PN-ML-T positions may occur only in the initial serial component, being always absent in (but shared with) the following component clause(s).

2. In the position(s) following the initial predicate and preceding the terminal predicate, only certain (nuclear) positions may occur: I, O₁, O₂, O₃, CG, C₂, and C₃. Several object positions are distinguishable, and also more than one ‘complement’ position (C). See chapter 5, especially Table 5.2, for fuller details on where each position occurs.

3. An object position occurring in one clause is not repeated in any of the following component clauses as long as the object is understood to apply for each verb. (A few examples show a noun object is replaced by a pronoun in the following component clause).

4. Lo, IA, Man, Sim, and CM positions may occur only in the terminal component clause, but may (or may not, according to the case) be shared with the preceding predicates.

5. A negative clause marker (and therefore predicate) may occur only if the terminal predicate is negative, in which case one or more of the preceding predicates may also be negative, but an affirmative predicate may not occur between two negative predicates.

The following examples will illustrate the above rules. Broken lines show the sphere of influence of positions ‘shared’ by more than one component clause.

(2) Rules 1, 4: (Initial and terminal: intransitive)

	T _e ₁		S	PM	P _i	P _i	Lo

Yóǵó	yǵǵ	kà'ǵm-é	máa nán	'wààpád	vũ sǵǵ	yaa	sàà-lí.
T _e ₁ -----							(4-9G)
S-----							
PM-----							
-----Lo							

Tomorrow mouth morning-in foc man all they gather come village-square-in
 (Tomorrow morning everyone must gather in the village square.)

(3) Rule 1: (Initial: intentional, terminal: locative)

	P _M	P _{int}	CG	P _{lo}	Lo

V _H	làà-	n	nan	yúúlí	dí kaa- lí.
PM-----					

They go-for-me dough working are-there village-in
 (She (plural of respect) went to fix me food ('couscous') in the village.)

(4) Rules 1, 2, 3, 4: (Initial, medial and terminal: transitive)

	P _M	P _{tr}	O ₁	P _{tr}	P _{tr}	Lo

V _H	kéé	dǵǵ gǵǵ	gǵbò	zùù	wũ-lí...	(3-136)
PM-----						
O ₁ -----						

They leave pot carry leave go-down there
 (They carry the pot and leave it there.)

(5) Rules 1, 2, 3, 4: (Initial: transitive, terminal: ditransitive)

	P _M	P _{tr}	O ₁	P _{di}	I	P	Man

...ùù	yúú	nan	ya	pǵǵ	ba	ya	vǵǵná. (3-126)
PM-----							
O ₁ -----							
-----Man							

...they-IMPV work dough come carry-to us-2 come fast
 (...that she (plural of respect) should fix the food and bring it to us fast.)

(6) Rule 5: (Initial and terminal: transitive)

PM	P _{tr}	P _{tr}	$\overbrace{\quad\quad\quad}^c$	CM	E
Mí	sòò	hòn		né	sám. (4-9M)

PM-----
 I search see-NEG F-I-NEG at-all
 (I've looked but haven't found it at all.)

NB: the symbol $\overbrace{\quad\quad\quad}^c$ indicates there is negative agreement between the clause marker and the verb.

Examples of the imperative (IMPV) and factative perfective (PERF) moods/aspects in serial clauses follow.

(7)	PM	P _{tr}	O ₁	P _{tr}	CM
	Àm	fáá	sám	vù là tè	ú. (2-6b)

You-IMPV gather garment pl go wash IMPV
 (Gather up the clothes and go wash them!)

(8)	PM	P _{tr}	O ₁	P _{tr}	CM
	Àm	là	bè zè' dè		ú. (2-12b)

You-IMPV go take fish dress-out IMPV (Go dress out the fish!)

(9)	PM	P _{di}	I	O ₁	P _{tr}	CM
	Mó	là vù-	n	fóó	gbò	sú'ú. (4-1)

You go expose-me body leave F-P (You've exposed me!)

(10)	PM	P _{tr}	O ₁	P _i	P _i	CM	Lo	Ideo
	Ø	gàñ	bàà	nóó	táəd	pèè	dii	mbàan
	He carries basket eye wide rec stands sits-together F-P hand-in							
	kəŋŋə (4-7)							

(He holds his large-holed basket and stands there with it in his hand without putting it down.)

6.3 RELATIVE FREQUENCY OF FACTATIVE IMPERFECTIVE CLAUSES IN SERIAL CONSTRUCTIONS

This analysis wouldn't be complete without some indication of the relative frequency of the clauses under discussion. Table 6.2 is based on the clause file made for my M.A. thesis (Bohnhoff 1968), modified to distinguish also the objective complement and dative constructions.

The first column in Table 6.2 includes negative forms and all independent factative imperfective clauses. Those factative clauses that serve as serial-component variant clauses are tabulated separately in the second column. This chart serves to alert the reader to the importance of serial-component variants in the total picture of clause frequency.

clause type	independent	serial
Intransitive	97	197
Descriptive	3	0
Equative	5	0
Locative	6	19
Transitive	144	231
Reciprocal	1	3
Object complement	0	0
Ditransitive	17	21
Dative	21	2
Stative/passive	4	9
Desiderative	13	0
Inchoative	14	1
Intentional	7	3
Introducer _{tr}	31	7
Introducer _{di}	93	14
Perception	13	0

Table 6.2: Frequency of independent factative imperfective clauses and serial-components in seven folktales

CHAPTER 7

DERIVED CLAUSES

7.0 INTRODUCTION

The whole set of factative imperfective clauses may be regarded as in some sense basic or central to the Dii clause system. This permits the analyst with a minimum of repetitiveness to describe most of the remaining Dii clauses as ‘derived’ from the factative imperfective. By applying certain rules to the whole series of factative imperfective clauses in Table 5.2, we arrive in theory at another whole series of perfective clauses, as in 5.4, or of imperative clauses, or of subordinate clauses of several different types. Some of the limitations of this general rule will be discussed in 7.1.1.

In this chapter will be described the characteristics, with examples, for each set of derived clauses, always keeping the factative imperfective mood/aspect as the point of departure unless explicitly stated to the contrary. Only when a position in a derived set of clauses differs from its factative imperfective counterpart will it be mentioned here. All unmentioned positions will be assumed to be identical with those found in the factative imperfective mood/aspect, whether nuclear or peripheral.

Each of the moods about to be described is emically contrasted with the other moods, differing both in meaning and in form; each set of subordinate clauses contrasts with all other sets of subordinate clauses and with each mood; and the variations need for emphatic and interrogative constructions are described last.

The main lines of derivation may be diagrammed as in Figure 7.1.

- Factative imperfective (FACT-IMPF) clauses may be transformed into
 - a)-any mood/aspect (FACT-PERF, VN, IMPV, HYP),
 - b)-several of the subordinate clause types (Sb TeLoC, Sb Rel, Sb Desid, Ind Quo, Sb ???, Sb Con, Sb Comp...).
- Factative perfective clauses may be transformed into
 - a)-hypothetical mood,
 - b)-several of the subordinate clause types (Sb TeLoC, Sb Rel, Sb Desid, Ind Quo, Sb ????, Sb Con, Sb Comp...).
- Imperative clauses may be transformed into Ind Ord and Sb Pur clauses.
- Hypothetical clauses may be transformed into Sb Hyp clauses.
- Serial clauses may occur wherever an ordinary factative clause occurs.

--Interrogation and emphasis are not mutually exclusive but may occur simultaneously in the same clause, but are not diagrammed in the figure but explained at the end of the chapter.

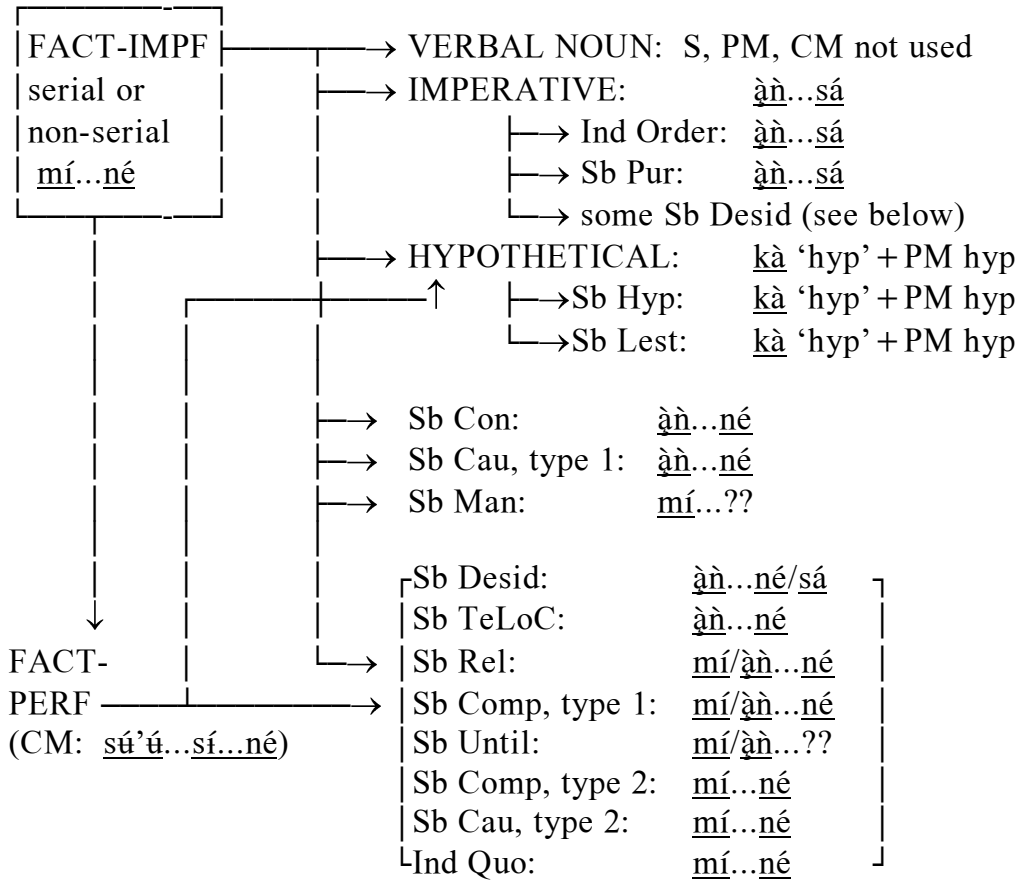


Figure 7.1: Principal lines of clause derivation

This chapter treats the following major topics:

- 7.1 modal derived clauses (IMPV, VN, HYP)
- 7.2 subordinate derived clauses (Sb TeLoC, Sb Rel, Sb Desid, Ind Quo, Ind Ord, Sb Hyp, Sb Pur, Sb Con, Sb Cau, Sb Man, Sb Comp)
- 7.3 reference variants (logophoricity)
- 7.4 interrogative derived clauses
- 7.5 emphatic derived clauses
- 7.6 topicalization

7.1 MODAL DERIVED CLAUSES (IMPV, VN, HYP)

These derived moods/aspects will be discussed as follows:

- 7.1.1 Occurrence limitations
- 7.1.2 Imperative (IMPV)
- 7.1.3 Verbal nouns (VN)
- 7.1.4 Hypothetical (HYP)
- 7.1.5 Summary of mood/aspect signals in PM and CM

7.1.1 Occurrence limitations. Since certain of the factative imperfective clauses have no corresponding derived forms in some other moods/aspects, I'll now designate which of them do have derived forms and in which moods/aspects they have been found. Table 7.1 has an x wherever a given FACT-IMPV clause has a corresponding derived form, and a 0 where no derived clause has yet been found. A z indicates the the derived clause concerned was an elicited form and has not yet been found in unelicited text. This completes the table given early in section 5.4.

FACT-IMPV	FACT-PERF	IMPV	VN	HYP
SIMPLE CLAUSES				
Intransitive	x	x	x	x
Descriptive	x	0	z	0
Transitive	x	x	x	x
Object Complement	z	?	?	?
Equative	x	x	0	0
Locative	x	0	0	0
Reciprocal	x	0	z	0
Ditransitive	x	x	x	0
Dative	x	z	z	x
stative/passive	x	x	z	0
COMPLEX CLAUSES				
Desiderative	x	z	0	0
Inchoative	x	0	0	0
Intentional	x	z	z	0
Introducer (transitive)	x	0	0	0
Introducer (ditransitive)	z	x	z	0
Perception	x	0	0	0

Table 7.1 Occurrence limitations of modal/aspectual derived clauses

7.1.2 Imperative mood (IMPV). The imperative mood is characterized by

- 1) its PN-ML composite position, which always contains an àh series pronoun, with no tense (T) position,
- 2) the optional occurrence of the second person singular and plural pronouns in the PN-ML composite position when the context makes the meaning clear, and
- 3) its imperative clause marker, which is distinctive in the negative: sá in all contexts; in the affirmative, the imperative clause marker is identical with the factative imperfective /ú/ (Table 5.1).

Imperative clauses may be transformed into emphatic and/or interrogative clauses and they may have variants which serve as serial component clauses (6.1 and 6.2).

The PN-ML composite position involves all three persons, and when not in the second person, is translatable by ‘let me...’, ‘let him...’, or by ‘I must...’, etc. The second person is the equivalent of the English imperative.

Some examples:

INTRANSITIVE:

(impv1) PM	P _i	CM	
----	-----	--	
Àm	dó zùù	ú!	(4-9F)
You-IMPV enter descend IMPV (Enter!)			

TRANSITIVE:

(impv2) PM	P _{tr}	O ₁	CM	
--	----	-----	---	
Ì	fẹẹ	moo wòò	sá!	(3-127)
You-IMPV receive word his IMPV-NEG (Don't believe his word!)				

DITRANSITIVE:

(impv3) PM	P _{di}	I	Lo	
--	---	----	-----	
À	pú	kẹẹ	nag- á.	(3-110)
He-IMPV give-to wife hand-in (He must hand his wife (the money).)				

DITRANSITIVE INTRODUCER:

(impv4) PM	P _{say} di	I			O ₄
--	----	--	-----		
Ì	q̄d-	d̄u:	«...líw	ka	'yé ȳagg- a?»
You-IMPV say-to-him: '...robber sb-he possesses mouth-Q'					
(Tell him, '...does a robber have a right to speak?') (3-128)					

TRANSITIVE (SERIES):

(impv5) PM	P _{tr}	O ₁	P _{tr}	Lo
--	-----	----	-----	-----
Ì	là pè'	gbág	'yé bàa yè	yúba. (3-135)
You-IMPV go help-lift clay-pot put man this up				
(Help lift this pot up on the man's head.)				

- 7.1.3 Verbal noun mood (VN). The verbal noun clause is characterized by:
- 1) no Te₁, S, PN-ML-T, or CM positions;
 - 2) a verbal noun always fills the predicate position;
 - 3) no negative form;
 - 4) indirect and direct object positions are retained and precede the predicate instead of following it, as they do in factative clauses, and the dative suffix is attached to the verb which precedes the indirect object position, i.e., to the verb of the main clause;
 - 5) verbal noun clauses occur only:
 - a) in the C₄ slot of the inchoative clause,
 - b) in the O₃ slot of the desiderative clause,
 - c) in the CG slot of the intentional clause,
 - d) in some slots ordinarily filled by nouns, like
 - detail slots in compound nouns (3.4.4 and 3.5.3), or
 - head slots in noun phrases (4.2), or
 - in axis slots in several relator-axis phrases (4.9 and 4.10).

The verbal noun mood is not, therefore, an independent mood, as are the other moods, nor does it very much resemble any of the subordinate clauses. It can easily be labelled a 'nominal mood'.

Several examples of the intentional and inchoative clauses containing verbal noun clauses may be found in 5.1.3.

Further examples:

TRANSITIVE VN in INTENTIONAL:

(vn1) PM	P _{int}	CG:VN _{tr}	CM
----	----	-----	--
V _{tr}	làà	púg tà''í-	ì. (4-35E)
They go animal shooting-F-I (They went hunting.)			

DITRANSITIVE VN in INCHOATIVE:

(vn2)	PM	P _{inch}		C ₄ :VN _{di}	CM
	---	----		-----	--
	Mí	did		ví moo tóó òlẹ-	ẹ. (3-94)
	I	am-in-process-of		you word other saying-F-I	
		(I'm telling you something.)			

7.1.4 Hypothetical mood (HYP). The hypothetical mood is used mainly in the initial and primary positions of hypothetical condition sentences (8.2). The primary position of this sentence may be filled without an accompanying subordinate clause. This sentence type characterized by:

- 1) the particle kà 'hypothetical' which immediately precedes the PN-ML-T composite position in both primary and initial clauses in hypothetical sentences;
- 2) only hyp_{present} and hyp_{past} subject pronouns may fill the PN-ML-T composite position;
- 3) the clause marker is the same as in the perfective and imperfective clauses except that sá can be used in the negative when the hypothetical clause is independent, especially when expressing displeasure concerning a past event as in (hyp1) below; the hypothetical has thus two possibilities in the negative;
- 4) a demonstrative may occur near the end of the clause;
- 5) the hypothetical clause may be transformed into a TeLoC derived subordinate clause (not shown in Figure 7.1).

Displeasure concerning a past event is illustrated by the following sentence (from Mark 9:39), which illustrates an imperative idea:

(hyp1)	Hyp	PM		P _{tr}	O ₁	CM
	Kà	vín		há''-	u	sá!
	Hyp	you-hyp _{present}		forbid-him	IMPV-NEG	
		(You shouldn't have forbidden him!)				

Independent hypothetical clauses without an imperative idea also occur, taking the normal factative negative clause marker:

(hyp2)	Hyp	PM		P _{tr}	O ₁	CM
	Kà	mín		kìn	dúú	né! (2-77h)
	Hyp	I-hyp _{past}		feel-NEG	fear	HYP-NEG
		(I wouldn't have been afraid.)				

7.1.5 Summary of mood/aspect signals in PM and CM. We're now able to draw together all the moods and aspects into a single chart, expanding what was presented at the very end of chapter 5:

mood	aspect	negative CM	affirmative CM
factative (PM = <u>mí</u> series) and hypothetical <i>kà</i> (PM = hyp series)	perfective	with locative P: <u>sí ... -lí</u> /sí...né/ (= <u>sí...né</u> , <u>lá...né</u> , <u>ná...né</u> , <u>ndé...né</u> , <u>sú'ú né</u> , <u>né sú'ú</u>)	/sú'ú/ (= <u>sú'ú</u> , <u>sí</u> , <u>sí...ú</u>) + exclamative (= <u>mà</u> , <u>mày</u>)
	imperfective	with locative P: <u>-lí</u> /né/ <u>né</u>	/ú/ (= <u>ú</u> , <u>-ì</u> , <u>wɛ</u> , <u>yɛ</u> , <u>-w</u> , <u>yɔ</u> , <u>nɔ</u> , none)
imperative (PM = <u>àñ</u> series)	(imperfective)	<u>sá</u>	'unmarked' form

Table 7.2: Summary of mood/aspect signals in PM and CM

7.2 SUBORDINATE DERIVED CLAUSES (Sb TeLoC, Sb Rel, Sb Desid, Ind Quo, Ind Ord, Sb Hyp, Sb Pur, Sb Con, Sb Cau, Sb Man, Sb Comp, Sb Until, Sb Lest)

Subordinate clauses are distinguished from independent clauses by the subordinating phrases or words/roots (or the lack of them) which may introduce and/or close the clause. Their positions of occurrence on the sentence, clause or phrase level also serve to contrast them with other clause types. The thirteen most frequent sets of derived clauses will be treated here.

- 7.2.0 occurrence restrictions
- 7.2.1 temporal-locative-conditional (Sb TeLoC)
- 7.2.2 relative (Sb Rel)
- 7.2.3 desiderative (Sb Desid)
- 7.2.4 indirect quotation and indirect order (Ind Quo, Ind Ord)
- 7.2.5 hypothetical (Sb Hyp)
- 7.2.6 purpose (Sb Pur)
- 7.2.7 concessive (Sb Con)
- 7.2.8 cause (Sb Cau)
- 7.2.9 manner (Sb Man)
- 7.2.10 comparison (Sb Comp)
- 7.2.11 'until' (Sb Until)
- 7.2.12 negative purpose 'lest' (Sb Lest)

All obligatory clause markers from other moods are retained in derived subordinate clauses, but the FACT-IMPF affirmative clause marker /ú/ needs special treatment here since it does not occur under certain conditions in certain subordinate clauses. It has been labelled 'unmarked' in Table 7.2 and must be analyzed and described as it occurs and if it occurs in a given subordinate clause.

The initial morpheme of the subordinate phrase occurs between the Subject and the PN-ML-(T) positions, which means that the Temporal 1 and Subject positions precede it.

The characteristics of the clauses listed below are not all distinctive, but at least two listed for each set of clauses will be contrastive.

Throughout this chapter, the symbol $\overline{\quad}$ or $\overline{\quad}$ will join elements of a discontinuous structure, and concord or agreement between discontinuous elements of a single structure will be indicated by: $\overline{\quad}$ c.

7.2.0 Occurrence restrictions. In principle, all FACT-IMPF and FACT-PERF clause types have counterparts in most types of subordinate clauses, with the exceptions outlined in Figure 7.1 and the accompanying discussion. The following tables show (with ‘x’) which potentialities are exemplified by examples in my clause file archives; see 7.2.8 for an explanation of ‘y’. Other than those exceptions already mentioned, items lacking in the table below are probably due to accidents of the data and further research would show examples of most of the missing items.

FACT-IMPF	SUBORDINATE CLAUSE TYPES													
	tlc	rel	des	iq	io	hyp	pur	con	cau	man	cmp	unt	les	
SIMPLE CLAUSES														
Intransitive	x	x	x	x	x		x	x	x	y	x	x	x	x
Descriptive		x												
Transitive	x	x	x	x	x	x	x	x	x		x	x	x	x
Object Compl.														
Equative	x	x		x		x		x				x		
Locative	x	x		x		x		x				x		
Reciprocal				x	x									
Ditransitive	x	x	x	x	x		x	x	y	x	x			
Dative	x	x		x									x	x
stative/passive	x													x
COMPLEX CLAUSES														
Desiderative	x	x		x										
Inchoative	x	x	x	x				x	x	y		x		
Intentional	x			x										
Introducer _{tr}	x	x						x	x	y				
Introducer _{di}				x				x		y				
Perception	x													

Table 7.3 Occurrences of FACT-IMPF clauses in derived clause types

NB: 1) ONLY the ‘ordinary’ uses of the CM are shown here, keeping the ‘strong’ uses mentioned at the end of 5.1.1 separate at this time; 2) series clause variants of IMPF clauses are included in the count in table 7.3.

tlc = TeLoC temporal-locative-conditional
 des = Desid desiderative
 iq = Ind Quo indirect quote
 io = Ind Ord indirect order
 hyp hypothetical
 pur purpose

con	concessive
cau	cause
man	manner
cmp	comparison
unt	until
les	lest

In the following chart, ‘-’ indicates a systematic absence of the possibility listed.

SUBORDINATE CLAUSE TYPES													
FACT-PERF	tlc	rel	des	iq	io	hyp	pur	con	cau	man	cmp	unt	les
SIMPLE CLAUSES													
Intransitive	x			x	-		-	-				x y	
Descriptive							-	-					
Transitive	x	x	x	x	-	x	-	-					
Object Compl.							-	-					
Equative							-	-					
Locative							-	-					
Reciprocal			x				-	-					
Ditransitive	x	x					-	-					
Dative	x						-	-					
stative/passive							-	-					
COMPLEX CLAUSES													
Desiderative	x						-	-					
Inchoative	x						-	-					
Intentional							-	-					
Introducer _{tr}							-	-					
Introducer _{di}							-	-					
Perception							-	-					

Table 7.4 Occurrences of FACT-PERF clauses in derived clause types

7.2.1 Temporal-locative-conditional (Sb TeLoC). The characteristics of the Sb TeLoC clause are:

- 1) its subordinating phrase (4.13.1):
 +(± Init:te/lo/tòw... ± H:(± ká ± ka) ... ± Ter:dem/rec/ná’)
- 2) the àn series pronoun which fills its PN-ML composite position;
- 3) the FACT-IMPf affirmative ‘unmarked’ /ú/ CM (see Table 7.2) is usually suppressed in Sb TeLoC clauses; see 5.1.1 and the remarks just before and concerning the illustrations (30) through (37); this CM often

fails to occur as if the Sb TeLoC were a main clause along the time line in narration and other continuous text;

4) in the negative the CM is né;

5) it occurs in the initial and terminal slots in ‘complex’ sentences.

Note that a subordinate-final ‘binder’ demonstrative is common in West African languages to help show exactly where the subordinate clause boundary is located (Bendor-Samuel 1989:34).

Either FACT-IMPF or FACT-PERF clauses may be transformed into Sb TeLoC derived clauses.

Some imperfective examples:

(tlc1) $\overbrace{\text{Sb} \quad \text{S} \quad \text{Sb-PM} \quad \text{P}_i \quad \text{Sb}}^{\text{Sb TeLoC}}$

 Sèy vùd ka sà' máa,... (4-5)
 Time night sb-it darkens dem (When night has fallen,...)

(tlc2) $\overbrace{\text{Sb-PM} \quad \text{P}_{\text{stv}} \quad \text{Lo} \quad \text{Sb}}^{\text{Sb TeLoC}}$

 Ka nə'əy ka' dágá téé,... (3-121)
 Sb-he bends-down side one dem (If he bends down to one side,...)

(tlc3) $\overbrace{\text{Sb} \quad \text{Sb-PM} \quad \text{P}_{\text{tr}} \quad \text{O}_1 \quad \text{Lo} \quad \text{Sb}}^{\text{Sb TeLoC}}$

 Sèy ka màà púg bó' máa,... (3-138)
 Time sb-he finds animal close dem
 (When he finds the animal is close,...)

(tlc4) $\overbrace{\text{Sb-PM} \quad \text{P}_{\text{tr}} \quad \text{O}_1 \quad \text{CM} \quad \text{Sb}}^{\text{Sb TeLoC}}$

 Kám họn mí ní téé,... (4-40F)
 Sb-you see-NEG me F-I-NEG dem
 (If you don't see me,...)

(tlc5) $\overbrace{\text{Sb} \quad \text{S} \quad \text{PM} \quad \text{P}_{\text{di}} \quad \text{I} \quad \text{O}_1}^{\text{Sb TeLoC}}$

 Tòw wáḡ- m à pú- m siidè... (3-111)
 If husband-your he gives-you money...

Perception clauses: when the FACT-IMPF is transformed into Sb TeLoC clauses, a double ka is found to occur, the first in its usual slot in the subordinating teloc phrase, the second preceding the PN-ML-T position in the object 5 clause:

(tlc6)

Sb	S	Sb-PM	P _{perc}	O ₅	Sb
Sèy	Mbùù	ka	kì	Zág	ka
Time	Hyena	sb-he	hears	Panther	sb-he
(When Hyena hears Panther say that,...) (4-9B)					

(tlc7)

Sb	Sb-PM	P _{inch}	C ₄	Sb
Sèy	ka	dì	hàḃ	télí
Time	sb-he	in-process-of	wild-yam	washing
(While he is washing the wild yams,...) (4-9D)				

A perfective clause example (transitive):

(tlc8)

S	Sb-PM	P _{tr}	CM	Sb
Dàg-	à	gbòò	ka	záń
Neighbor-	his	friend	sb-he	forgets
(When his friend had forgotten,...) (3-146)				

7.2.2 Relative (Sb Rel). Speakers can choose among a rather complicated set of options in this clause. The characteristics of the (restrictive) relative subordinate clause are as follows:

1) its subordinating phrase (4.13.2):

± H:(ká ± bà/ka, or bà + ka, or bà)... ± Ter:dem/rec/ná',

(but since all elements of this phrase are optional, some clauses don't contain any!);

2) the subject pronoun filling the PN-ML(-T) composite position varies according to which subordinator(s) are chosen by the speaker:

--with ká alone, the mí series is used;

--with ká...bà, or bà alone, the mí_{fut/nonfut} sets are used;

--with ká ka or bà ka, the àḅ series is used;

--with no subordinator, the àḅ series is used;

3a) the negative agreement of the subordinate verb with the verb of the preceding primary clause when this latter verb is negative (although the subordinate verb's meaning remains affirmative).

3b) The normal negative CM inside the clause without outside agreement is né; see the last examples below.

- 4) The FACT-IMPF ‘unmarked’ /á/ CM (see Table 7.2) is usually suppressed in Sb Rel clauses. See 5.1.1 and the remarks just before and concerning the illustrations (30) through (37). This CM fails to occur exactly as if the Sb Rel were a main clause along the time line in narration and other continuous text.
- 5) It typically occurs as a modifier in noun phrases.

Factative imperfective and perfective clauses may be transformed into relative subordinate clauses. Note that a subordinate-final ‘binder’ demonstrative is common in West African languages to help show exactly where the subordinate clause boundary is located (Bendor-Samuel 1989:34), even if in this case it’s optional! Often in Sb Rel, the final demonstrative is a recall morpheme (pèè, tèè, súu).

Relativizable positions: Noun phrases may be relativized on if they are subject (S), direct object (O), indirect object (I), possessed or possessor noun, or object of a pre-/postposition (OP). In addition, any of these noun phrases may be fronted into topicalized position (TOP), and their fronting seems not to alter their relativizability; i.e., any noun phrase fronted/topicalized brings its Sb Rel modifier along with it.

The following abbreviations and symbols will be used throughout this subsection:

- Slashes / before and after a Sb Rel in an example will be used to help identify it.
- Subscripts i and j are used to signal coreferentiality.
- The function of the noun phrase relativized on is placed in single parentheses (...).
- The function symbol of the noun phrase position relativized into is placed in double parentheses ((...)).
- F-I = FACT-IMPF.
- F-P = FACT-PERF.

In this subsection, I draw the reader’s attention to the functions in single parentheses:

SUBJECT:

(r1)	S	PM	P _i	CM
	<div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-right: 5px;">(S)</div> <div style="margin-right: 5px;">Sb-PM</div> <div style="margin-right: 5px;">P_{tr}</div> <div style="margin-right: 5px;">((O₁ = Ø))</div> <div style="margin-right: 5px;">Sb</div> </div>			
	Sààm _i / kám fèè	yè, / vɛ _i	dɛɛ	né. (4-35N)
	Clothes _i sb-you buy	dem they _i	are-good	F-I-NEG
	(The clothes you bought are not good.)			

DIRECT OBJECT:

(r2) PM P_{tr} O₁

 (O₁) ((Sb-PM)) P_{lo} Lo

 Mí vùd hẹn_i víg / ka_i đĩ tíj-gòd-lí. /
 I remove thing_i dirty sb-it_i is-there in- it- in
 (I remove the dirt that is in it (a pocket).)

INDIRECT OBJECT:

(r3) S PM P_{di} I

 (I) ((Sb-PM)) P_{di} I O₁ Sb

 Kadia_j Ø híjd nán_i / bà_i ọd- đũ_j moo pèè /: «... »
 K_j. he answered-to man_i sb-he_i say-to-him_j word rec
 (Kadia answered the man who had told him that: ‘...’)

OBJECT OF A PRE-/POSTPOSITION:

(r4) PM P_i Lo

 (OP) S Sb-PM P_i ((OP=Ø)) Sb rel

 V_h là yà ya / mbìgì bà pɛ pèè- / lí. (3-140)
 They go arrive place hammer sb-it fell rec- at
 (They arrived at the place where the hammer had fallen.)

POSSESSED NOUN (also topicalized):

(r5) S-TOP (S) PM P_i CM

 (S) Sb-PM P_{tr} ((O₁=Ø)) Lo Sb TOP
 ----- (4-4)
 Bạ'_i / kám' dọg- gà bùù la' yúba yẹ / niì, ya wòd Ø đũũ né.
 Egg_i sb-you go-up-go sit-on tree in dem dem, place its it is-good
 F-I-NEG
 (The egg(s) which you are sitting on up in the tree, their place is not good [i.e., they could fall in a storm].)

POSSESSED NOUN (direct object):

(r6) PM P_{tr} O₁ CM

 S Sb-PM P_{desc} C₁ Sb

Mín tè sààm waa wòò / ka mbàà vǐǐgná yè / nɔ. (4-95)
 I-FUT wash clothes; child his sb-it_i is dirty dem F-I
 (sààm is possessed noun, waa possessor noun)
 (I will wash the child's clothes that are dirty.)

POSSESSOR NOUN (direct object):

(r7) PM P_{tr} O₁ CM

 S Sb-PM P_{inch} C₄ Sb

Mín tè sààm waa / ka ði yaalí yè / wòò nɔ. (4-95)
 I-FUT wash clothes child_i sb-he_i is coming dem his_i F-I
 (sààm is possessed noun, waa possessor noun)
 (I will wash the clothes of the child that's coming.)

POSSESSOR NOUN (subject):

(r8) S PM P_{desc} C₁

 Sb-PM P_{inch} C₄ Sb

Sààm waa / ka ði yaalí yè / wòò Ø mbàà là vǐǐgná. (4-95)
 Clothes child_i sb-he_i is coming dem his_i 'it' is go dirty
 (The clothes of the child coming there, are dirty.)

SUBJECT TOPICALIZED:

(r9) S-TOP PM P_i Man Lo

 (S) ((Sb-PM)) P_{di} I O₁ Sb TOP (S)

Wakéǐ /ka_i kód wèǐ hakkilo má /na...vu_i mbàà dǎn bab-bí... (3-92)
 Woman_i/sb-she_i do-for husband-her obedience dem / TOP...they_i
 stay only field-in
 (The women who are obedient to their husbands stay continually
 in the field (working).)

OBJECT TOPICALIZED:

(r10)

	O ₁ -TOP		Sb	S	PM	P _i	CM	Sb
(O ₁)	TOP	Sb-PM	P _{tr} ((O ₁))					
Waa _i	ví	máa / kíí	hạạ	vũ _i /,	sèy	gòm	à	yaa sú'ú tée,
Child _i	your	TOP	sb-you	bear	them	time	famine	it comes F-P dem
PM	P _{tr}	(O ₁)	Lo	Q				
--	-----	----	---	---				
ví	'yé	vũ _i	tế-	lá?	(3-59)			
you	keep	them _i	where-Q					
(The children which you have given birth to--where will you keep them when a famine comes?)								

In view of Keenan's hierarchy (1972:440) of relativizable positions, we find all positions are relativizable in Dii except the last one: subject / direct object / indirect object / object of true preposition / possessor noun phrase / objects of comparative particles.

The last possibility has no counterpart in Dii syntax, which has no comparative particle but uses a series of two verbs in comparisons thus: Kadia is-tall surpasses Ina.

Positions relativized into: Here we meet essentially the same list as in the preceding subsection: subject, direct and indirect object, object of a pre-/postposition, and possessed or possessor noun.

The sentences in the above subsection contain several examples of subject and direct object noun phrases in doubled parentheses ((...)). The following are examples of indirect objects and objects of pre-/postpositions.

INDIRECT OBJECT:

(r11) PM P_{tr} O₁

CM								
(O)	Sb-PM	P _{di}	((I))			O ₁	Sb	pl
Vũ	bèè	nán _i / bà	ọd	vũ _i	moo	hẹn	lálí	pèè / vu yũ.
They	call	person _i sb-he	calls	them _i	word	thing	eating	rec pl F-I
(They're calling the people that he invited to a meal.)								

OBJECT OF POSTPOSITION:

(r12) PM P_{tr} CM O₁ CM

(O) Sb-PM P_{tr} O₁ ((OP))-Lo Sb

Mó nùh sǐ béég_i ùu dǝ- m- mu_i- lí máa / sú'ú. (3-54J)
 You find F-P grave_i they bury-you-there_i-in dem F-P
 (You've found already the grave where they will bury you [or:
 where you will be buried].)

OBJECT OF PREPOSITION TOPICALIZED:

(r13) OP-TOP Sb-PM P_{tr} O₁ Cause Sb TOP

rel ((OP))

----- (3-113)

Tóm kǝnǝné_i yè / kán dǝama ví moo wòò_i té / naa,...
 Street sweeping_i dem sb-I bother you because-of it_i dem TOP
 (Now concerning the sweeping of the streets that I'm always
 pestering you about,...)

POSSESSOR NOUN (subject), also TOPICALIZED:

(r14) S PM P_{desc} C₁

S-TOP Sb-PM P_{inch} C₄ Sb

----- ((x)) (4-95)

Waa / ka dǝ yaalí yè /, sǝam wòò Ø mbàa là vǝgná.
 Child_i sb-he_i is coming dem, clothes_j his_i it_j 'is' go dirty
 (sǝam is possessed noun, waa possessor noun)
 (The clothes of the child that's coming are dirty.)
 [NB: the ((x)) above the line of Dii text indicates where the
 possessor noun normally occurs.]

POSSESSED NOUN (direct object), also TOPICALIZED:

(r15) O₁-TOP PM P_{tr} ((O₁)) CM

S Sb-PM P_{desc} C₁ Sb

Sǝam waa wòò / ka mbàa vǝgná yè /, wún tǝ- ge ú.
 Clothes_i child_j his_j sb-it_i is dirty dem, he_j-FUT wash-it_i F-I
 (sǝam is possessed noun, waa possessor noun) (4-95)
 (The child will wash his clothes that are dirty.)

An example of negative grammatical agreement inside the subordinate relative clause (the c after the bar indicates concord or agreement):

(r16)

S	PM	P _{tr}	┌──────────────────────────────────┐			O ₁	CM	└ ^c ┘
-----	---	-----	-----			---	---	---
Bậậạm	Ø	gàan	hẹn	à	kón	né.	(3-121)	
Rabbit	he	knows-NEG	thing	he	does-NEG	F-I-NEG		
(Rabbit doesn't know what to do.)								

An example of the F-P clause (also with negative agreement):

(r17)

PM	P _{tr}	┌──────────────────────────────────┐				O ₁	CM	└ ^c ┘
---	-----	-----				---	-----	-----
Ø	gàan	hẹn	tóó	à	kón	sí	né.	(4-7)
He	knows-NEG	thing	other	he	does-NEG	F-P	NEG	
(He doesn't know what to do.)								

Two examples of the negative inside the Sb Rel without external influence follows; the first in F-I, the second F-P.

(r18)

S	Sb-PM	P _{tr}	┌──────────────────────────────────┐			O ₁	CM	└ ^c ┘	Sb lo
-----	-----	-----	-----			---	---	---	-----
...hũũ...	kũũ	hộñ	ba	né	máa-lệ.	(3-54K)			
...forest...	sb-they	see-NEG	someone	F-I-NEG	dem-in				
(...a forest in which no one can be seen.)									

(r19)

S	Sb-PM	P _i	CM	Sb					
-----	-----	-----	-----	-----					
(...sèy)	mam ka	làa ná	né	máa-(lệ).	(3-54U)				
(...time)	rain	sb-it	go	F-P	NEG	dem-(in)	[in this example, the normal verb suffix - <u>n</u> is suppressed before <u>n</u> in the speech chain following a long vowel]		

7.2.3 Desiderative (Sb Desid). The characteristics of the subordinate desiderative clause are:

- 1) its lack of a subordinator normally, although some people do use bà here as in (d3) below;
- 2) the àñ pronoun filling the PN-ML composite position, although in many cases the subject pronoun of the Sb Desid is from the bi series due

- to coreference with the preceding dominating subject pronoun--a fact that on the surface disguises the underlying à pronoun that ‘belongs’ here;
- 3) most people use /né/ in the negative imperfective, see (d2) below; but some shade the meaning over into an Indirect Order by using the negative sá (d3);
- 4) negative agreement between the subordinate verb and the verb in the primary clause (d4) (cf. Sb Rel); and
- 5) the FACT-IMPV ‘unmarked’ /á/ CM (see Table 7.2) is usually suppressed in Sb Desid clauses. See 5.1.1 and the remarks just before and concerning the illustrations (30) through (37). This CM fails to occur exactly as if the Sb Desid were a main clause along the time line in narration and other continuous text.
- 6) It occurs in the Object 6 slot of the desiderative clause.

Both FACT-IMPV (d2, d4) and FACT-PERF (d5) clauses may be transformed into Sb Desid clauses. The Sb Desid in (k1) in 5.1.3 becomes (d1) here:

(d1) PM P_{di} I O₁
 --- ----- -- ----
 ...ì dùù ɸ- n tóó. (3-54I)
 ...you-IMPV follow tell-me other ((I want) you to repeat that.)

(d2) PM P_i IA CM
 --- ----- ----- ---
 (V_u híí) bi yáán kan zig tóó v_u né. (4-39)
 (They want) they-LOG mix with tribe other pl F-I-NEG
 (They don’t want) to mix with other tribes.) [Here the normal
 verbal negative agreement -n is absorbed in the speech chain by
 the final n of the verb after a long vowel.]

(d3) S Sb PM P_{tr} O₁ CM
 ----- --- ----- --- ---
 (Mó híí) tэндè bà à нòñ bi sá. (3-114)
 (You want) worm sb it-IMPV bite you-LOG IMPV-NEG
 ((You don’t want) the worm to infect you.)

(d4) PM P_{desid} O₃ CM^c
 --- ----- ----- ---
 Mó híín òò нòон bi móó-lẹ́ lig- í ní. (3-54J)
 You want-NEG we kill-NEG you-LOG your-at house-at F-I-NEG
 (You don’t want us to kill you at your house.)

(d5)		PM	P _{tr}	PM	O ₁	CM	Man
		---	----	---	-----	-----	
	(...kíí híí)	àa	fàn	ví	moo	yè	sú'ú pèń (tée,...)(3-144)
	(sb-you want)	we	discuss	we	problem	dem F-P	first (dem)
	(...if you want)	that	we	discuss	this	problem	first,...)

7.2.4 Indirect quotation and indirect order (Ind Quo, Ind Ord).

Both indirect quotations and orders use:

- 1) the optional subordinating root bà and
- 2) fill the Object 4 slot in introducer clauses.

They are differentiated, however, as follows:

- 3a) indirect quotations have a mí series pronoun filling the PN-ML-T composite position (with tense, transformed from factatives), while
- 3b) indirect orders have an àń series pronoun in the PN-ML slot (without tense), and can be considered transformations from imperatives;
- 4a) indirect quotations may contain only factative (IMPF or PERF) clause markers, and since they reflect direct quotations, they have a higher incidence of the ‘unmarked’ /ú/ CM’s as shown in Bohnhoff and Boyd 2003; while
- 4b) indirect orders are linked to imperatives, so in the negative we find sá, but note the affirmative IMPV CM /ú/ is the same as the IMPF (see Table 7.2);
- 5) if ká ‘far past’ occurs, it appears immediately following the noun subject (and just before bà in those cases where bà is also present); when several indirect quotes are strung together in a single object position, ká seems to occur only with the first of the series (see Acts 22:19 and 2 Peter 3:5-6), while bà may be repeated at the beginning of each clause in the series; see also next paragraph.

When a sentence introduced by a temporal-locative-conditional or hypothetical subordinate clause is transformed into an indirect quotation or order, both the initial subordinate clause and the primary clause take the subordinator bà. See example (io3) below.

Examples of indirect quotations:

(iq1)	Te ₁	S	Sb-PM	P _i	Lo
	-----	-----	---	----	-----
	...zàgà-lẹ	máa	Kpoo	bà	yaa yè-lí. (4-9H)
	...day-	in dem	Baboon	sb-he	comes here
	(...that	during the	day	Baboon	came here.)

(iq2) S Sb-PM P_{lo} Lo
 --- --- --- -----
 ...dòò bà òò Vùdyè'-'é. (3-89)
 ...beer sb-it is-in Vùdyè'- in
 (...that there's beer (for sale) in Vùdyè'.)

(iq3)

S	Sb-PM	P _{di} I P			O ₁
-----	-----	-----	---	---	-----

...Bàbàam bà dùù pàñ bi ya nan tóó. (4-9K)
 ...Rabbit sb-he follows carries them-LOG comes couscous other
 (...that Rabbit brings them more food.)

A transitive with ká:

(iq4) Sb/Te? Sb PM P_{tr} O₁ Man
 --- --- -----
 ...ká bà mín kó ba'ad Yésù wòò néélé nà'à. (Phil. 1:30)
 ...far-past sb I-nonfut do work Jesus his strong very
 (...that I used to work very hard for Jesus.)

Examples of indirect orders:

(io1) Sb PM P_{tr} O₁
 --- --- --- -----
 ...bà ùù pa moo... (4-9K)
 ...sb they-IMPV announce word
 (...that they should announce...)

(io2) PM P_{di} I O₁
 --- --- --- -----
 ...àn túd bi bab... (3-125)
 ...I-IMPV guard-for her-LOG field
 (...that I should guard her field.)

An example of a sentence quoted in indirect order form which requires two bà's:

(io3)

Init:Sb	TeLoC-F-P	Prim:Ind	Ord-F-I	Di

...tòw bà à hò ya mbìgì bì sù'ú pèñ tée, bà à tú'ud bi ú.
 ...if sb he sees place hammer his-LOG F-P first dem, sb he-IMPV
 show-to him-LOG IMPV (3-139)
 (...that if he_i sees the location of his_j hammer, he_i should show him_j.)

7.2.5 Hypothetical (Sb Hyp). The subordinate hypothetical clause is similar to the hypothetical clause in a ‘primary’ sentence position (7.1.4) and has the following characteristics:

1) its subordinating phrase (4.13.5):

± Init:tò/tòw ... + H: ± ká + kà ... + Ter:tée;

note the hypothetical morpheme kà and the subordinate-final ‘binder’ demonstrative tée that is common in West African languages to help show exactly where the subordinate clause boundary is located (Bendor-Samuel 1989:34);

2) only hyp_{present} and hyp_{past} subject pronouns occur in the PN-ML-T composite position;

3) its occurrence only in the initial position of hypothetical condition sentences (8.2).

Both FACT-IMPF and FACT-PERF clauses may be transformed into subordinate hypothetical clauses, with all the implications that has for clause marker occurrences. Example (h1) is IMPF affirmative, (h2) IMPF negative, and (h3) PERF negative.

Some examples:

(h1)

Sb	PM	C ₂	CM	Sb
Tòw	kà món	nán nà-	ì	tée,... (2-77h)
If	hyp you _{present}	man riches-IMPF	dem	
(If you were a rich man,...)				

(h2)

Sb-PM	P _{tr}	O ₁	CM	Sb
Kàñ	kón	keb	né	tée,... (3-130)
Hyp-he	do-NEG	trick	IMPF-NEG	dem
(If he had not been tricky,...)				

A transitive example occurring in an indirect quotation follows:

(h3)

Sb	PM	P _{tr}	O ₁	CM	Man	Sb
...kà	biñ	kón	keb	né	sú’ú pěn	tée,... (3-130)
...hyp	he _{past} -LOG	does-NEG	trick	NEG	PERF first	dem
(...if he hadn’t been tricky,...)						

7.2.6 Purpose (Sb Pur). The subordinate purpose clause has the following characteristics:

- 1) it may be introduced by the subordinator moo ‘in order that/that’; a second subordinator bà does also occur, but rarely, just before the subordinate subject pronoun;
- 2) it occurs in the ‘terminal’ position of ‘complex sentences’ (Table 8.1);
- 3a) the subordinate subject pronoun is from the àh series if it refers back to the direct (or indirect) object in the preceding ‘primary’ clause; see also Table 8.1;
- 3b) if the subordinate subject pronoun introduces a new participant, the pronoun will also be from the àh series;
- 3c) but if the subject pronoun would refer back to the preceding ‘primary’ clause’s subject pronoun, it may be suppressed and the verb will then take its verbal noun form [‘subject raising’];
- 3d) however, when a bi pronoun replaces the àh series subject pronoun (see section 7.3), there is no need to transform the verb into a verbal noun;
- 4) in the negative, the clause marker is sá, and in the affirmative the ‘unmarked’ /á/ form occurs, which leads us to derive this subordinate form from the imperative mood;
- 5) a whole sentence (a Piv Sent in this case) instead of just a clause may occur in this subordinate structure, see (p6) below.

No Subordinator; indirect object becomes subordinate subject:

- (p1) PM P_{tr} O₁
 -- ---- ----
 ...à zùh túd,... (3-58)
 ...she-IMPV pound millet
 ((I take millet, give to my wife) that she pound it...)

Negative, with introduction of new participant ‘sun’:

- (p2) Sb S PM P_i Lo CM
 ----- ----- -- --- ----- ---
 ...moo zágá à dó tíh- gòd-lí sá. (3-54U)
 ...in-order-that sun it-IMPV enter inside-it- in IMPV-NEG
 ((They cover the hills completely with grass) in order that the sun
 not enter inside [the holes].)

Double subordinator, with ‘new’ participant as subordinate subject:

- (p3) Sb S Sb PM P_{tr} O₁ IA
 ----- ----- ---- -- ----- ----- -----
 ...moo kẹ́ẹ̀ bìì bà à gàgan waa wòd-lí. (3-129)
 ...sb wife his-LOG sb she-IMPV carry-with child her-in
 ((He prepares the skin) so that his wife can carry her child in it.)

‘Subject raising’:

- (p4) Sb O₁ VN_{tr} CM

 ...moo hẹn lálí sòòlí- ì. (4-47D)
 ...sb thing to-eat to-look-for-F-I
 ((She also left her house,) to look for something to eat.)

Subject reference by logophoric bi pronoun:

- (p5) Sb PM P_{tr} O₁ Lo

 ...moo bi ya hò Zág hq̄q̄- lẹ́. (Tanlaka 1983:5)
 ...that he-LOG come see Panther sickness-in
 ((As for Antilope, he had pity) such that he came to see Panther in
 his illness.)

- (p6) Sb Prim₁:IMPV-Ditr Prim₂:IMPV-Tr CM

 ...moo bi ya pú waa bìì à lá ú. (4-47C)
 ...that she-LOG come give child her-LOG he-IMPV eat IMPV
 ((The mother went to look for food) so she could give it to her
 child and he could eat.)

7.2.7 Concessive (Sb Con). Subordinate concessive clauses have the following characteristics:

- 1) there may be as many as five elements that indicate subordination, as explained in 4.13.6, but often only 2 or 3 are present in a single clause; the final element does seem to be obligatory:
 ± Init: kóó ... ± H: ± ká ± ka ... ± Ter: dem + Ter: sì’
- 2) the subject pronoun is from the àn series;
- 3a) the clause marker in this subordinate type poses special problems; in the affirmative it seems to be of the ‘unmarked’ /ú/ type in Table 7.2, although in this clause it seems to be usually for strong insistence, as described at the end of section 5.1.1; see examples (co4) and (co5) below; the non-insistant ‘true unmarked’ form seems not to occur here;
- 3b) the negative clause marker is /né/ (causing also the negative agreement suffixed to the verb), which leads toward the conclusion that this subordinate type is derived from the imperfectives, despite the àn series subject pronoun.
- 4) they may occur either initially or terminally in ‘complex sentences’ as shown in Table 8.1.
- 5) an interesting example of the coordination of several clauses inside this subordinate structure is shown in (co5), where kóó ká occurs only

once initially, and the insistent CM /á/ and sɿ' each occur only once at the end, with three clauses inserted between.

Several examples follow.

(co1) Sb PM P_i CM Sb
 ----- -- ---- ----
 Kóó à yaa né sɿ',... (KM)
 Even-if he comes F-I-NEG even-if
 (Even if he doesn't come...)

(co2) S Sb P_i Sb Sb
 ----- --- ---- --- ---
 Kpoo ka nɔɔ yè sɿ',... (4-9N)
 Baboon sb-he dies dem even
 (Even though Baboon was dead,...)

(co3) Sb Sb PM P_{tr} O₁ Sb
 ----- --- --- ---- ----- ---
 ...kóó ká ùu hà' hɛn yè vu...sɿ'. (Heb. 10:8)
 ...even-if far-past they sacrifice thing dem pl even-if
 (...even if they sacrificed those things (properly).)

(co4) Sb PM P_{tr} PM O₁ Man Lo CM Sb
 ----- --- ---- --- ---- ----- --- ----
 Kóó àa tàà ví moo í yògò yúú Krístù wòd-lí á sɿ',...
 Even-if we think we word like that about Christ him-on insistence
 even-if (2 Cor 5:16)
 (Even if we used to think indeed thus about Christ,...)

(co5) Sb clause 1:Tr clause 2:Tr

 Kóó ká àn haa- wɛ, àn dùun nán wòd vu kan hɛn bíd,
 Even-if far-past I insult-him, I follow man his pl with thing bad,

 clause 3:Tr CM Sb
 ----- -- ----
 àn bée moo wòd vu á sɿ',... (1 Tim 1:13)
 I despise word his pl insistence sb
 (...even if I insulted him, persecuted his followers, and despised
 his word...)

7.2.8 Cause (Sb Cau). The subordinators involved in this type of clause are well described in 4.13.7. These clauses may occur either initially or terminally in 'complex sentences', and are of two types.

In sentence-initial and in sentence-final position, ‘type 1’ seems to be nearly identical with the Temporal-Locative-Conditional (Sb TeLoC) described in 7.2.1, except that the ‘initial’ SbP position is lacking; occurrence of this type is marked by an ‘x’ in Tables 7.3 and 7.4. The subordinating phrase elements are thus:

±H:(±ká ±ka) ... ±Ter:dem/rec/ná’

and the subject pronoun is (presumed to be) from the à̀n series, although I have no clear examples at present. The negative is: né, and requires the verb to agree in negativity, as in (ca2).

I don’t have any examples of the perfective occurring in this clause type.

(ca1) S Sb-PM P_i Sb

 Waa míí ka nɔɔ yè,... (4-47B)
 Child my sb-he dies dem (Because my child has died,...)

(ca2) Sb-PM P_{tr} PM O₁ CM^c Sb

 Kaa hɔ̀n ví wi’ ní yè,... (Appendix B.4)
 Sb-we see-NEG we meat F-I-NEG dem
 (Since we don’t have any meat,...)

(ca3) Sb+PM P_{tr} PM O₁ Sb

 ...kaa nùh ví hɛn lálí nà’à yè (nɔ.) (Appendix B.4)
 ...sb-we find we thing to-eat much dem (F-I)
 (...since we have much to eat.)

The other Sb Cau type (‘type 2’) also occurs in both sentence-initial and sentence-final position, but is rather different in structure. Its occurrence is marked by a ‘y’ in Tables 7.3 and 7.4. The SbP here has been outlined at the very end of chapter 4 as:

±moo/moo wòdò nɔ... ±ká/ka... ±dem/rec ±pén/insistent /ú/
 and the negative is: né. Both IMPF and PERF aspects occur.

(ca4) Sb Sb-PM P_i CM Lo CM Sb

 Moo ka zùù sí vòdò- lí ú máa,... (3-96)
 Because sb-he goes-down F-P them-to F-P dem
 (Because he goes down to their (village),...)

(ca5) Sb Sb+PM P_{inch} C₄ Sb

 ...moo kíí dī vó tààlí... yè (nɔ.)(3-54A to 55)
 ...because Sb-you in-process us thinking-of dem (F-I)
 (...because you are thinking of us all the time.)

(ca6) Sb Sb PM P_{tr} O₁ Lo CM^c

 ...moo ká vū nùgun ya úd lig gáá-lí né. (Luke 2:7)
 ...because past they find-NEG place sleep house visitor-in F-I-
 (...because they found no room in the inn.) NEG

(ca7) Sb S Sb PM P_{tr} O₁ CM

 ...moo ya vòd 'wààpád ká vū éé- wū sú'ú. (Mat. 22:28)
 ...because place them all past they marry-her F-P
 (...because they had all married her.)

7.2.9 Manner (Sb Man). The manner subordinating clause, only occurring in terminal position in 'complex sentences', is not fully understood, and its structure is complex, such that there may be more than one proposed analysis. The sentences below illustrate the problem, but the information in 4.13.3 should be read first.

1) The subordinating signals may be resumed as follows, with the subject pronoun enclosed in parentheses:

+ Init: kó née pẹ́n/née/kó née/də̀n née ± H: ká (mí) ± Ter: -a

2) I seem to have no examples of a negative CM in this construction.

Examination of several examples will illustrate the analysis problem. The -a at the end of the sentence may or may not be interrogative, and seems to occur with née automatically; my informants tell me it is not interrogative.

(m1) S PM P_{tr}?/Sb?? S PM P_{di} I O₁ Sb?

 Bà'á wún kó née pẹ́n, waa wún kód-du ba'ad-a. (4-96)
 Father_i he_i-FUT do how first child_j he_j-FUT do-for-him_i work-a
 (What will Father do to get the child to work for him.)

(m2) S PM P_{tr}?/Sb?? S PM P_{tr} O₁ Sb?

 Bà'á wún də̀n née waa wún kó ba'ad-a. (4-96)
 Father_i he_i-FUT begin how child_j he_j-FUT do work-a
 (What will Father do to get the child to work.)

(m3) S PM P_{di} I Sb? PM P_{tr} O₁ Sb?

 Bà'á wún tú'ud waa née wún kó ba'ad-a. (4-96)
 Father_i he_i-FUT show child_j how he_j-FUT do work-a
 (How will Father get the child to work.)

One analytic question: in the first sentence with kó 'do', what rôle does née...ba'ada have in the larger structure? Is it the direct object of 'do', or does it fill a manner slot?

A second question: are the manner 'subordinators' née/née péń, etc. real subordinators, introducing the second clause, or are they just manner morphemes inside the second clause? There seems to be little way of determining the answer at this point.

Another example:

(m4) Sb? S Sb+PM P_i Sb?

 (Ì tú'ud vó) kó née péń lig Tayii ka na"-a. (3-57)
 You-IMPV show us do how first house God sb-it grow-a
 ((Show us) how the church can grow.)

7.2.10 Comparison (Sb Comp). The subordinate comparison clause has two structures already outlined in 4.13.4; the first is far more complex than the second, with its subordinating elements as follows. The appropriate subject pronouns are indicated in parentheses; the negative CM is né. Note that these Sb Comp can only be used in 'terminal' position in 'complex sentences'

SbP _{sim} , type 1	+ <u>kó í</u>	<table style="border-collapse: collapse;"> <tr> <td style="padding-right: 10px;">+ <u>ká/bà</u></td> <td style="padding-right: 10px;">(<u>mí</u>)</td> <td rowspan="3" style="border-left: 1px solid black; padding-left: 10px;">± dem/rec + <u>wogɔ</u></td> </tr> <tr> <td style="padding-right: 10px;">± <u>bà</u> + <u>ka</u></td> <td style="padding-right: 10px;">(<u>àń</u>)</td> </tr> <tr> <td style="padding-right: 10px;">[(none)</td> <td style="padding-right: 10px;">(<u>mí_{fut/nonfut}</u>)</td> </tr> </table>	+ <u>ká/bà</u>	(<u>mí</u>)	± dem/rec + <u>wogɔ</u>	± <u>bà</u> + <u>ka</u>	(<u>àń</u>)	[(none)	(<u>mí_{fut/nonfut}</u>)
+ <u>ká/bà</u>	(<u>mí</u>)	± dem/rec + <u>wogɔ</u>							
± <u>bà</u> + <u>ka</u>	(<u>àń</u>)								
[(none)	(<u>mí_{fut/nonfut}</u>)								
SbP _{sim} , type 2	+ <u>baà</u>	<table style="border-collapse: collapse;"> <tr> <td style="padding-right: 10px;">[(none)</td> <td style="padding-right: 10px;">(<u>mí_{nonfut}</u>)</td> <td rowspan="2" style="border-left: 1px solid black; padding-left: 10px;">± dem ± <u>wogɔ</u></td> </tr> <tr> <td style="padding-right: 10px;">[± <u>bà</u></td> <td style="padding-right: 10px;">(<u>mí</u>)</td> </tr> </table>	[(none)	(<u>mí_{nonfut}</u>)	± dem ± <u>wogɔ</u>	[± <u>bà</u>	(<u>mí</u>)		
[(none)	(<u>mí_{nonfut}</u>)	± dem ± <u>wogɔ</u>							
[± <u>bà</u>	(<u>mí</u>)								

It's obvious that with more data these two types might be combined into a single structure, but at this point I don't have enough data to accomplish that.

Some examples of type 1:

(cp1) Sb Sb PM P_i Lo Sb Sb

 ...kó í ká vᵤ bínda moo Tayii-lí yúú míí-lí máa wɔɔɔ.
 ...as far-past they write word God-in about me-on dem as
 (...as they wrote in God's word concerning me.) (Mat. 26:24)

(cp2) Sb Sb+PM P_{tr} T_{e2} Sb

 ...Ø mòò... kó í bà mòò tíj wɔɔɔ. (Mat. 26:44)
 ...he spoke... as sb+he spoke before as (...as he spoke before.)

(cp3) Sb Sb+PM P_{di} I Sb

 Gbañ kẹ́ẹ́ Ø sòd vᵤ yag dáɡá kó í ka sòd wayée wɔɔɔ.
 chief wife she explain them mouth one as sb-she explain men as
 (The chief's wife explained to them the same thing she had explained to
 the men.) (2-64b)

(cp4) Sb Sb+PM P_{tr} O₁ Sb Sb

 ...kó í kám híj fọ́ọ móó máa wɔɔɔ. (Mat. 22:39)
 ...as sb-you like body your dem as (...as you like yourself.)

(cp5) Sb PM P_{di} I Sb Sb

 ...vᵤ ọ̀... kó í vᵤh ọ̀d vᵤ pèè wɔɔɔ. (Mat. 28:15)
 ...they told as they-nonfut told them rec as
 (...they told [the authorities] as they had told them to say, i.e., as
 they had been told to say.)

This construction also requires negative agreement on the subordinate verb, agreeing in negativity with the clause marker (and the main verb) without taking on negative meaning itself:

(cp6)
 ...moo ẹ̀h mó hò gím gàan dà- m ba'ad yẹ
 ...for what you see poor know-NEG neighbor-your work dem

^c

Sb	Sb+PM	P _{tr}	O ₁	Sb	CM	Q
-----	-----	-----	-----	-----	-----	-----

kó í kán hò gàan mó wɔɔɔ né- lá? (Mat. 18:33)
 as sb-I see know-NEG you as F-I-NEG-Q
 (...why haven't you had pity on your co-worker like I had pity on
 you?)

Illustrations of the second type of Sb Comp follow.

(cp7)

	Sb	Sb + PM	P _{tr}	O ₁
	-----	---	---	-----
	...hæg	Ø mbàà...	baà bà	zò hẹn zígíd tóó nɔ. (3-108)
	...	stomach	it sits like sb-he	drink thing sweet other F-I
	(His stomach is like he drank something sweet [i.e., it's swollen].)			

(cp8)

	Sb	PM	P _i	
	-----	-----	-----	
	V _H mbàà	baà vuùn	nɔɔ ó. (Mat. 28:4)	
	They sit	like they-nonfut	die F-I	(They are like dead people.)

7.2.11 ‘Until’ (Sb Until). This very interesting type of subordinate clause has the following characteristics:

- 1) it's introduced by a conjunction borrowed from Fulani: háá ‘until’;
- 2a) it seems to contain any factative clause (perfective or imperfective), whose elements normally occur in their regular order as in Table 5.2;
- 2b) one exception to this ‘regular’ word order is subject inversion, especially when the subordinate verb is yà ‘arrive’ and occurs with a temporal as subject, especially sèyè ‘time (Ful)’; other temporals found in this inversion have been: bá ‘day’, zága ‘day’, ve ‘year’, zága ɓèè ‘today’; subject inversion in Dii is highly exceptional;
- 3) its subject pronoun is from the mí or the àñ series; no distinction in meaning has yet been clearly associated with this choice;
- 4) the IMPF affirmative CM seems to be the ‘unmarked’ form (Table 7.2), and absent in continuous text as if the contents of this subordinate clause were on the main time-line of the story;
- 5) I find no examples of the negative in my data;
- 6) these clauses occur only in sentence-terminal position (Table 8.1).

Illustrations will be given first of normal word order:

(u1)

	Sb	S	PM	P _i	
	-----	-----	---	-----	
	...háá	vìd	Ø sà’.	(4-47D)	
	...	until	night it falls		
	(…until night falls.)				

(u2)

	Sb	PM	P _i	Lo	
	-----	---	-----	-----	
	...háá	Ø dó	zùù	dəə- lí pì. (4-40G)	
	...	until he enters	descends hole-in	there	
	(…until he enters the hole there.)				

(u3) Sb S PM P_{dat} I CM
 ---- ----- --- --- ---
 ...háá gọom Ø yà- gạ sí... (4-48C)
 ...until hunger it bothers-him FACT-PERF
 (...until he's hungry already.)

(u4) Sb S PM P_{desc} C₁
 ---- ----- --- --- -----
 ...háá nàag vu kée nónó. (3-54E)
 ...until guinea-hen they remain five
 (...until there are only five guinea hens remaining.)

The following are illustrations of inverted subject order:

(u5) Sb PM P_i S
 ---- --- --- -----
 ...háá Ø yà sèy nòm vòò. (4-47E)
 ...until it arrives time death their
 (...until the time of their death arrives.)

(u6) Sb PM P_i S (sèy + noun + Sb. Rel)
 ---- --- --- -----
 ...háá Ø yà sèy hẹn lálí ka bụù kaa-lí máa. (3-54E)
 ...until it arrives time thing to-eat sb + it is-much village-in dem
 (...until the time came when food was plentiful in the village.)

(u7) Sb PM P_i S
 ---- -- --- -----
 ...háá à yà sèy túd họt fạ”ẹ. (Mat. 13:30)
 ...until it arrives time millet grass cutting
 (...until the time for the rice harvest arrives.)

The preceding three sentences may be compared with the following, which has both yà and sèy but maintains normal word order:

(u8) Sb S PM P_i Lo
 ---- ----- --- --- -----
 ...háá sèy hẹalẹ wòò Ø yà wu-lí. (Mat. 1:25)
 ...until time being-born his it arrives there
 (...until he was born.)

7.2.12 Negative purpose ‘lest’ (Sb Lest). This subordinate clause is linked to the hypothetical mood. The English corresponding conjunction would be ‘lest’ or ‘for fear that’, or ‘so that...not’.

1) The subordinator moo ‘in order that’ often occurs, followed by the hypothetical subordinator kà, which always occurs;

- 2) sometimes the subordinator bà occurs before kà;
- 3) the subject pronoun is from the hypothetical pronoun sets;
- 4) if the verb in the primary clause is 'fear', then moo is absent;
- 5) there seem to be no PERF examples, and none where the subordinate verb is in the negative, this latter possibly because the semantics of the clause are already negative;
- 6) this clause occurs in 'terminal' position in 'complex clauses' (see Table 8.1).

If several Sb Lest clauses are coordinated, then moo occurs only with the initial clause in the series, the others each containing only kà and the hyp subject pronoun; see 1 Timothy 5:11-13 for an extended example.

Some illustrations follow:

(lest1) S Sb PM P_{tr} CM
 ----- --- ----- --- --
 ...waa kà vùn kì ú. (4-47H)
 ...child hyp they-present hear IMPF
 (...for fear the children will hear.)

(lest2) Sb + PM P_{stv} CM
 ----- ----- --
 (Mí ndòg) kàn gəyy-ú. (4-40A)
 I fear that-it-past break-IMPF
 ((I was afraid) that it would break.)

(lest3) Sb Sb PM P_i Lo
 ----- --- ----- --- -----
 ...moo kà vín dó hən zò"í- lí. (Mark 14:38)
 ...for-fear hyp you-present enter thing tempting-in
 (...for fear that you'll be tempted.)

(lest4) Sb S Sb Sb PM P_{tr} O₁
 ----- ----- --- --- ----- --- --
 ...moo nán farísa bà kà vùn vud bi
 ...because man Pharisee sb hyp they-present chase-out them-LOG

Lo

 lig súggí vòò- lí. (John 12:42)
 house gathering their-in
 (...for fear that the Pharisees would chase them out of the Jewish meeting house.)

7.3 REFERENCE VARIANTS (LOGOPHORICITY)

As already indicated in 3.6.1, some subordinate clauses may under certain conditions contain a bi series reference pronoun, a logophoric pronoun, instead of a mí or àh series pronoun. (See Hagège 1974, Clements 1975, Hyman and Comrie 1981, Wieseemann 1986.) First, several technical terms and the ‘reference condition’ must be defined.

1. A matrix clause is a clause which contains an embedded construction of some sort, e.g. a Sb Desid, an Ind Ord, etc. The subject pronoun of this matrix clause is termed the matrix subject. In the following sentence, for example:

(log1) v_{H} h́í bi làà kaa- lí. (5-219)

They want they go town-to (They want to go to town),

where v_{H} is the matrix subject, v_{H} h́í the matrix clause, and bi làà kaalí is a Sb Desid.

It will be seen below that the matrix clause is not necessarily a clause containing a verb of saying, nor is it always a reported speech, although Intro_{tr} and Intro_{di} clauses are matrix clauses. Desid clauses can also be matrix clauses, but they never contain a verb of saying, and the Sb Pur and Sb Cau (target) clauses appear widely in complex sentences with all sorts of verbs, so Roncador 1992 has defined logphoricity much too narrowly for Dii. A similar criticism has already been made by Ross Jones 2000.

2. The antecedent (A) is the preceding (pronominal) reference to the same participant as the pronoun (Pr) or possessive (Poss) under study. In the above sentence, v_{H} is the A, and bi the Pr. The A will also be called the trigger, and the Pr the target.

3. The pronoun Pr or possessive Poss and its antecedent A, since they refer to the same participant, are said to be coreferential.

The Dii language has a strict coreferentiality structure that’s used in certain subordinate clauses. The bi pronoun series and the reference possessives are used to indicate the coreferentiality of Pr and A (or Poss and A) instead of the regular mí and àh pronouns and possessives if and only if the following ‘reference condition’ is met.

(log2) REFERENCE CONDITION (REF COND):

If A is a matrix subject pronoun (trigger), then any coreferential Pr or Poss (target) in the following embedded clauses will be from the bi pronoun or possessive series:

Sb Desid Ind Quo Ind Ord Sb Pur Sb Cau

Any other type of subordinate clause does not meet the REF COND unless it's embedded in one of the clauses listed in REF COND.

This holds true whether the Pr target functions as subject, object, indirect object, or object of a pre-/postposition; i.e., the function of the target Pr or Poss in its own immediate clause is irrelevant as far as this REF COND is concerned.

From a tagmemic point of view, any clause containing a bi pronoun form would be regarded as a variant of the corresponding non-bi clause. Since the difference in pronoun is specifiable, the different clause structures (bi and non-bi) are to be regarded as non-contrastive.

Some examples of logophoric forms, with both trigger and target underlined follow:

Sb Desid embedded:

(log3) Mí híí bi ọd ví... (target is subject pronoun PN-ML)
I want I tell you (I want to tell you...) (3-59)

(log4) Mó híí yà'ạd bà à nọh bi sá. (target is direct object O)
You want dog sb he-IMPV bite you IMPV-NEG (±3-114)
(You don't want dogs to bite you.)

(log5) Vụ híí bi mbàà kan yúú bì nu. (Target is PN-ML...Poss)
They want they sit with head their F-I
(They want to be independent.)

Ind Quo embedded:

(log6) Bà'á ọ ọ bà bíí làà kọd- dí. (Target is PN-ML-T)
Father he says sb he-FUT go forest-to (5-221)
(Father says he will go to the forest.)

(log7) Ví ọ bà míi dọ́ọma bi. (Target is O)
You say sb I-emph bother you (3-113)
(You say that I bother you.)

Ind Ord embedded: (Target is indirect object I)
 (log8) V ọ ậ ãn ya túd bi bab mbàà yè-lí. (3-125)
They say I-IMPV come guard-for them field sit here
 (They say I must come guard the field for them.)

Sb Pur embedded:
 (log9) Bà'á Ø nà'əy hág-á bi hò púgg- ì. (Target is PN-ML)
 Father he bends down he sees animal-F-I
 (Father bends down to see the animal.)

Sb Cause embedded: (Target is I)
 (log10) Yọ̀qb v kó à'á bà háj bi nann-è.
 Ancestor-spirits they attacked grandmother because-she refused
them food-F-I (4-35S)

In order to contrast the above constructions with those which do not permit bi-pronominalization by themselves, the following examples are cited: VN Cl, Sb TeLoC, Sb Rel, Sb Comp, Sb Until, Sb Lest.

VN Clause embedded:
 (log11) Dábé Ø yaa lig wòd mbóggí- ì. (Target is Poss)
 Dabe he comes house his to-fix-up-F-I
 (Dabe comes to fix up his house.)

Sb TeLoC embedded: (Target is PN-ML)
 (log12) Nán v dẹ' zọ́ sèy ku kì moo náb máa.
 Man they have-happy heart time sb-they hear word dance dem
 (The people were happy when they heard about the dance.)

Sb Rel embedded: (Target is O)
 (log13) À'á Ø gàan hẹn ka kón- n né.
 Grandmother she knows-NEG thing sb-it does-NEG-her F-I-NEG
 (Grandmother doesn't know what is making her sick.)

Sb Comp embedded: (Target is Poss)
 (log14) À híj dà- m vư kó í kám híj fọ́ mọ́ máa wọ́g.
You-IMPV love neighbor-your pl as as sb-you love body your
 (Love your neighbor as you love yourself.) (Mat. 22:39) dem as

Sb Until embedded: (Target is PN-ML)
 (log15) Ø dùù... ya ka dũũ né... háj Ø vbí ndàa doo gè gbò.
He followed...place sb-it is-good F-I-NEG...until he trips cow leg
 break leave (4-40B)
 (He followed bad places until he tripped the cow and broke its leg.)

Sb Pur negative ‘Sb Lest’ embedded: (Target is PN-ML)
 (log16) Ì bá’ Tayii, moo ka vín d’ó hèn zò’í- lí.
You-IMPV pray God, for hyp you-present enter thing tempting-
 (Pray God lest you enter into temptation.) (Mark 14:38) into

At the end of REF COND it’s stated the the non-bi types of subordinate clause may contain a bi pronoun only if they are embedded in one of the bi-pronominalizing types. The following is an example:

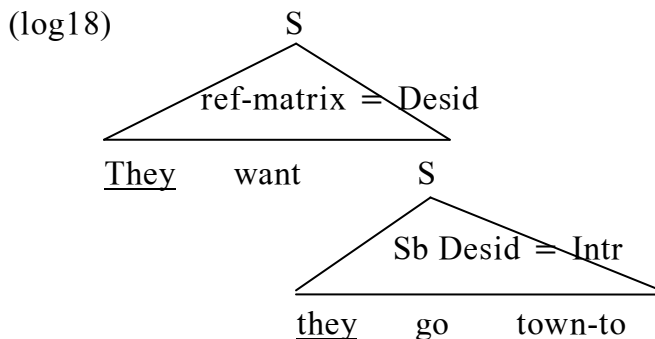
VN Clause embedded in an Ind Quo:
 (log17) Vu qd gbanàà bà bi híí waa bi d’nné- è. (3-54S)
They say-to chief sb they want boy their to-circumcize-F-I
 (They tell the chief that they want to circumcize their boys.)

It’s now clear that some matrix clauses do dominate subordinate constructions containing bi-pronominalization, while others don’t. But since the A (trigger) is in the matrix clause, I will now distinguish the two types of construction by referring to the reference-triggering matrix as a reference matrix (ref-matrix). As more details are outlined concerning this phenomenon later in this section, the usefulness of this new technical term will become more apparent.

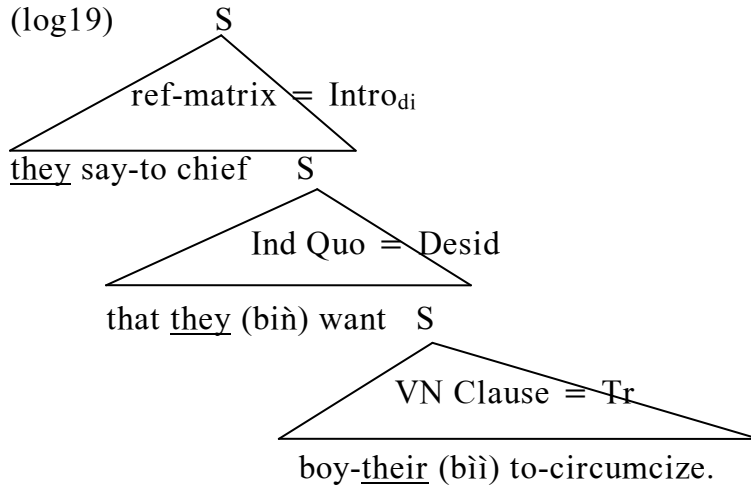
It may help to use generalized tree diagrams. The sample sentence (log1) was the following, in which I have here underlined the coreferent pronouns:

(log1) Vu híí bi làà kaa- lí. (5-219)
They want they go town-to (They want to go to town.)

In the tree diagrams below, ‘S’ should be taken to mean either ‘sentence’ or ‘clause’, according to the structure in question.



With this example in mind, look now at the more complicated tree diagram for sentence (log17):

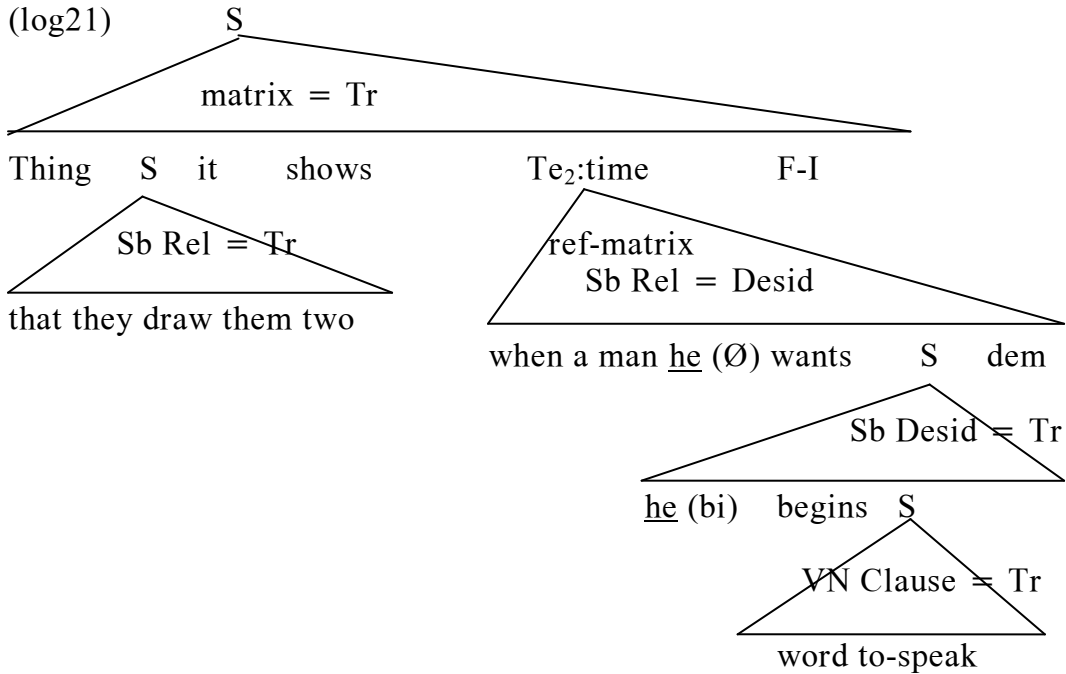


Up to this point, only examples where the ref-matrix is at the top of the diagram have been examined. It is, however, also true that the reference matrix may itself be embedded in a matrix still higher up in the tree. When this is the case, the ref-matrix brings with it intact all its referential ‘baggage’. The following sentence has a matrix higher than the ref-matrix in the tree. (The speaker is explaining the use of quotation marks to new readers.)

(log20) Dàa kuu kàg vu idú ... Ø tú’ sèy nánán ka
 Thing sb-they draw pl two ... it shows when person sb-he

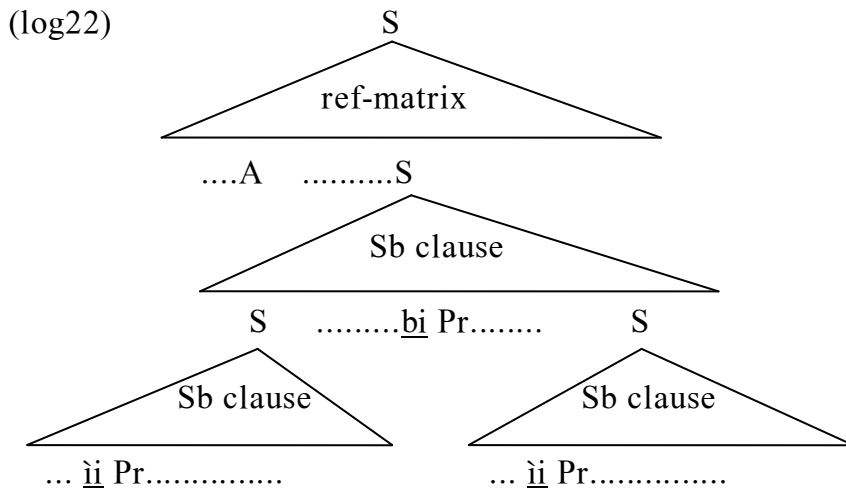
híí bi dən moo òlè té nɔ. (Bohnhoff et al. 1984:80)
 wants he begins word saying dem F-I
 (The two things they draw... show when a person wants to
 begin speaking.)

The tree diagram for this sentence is shown in (log21).



From the above diagram it can clearly be seen that the ref-matrix is not identical with the top-most element in the tree diagram which is customarily termed 'matrix' in linguistic descriptions.

Most of the pronoun forms that occur in embedded Dii clauses have been explained in the preceding portion of this section. There is, however, one more coreference pronoun set (the i subject set) to be accounted for. It occurs starting two embeddings down from the ref-matrix clause. The following tree describes this new situation:



Two examples, with trees, follow.

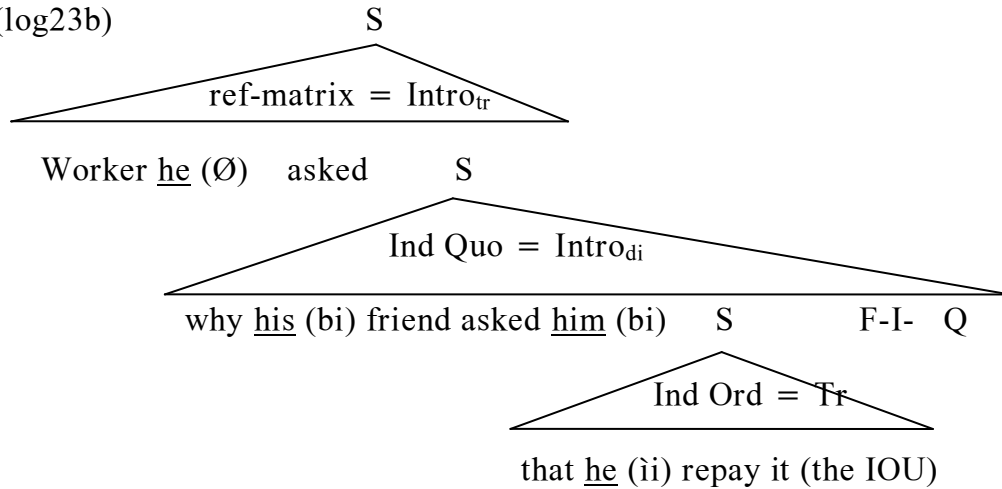
(log23a) Nán ba'ad Ø ò moo èn dà bi tóó bà ka vì bi
 Man work he said for what neighbor his other sb sb-he ask him

ba ii súú- wu ú- lá? (4-72)

sb he repay-it F-I-Q

(The worker asked why his friend asked him to repay the IOU.)

(log23b)

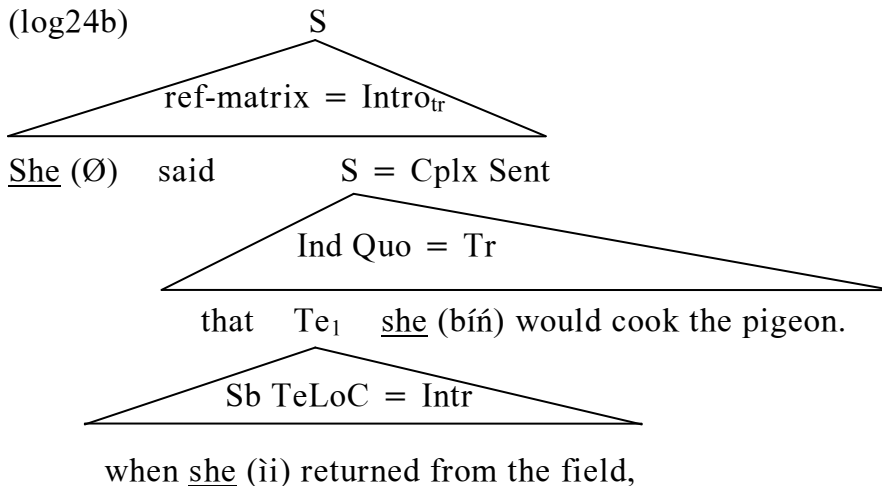


(log24a) Ø ò sèy bà ii là fíí ya bab- bí tée, bà
She said time sb she goes returns comes field-from dem, sb

bín dèè gbòkì- ì. (4-101)

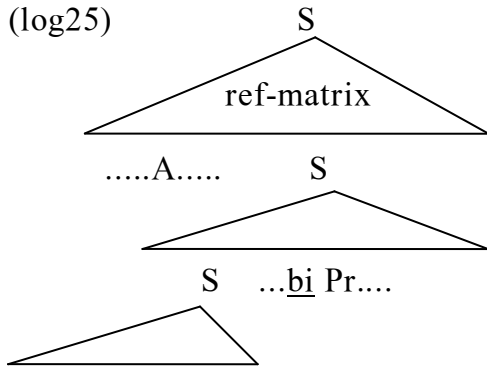
she-FUT cook pigeon-F-I (She said that when she returned from the field, she would cook the pigeon.)

(log24b)



The ii subject pronouns have been observed in the following initial clauses. (NB: when the subordinator ka occurs with ii, they contract to kii, cf. Luke 19:15.)

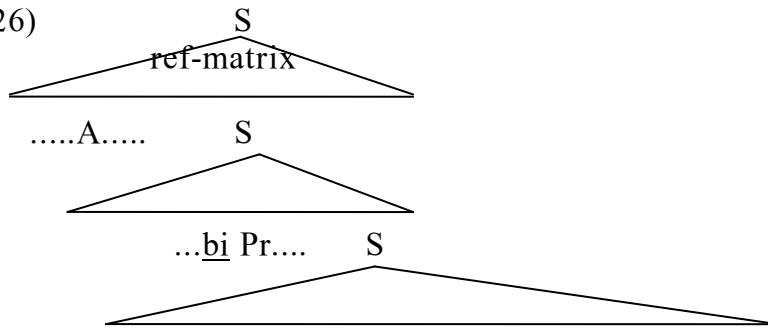
(log25)



- 1) ii in Sb TeLoC: ‘when/where/if he goes,...’ (4-97)
- 2) ii in Sb Con: ‘even if he doesn’t leave,...’ (4-97)
- 3) ii in Sb Cau: ‘because he has no meat,...’ (4-97)

The comparable list of terminal subordinate clauses found so far to contain ii subject pronouns is the following:

(log26)



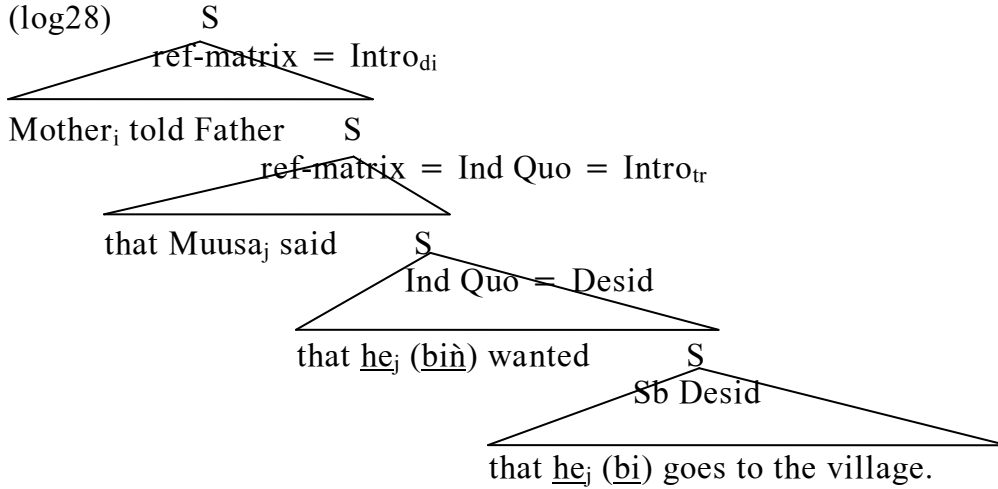
- 1) ii in Sb TeLoC: ...‘when/where/if he goes.’ (4-98 &104)
- 2) ii in Ind Ord: ...‘that he-must go.’ (4-72)
- 3) ii in Sb Pur: ...‘in order that he go.’ (4-103)

Other subordinate clauses occurring in either initial or terminal position seem to use only b̄i pronoun subject forms, even on this second level of embedding. Object and possessive forms at any level of embedding seem also to be only b̄i forms, so there seem to be no special ii object or possessive forms.

Coreferentiality and pronominalization occur in a highly structured form in the Dii language through use of the b̄i forms, and a subject set of ii forms which cannot occur less than two embeddings down from the reference-matrix clause. What is here termed the ref-matrix may itself be embedded in other clauses, and in fact, one ref-matrix may be embedded inside another ref-matrix structure, as the following example shows. In this latter case, the nearest ref-matrix is the one that is active. Note that b̄in and b̄i are gender-neutral in Dii, like all third person pronouns, so only their logophoric reference can say they are ‘masculine’ because they refer to Múúsà who is a man.

(log27) Nà'á Ø ɔd bà'á Múúsà bà ɔ̀ bà bĩn híí bi làà kaa-lí.
 Mother_i she_i tell Father M. sb-he_j say sb he_j want he_j go village-
 to (4-102)

(Mother_i told Father that Muusa_j said that he_j wanted to go to the village.)



7.4 INTERROGATIVE DERIVED CLAUSES

All clauses in the following three moods may be transformed into interrogative clauses: factative-imperfective, factative-perfective, and imperative. In addition, emphatic derived clauses (7.5) may simultaneously be interrogative.

This section will describe Dii interrogative structures: the initial and final interrogative particles, intonation, and WH-words (who, which,...).

7.4.1 initial particles

7.4.2 final particles

7.4.3 intonation

7.4.4 WH-questions

7.4.5 imperative questions

7.4.1 INITIAL PARTICLES

Both yes-no and WH-questions may begin with an initial particle yèe which is optionally followed by either máa or tée (both of which are ‘attention-getters’ and may be glossed roughly as ‘listen!’ or ‘then,’ and occur principally at the beginning of utterances).

(qi1) Yèe máa vún kó nénn-á? (3-86)
Q then they-FUT do how-Q (What will they do, then?)

(qi2) Yèe tée kaa lá tée, ba zòn mam na? (3-54J)
Q then sb-one eats dem one drinks-NEG water F-I-NEG-Q
(When one eats, then, can’t he drink water?)

In more recent times, an initial particle nàà has been borrowed from Fulfulde:

(qi3) Nàà mí ɔd ví sú’ú ná?
Q-NEG I say-to you F-P NEG-Q
(Didn’t I tell you?...)

The particle yèe seems to occur frequently in utterance-initial position. It may also be used to introduce rhetorical questions.

7.4.2 FINAL PARTICLES

The final interrogative particle usually has the basic form -á but is often modified by lengthening or intonational variations linked to the emotions of the speaker. In addition, the high tone may be lowered by assimilation to the tone of the immediately preceding syllable or by

assuming the tone of the vowel it ‘replaces’ (see the examples below). Both yes-no and WH-questions use the same final particle.

The interrogative -á may simply replace the final vowel of the sentence:

- the perfective clause marker sú'ú becomes sá'áa,
- the negative clause marker né becomes ná,
- the affirmative clause marker /ú/ allomorphs:
 - ì, ú, nɔ, yɔ, and -lí (5.1.1) become
 - á, á, na, ya, and -lá respectively, and where no overt clause marker is used, the interrogative takes -á,
- verbal nouns, numerals, the temporal-locative /lí/ ‘time-place’, and kó í... wɔɔɔ ‘like’, all have their final vowel replaced by a as a rule of thumb.

In the examples below, the affirmative form is cited on the left, and the corresponding interrogative form on the right.

- (qf1) Mó hò ligg- ì. --Mó hò liggá?
 You see house-F-I. (Do you see the house?)
 (You see the house.)
- (qf2) Moo Ø pé- lí. --Moo Ø péláa?
 Word it is-there-NEG-F-I-NEG (Is there reason for a quarrel?)
 (There is no reason for a quarrel.)
- (qf3) Wún yùgu-m- ú. --Wún yùgumáa?
 He-FUT hide-you-F-I. (Will he hide you?)
- (qf4) Ø lig wòdò nɔ. --Ø lig wòdò naà?
 It house his F-I (It's his house.) (Is it his house?)
- (qf5) Mín lùù dágá dágá. --Mín lùù dágá dágáa?
 I-FUT remove one one. (Will I remove one(from each pile?))
 (I'll remove one (from each pile).)
- (qf6) Bààbá Ø sén lààlí bab- bí né. --B. Ø sén lààlí babbí náa?
 B. he wants-NEG to-go field-to F-I-NEG (Doesn't B. want
 (B. doesn't want to go to the field.) to go to the field?)
- (qf7) Gbaṅṅèṅ Ø hò waa sú'ú. --Gb. Ø hò waa sá'áa?
 Gb. he sees child F-P (Did Gb. see the child?)
 (Gbaṅṅèṅ saw the child.)

A stylistic (and perhaps rhythmic) variant inserts an epenthetic ‘l’ between the clause marker vowel and the interrogative marker: -ìlá, úlá,

nólá, nélá, sú'úlá, etc. These forms are seemingly in free variation with the forms listed above in this subsection.

Influence from the trade language Fulfulde has led to the occasional borrowing of the final particle naa, usually with falling intonation, which follows the clause marker: nɔ naà, etc.

7.4.3 INTONATION

Most Dii questions have falling intonation on the final syllable of the sentence: high-mid tone, mid-low, high-low, etc. If the morpheme preceding the interrogative particle has a low tone, the particle may remain low, or it may fall still further, creating a non-contrastive extra-low tone. Two examples (téé, néé) will be given below where the interrogative occurs with a long high level tone in combination with certain WH-words.

The tonal and intonational analysis of the final interrogative particle and its variants is rendered difficult by the Dii tendency to lengthen all vowels before pauses. Oscillographic analyses of a short extemporaneous speech by one Dii, for example, have been made at the phonetics laboratory of the University of Toronto. Where his short vowels in medial position have an average duration of 5.7 centiseconds (cs), his short vowels before pauses are lengthened to an average 10.1 cs. His long vowels averaged 11 cs in non-pause positions, but 18 cs before pauses.

There are no perceptual differences in intonation between Dii yes-no and WH-questions.

7.4.4 WH-QUESTIONS

As has been seen in the previous subsections, Dii yes-no questions and WH-questions use identical initial and final interrogative particles, and share the same intonation patterns. We must look elsewhere for the distinctive characteristics of the two question types.

One difference is contextual: obviously, yes-no questions expect a yes or no answer, while WH-questions elicit information. (This distinction is somewhat blurred by rhetorical questions, which may have either a yes-no or WH-form in Dii, but expect no answer.) There is also a formal difference in WH-questions: the presence of a WH-word. I retain the term 'WH-word' in a technical sense, and mean by it only that Dii has a set of interrogative Pro-forms which correspond to the WH-forms in English. As in most languages, the context of the WH-word,

whether nominal, adjectival or adverbial, must be indefinite. This is a phenomenon already illustrated from a wide range of languages.

Most Dii WH-words have two forms: one in non-final position, the other before the clause marker. In the column on the right below, the forms in parentheses are the clause markers which occur with the WH-word in questions. Examples are found immediately following the list of interrogative forms below. Two forms (néé, téé) are unique because they don't have an interrogative form in -a, and because their tone is long and level, in contrast to the falling intonation pattern of the majority of Dii interrogatives.

		<u>non-final</u>	<u>before cm</u>
animate noun:	who(m)	nóo	nón(ná)
animate possessive:	whose ('who its')	nóo wòò	nóo wòò (na)
inanimate noun:	what	} òh	} èn(á)
adjectives: 1)	which		
	2) how much/many	} née	} nèn(ná)/ néé
how			
	where		té(lá)/ téé
	when ('time where')		sèy té(lá)/ téé
	why ('for what')	moo èh (péń)	moo èh(á)
(q1)	<u>Èh</u> Ø di váh tíh-á?		(subject)
	What it is-there granary in- Q (What's in the granary?)		
(q2)	Bán lá <u>èh</u> - á?		(direct object)
	We-2-FUT eat what-Q (What will we eat?)		
(q3)	Ø lig <u>nóo wòò</u> na?		(possessive)
	It house who his F-I-Q (Whose house (is this)?)		
(q4)	<u>Nóo</u> Ø kó-mm-á?		(subject)
	Who he do-you-Q (Who did (this) to you?)		
(q5)	Mí ba' <u>nón</u> - ná?		(direct object)
	I send whom-Q? (Whom will I send?)		

(q6) Moo èn pèń sín nùgu ní- lá? (why)
 For what first he-FUT find-NEG F-I-NEG-Q
 (Why won't he get (it)?)

(q7) Ví gbó waa moo èn- á? (why)
 You hit child for what-Q (Why are you hitting the child?)

The last two examples draw attention to some differences in initial and final forms for 'why'. The morpheme pèń 'first' may appear clause-initially, although it cannot occur clause-finally with moo èn.

Secondly, there appears to be an additional optional discontinuous morpheme ka...máa which can also occur with moo èn:

(q8) Moo èn pèń kaa tè zóó bàà máa-lá?
 For what first sb-we-2 wash heart our-2 dem-Q
 (Why do we receive forgiveness of our sins? 'wash our hearts')

(Ka plus the dual pronoun ba becomes kaa.) The meaning of ka...máa is not known, although superficially it's homophonous with the subordinators used in relative and temporal-locative-conditional clauses. Máa is probably a demonstrative or recall morpheme. The example (q8), however, is not a subordinate clause!

An additional similarity with subordinate clauses is found, however, in the optionality of the máa element:

(q9) Moo èn ká-m vá'a- n- á?
 For what ?- you greet-me-Q (Why do you say hello to me?!)
 [the speaker was angry with the listener that couldn't understand why he should want to greet him.]

It seems, then, that there are three options for added elements when the 'why' construction occurs clause-initially: pèń, ka, or ka...máa.

7.4.5 IMPERATIVE QUESTIONS

Since the Dii language has a full set of àn pronouns in all persons, singular and plural, there's no difficulty in deriving a parallel set of interrogatives alongside the imperatives: only the clause marker is modified, using the same rules I've outlined above for the factative interrogatives.

- (qv1) Mam à 'wód péné. --Mam à 'wód pénénaa?
 Water it-IMPV dry-up first (Must the water evaporate first?)
 (The water must evaporate first.)
- (qv2) Ba lúú ú! --Ba lúú áa?
 We-2-IMPV leave IMPV (Shall we leave?)
 (Let's leave!)
- (qv3) Àn làà áím-á?
 I-IMPV go also- Q (Must I go too?)

This construction seems to be most frequently used in the first and third persons. It doesn't seem to utilize the initial particles.

Dii interrogatives, then, use three structural signals in both yes-no and WH-questions:

- 1) an optional particle utterance-initially: yèe (máa/tée) or nàà,
- 2) a final particle whose basic form is -á but which has a large number of variants, some replacive, some additive, and
- 3) except in the case of the two WH-words tée and néé, a falling intonation pattern if the final sonorant(s) is long.

WH-questions add another structural signal:

- 4) the WH-words listed above.

One WH-construction is unique:

- 5) 'why' questions have several optional elements clause-initially.

7.5 EMPHATIC DERIVED CLAUSES

Clauses may show emphasis in several ways, or in combinations of these ways.

To emphasize the PN-ML(-T) composite pronoun subject position, one of the ‘emphatic pronouns’ may replace the regular pronoun, as in (e1) here which repeats (pr8) from section 3.6. However, the emphatic pronoun often follows the predicate, as in (e2). The symbol $\overline{\quad}^c$ indicates automatic ‘concord’ or agreement when the verbal suffix agrees with the clause marker in negativity. Emphatic elements are underlined in the examples below.

- (e1) PME P_{tr} O₁ Lo

Móo hò bà’á kaa- lí. (5-216 & 217)
 You see father town-in. (You saw father in town.)
Wu hò bà’á kaa-lí. (He saw...)
Baà hò ví bà’á kaa-lí. (We (include.) saw...)
Vuù hò bà’á kaa-lí. (They saw...)

- (e2) $\overline{\quad}^c$
 PM P_{tr} PME O₁ CM
 --- ---
 Mí sɛn mí yəŋ né. (4-9F)
 I want-NEG I foolishness F-I-NEG
 (I don’t want any foolishness, I don’t!)

The root í ‘the one’ or ‘the one who’ may give special emphasis:

- (e3) E PME P_{tr} O₁ CM-Q
 - - - - -
Í víí kó hɛn yɛ́n-nòò ɛ̀n... á? (3-144)
 The-ones you do thing seed-his what...F-I-Q
 (What good thing do you do...?)

Several examples of noun phrase, numeral, or limiter constructions modified by àgà ‘self’ also bring a type of emphasis; see (np31-36) in section 4.2.1.

The emphatic pronoun follows the sí of the perfective:

- (e4) PM P_{tr} CM PME O₁
 --- --- ---
 Mí híí sí mí siidè. (3-46)
 I want F-P me money (Me, I want money!)

CHAPTER 8

SENTENCES

8.0 INTRODUCTION

A Dii sentence is a grammatical unit on a level above the clause and serial clause levels but below the paragraph and discourse levels. Sentences consist of ‘a single clause, of a patterned combination of clauses, or of a clause fragment (usually of phrasal structure, and often dependent in sense on other sentences in the linguistic context or on context of situation)’ (Longacre 1964:125). A sentence is at least potentially capable of standing alone, with silence before and after it.

Some information on the occurrence of Dii sentences on the levels of the paragraph and discourse is available in chapter 9 of this work, but further research needs to be done on this topic.

Present evidence indicates the following types of sentences, with section 8.7 reserved for treatment of peripheral positions:

- 8.1 imperative sentences
- 8.2 hypothetical condition sentences
- 8.3 compound sentences
- 8.4 pivoting sentences
- 8.5 simple and complex sentences
- 8.6 interrupted sentences
- 8.7 peripheral sentence positions
- 8.8 response sentences

The descriptions in 8.1 through 8.6 will treat nuclear positions (5.0.3) only, and section 8.7 will treat the peripheral positions which may accompany these sentence nuclei.

Serial clauses (factative or imperative) may occur in sentences wherever their non-serial counterparts occur. They will thus not be mentioned specifically in the remainder of this chapter.

Table 8.1 provides a compact listing of the major sentence types and their nuclear positions for purposes of comparison. See each sentence type below for an explanation of symbols used in the table.

8.1 IMPERATIVE SENTENCES (Impv Sent)

The imperative sentence has the following characteristics:

- 1) It contains at least two primary positions, each of whose meaning is imperative.
- 2) The first primary position must contain an imperative clause.
- 3) An indefinite number (n) of primary positions may then follow, but they must all contain only clauses that are factative in form, while remaining imperative in meaning.
- 4) The subject pronouns in every PN-ML(-T) composite position must be identical in person and number throughout the sentence, although the mood shifts externally from imperative to factative.
- 5) All the clauses involved must be affirmative, none negative.

There are some as yet unidentified limitations on the number of clause-level positions that may occur between the first and the last predicate of the sentence. The clause marker position, for example, occurs only at the end of the sentence.

Examples:

(impv1)	Prim ₁ :Impv	Prim ₂	Prim ₃

	Àm	bè kẹ̀ṅ yẹ̀	mó màa mó sọ́j 'wààpád! (4-2)
	You-IMPV take monkey dem you roast you crunch all		
	(Take this monkey, roast it, and eat it all!)		

(impv2)	Prim ₁ :Impv	Prim ₂	

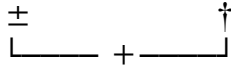
	Ì	làà ví hàù píg víí dọ̀g hág- á	
	You-IMPV go you put-down mat your go-up ground-on		
	Prim ₃	Prim ₄	Prim ₅

	ví ùd	yẹ̀'ey	ví nọ ví hị hịg dūulí nà'à.
	you lie-down lie-on-back you sleep you snore snoring being-good		
	very (3-60)		
	(Go lay your mat down on the ground, lie down, sleep, and snore very loudly!)		

8.3 COMPOUND SENTENCES (Cpd Sent)

The characteristics of a compound sentence are as follows:

- 1) two constructions related coordinately: the first element may be a factative clause or some previous element in the discourse (a sentence or even a paragraph); the second element is normally a factative clause;
- 2) a relator position containing one of the coordinating relator roots seen in 3.14. Ám ‘also’ at the end of a sentence may serve the same coordinating function, and the following symbol in Table 8.1 indicates one but not both relator positions must occur in a compound sentence:



Examples:

(cpd1)

Prim₁:Fact-Impf

 Bàa yè Ø hò ya mbìgì ka pe ’wààpád,
 Man dem he sees place hammer sb-it falls all,

Rel Prim₂:Fact-Impf

 ąmáa Kəə Ø hən né. (3-138)
 but Lion he sees-NEG F-I-NEG
 (This man sees clearly the place where the hammer falls, but Lion doesn’t.)

(cpd2)

Prim₁:Fact-Impf Prim₂:Fact-Impf Rel

----- ----- ----
 Gọm Ø yà ba, mam Ø ’wòd ba ám. (4-47E)
 Hunger it attacks us-2, water it dries us-2 also
 (We two are hungry, and thirsty too.)

8.4 PIVOTING SENTENCES (Piv Sent)

The pivoting sentence (Hockett's term, 1939) has the following characteristics:

- 1) It contains only two positions, each of which is 'primary'.
- 2) A factative or imperative clause may occur in either primary position.
- 3) The indirect or direct object of the first clause and the PN-ML(-T) subject pronoun of the second clause must refer to the same person or thing. In some cases, the pronoun in the second clause may refer to a larger group than that referred to by the pivoting I or O; sometimes the initial subject is added to the I or O to become plural subject of the second clause.
- 4) Only a direct object position and/or a post-verbal auxiliary verb may occur between the indirect object and the PN-ML(-T) positions when these latter two are in pivotal relationship.

Since the pronoun in the PN-ML(-T) position of the second clause refers to the same person as the indirect or direct object of the first clause, the second clause 'pivots' off the indirect or direct object involved. The subjects of the two clauses are thus never identical, although in some cases the first subject may 'join' the I or O person to become plural subject of the second clause.

It proves helpful to refer to 'I-pivot' and 'O-pivot' sentences. The first two examples below are of I-pivot sentences; the next two are of O-pivot sentences. Lawal (1989:6) reports an O-pivot structure in Yoruba but treats it as a type of serial construction.

(piv1)	Prim ₁	Prim ₂
	-----	-----
	Àm pú- n sààm	mí tẹ́ ń! (1B25)
	You-IMPV give-me	I wash F-I
	(Give me the clothes and I'll wash them!)	

(piv2)	Prim ₁	Prim ₂
	-----	-----
	Ì pú- n mí là	úud vù... (4-9H)
	You-IMPV give-me	I go blow-for them
	(Give me (the horn) and I'll blow it for them!)	

(piv3)	Prim ₁	Prim ₂
	-----	-----
	Àm túú mam à	hì"- ń. (2-36)
	You-IMPV pour-in	water it-IMPV be-full-IMPV
	(Pour water into (the barrel), it must be filled.)	

(piv4) Prim₁ Prim₂

 Mí híí siidè Ø pé- lí. (2-5)
 I want money it is-there-NEG-F-I-NEG
 (I want some money; I don't have any.)

A case where an auxiliary verb (zùù) follows the O-pivot but precedes the following subject pronoun:

(piv5) Mí ba' Diinà zùù wún bèn... (3-38)
 I send Diinà descend he-FUT take...
 (I send D. down to take...)

An example of an O with modifiers between the I pivot and the second subject pronoun (from Mark 12:15):

O-----
 (piv6) Ì pú- n ya siidè lám̀bà súúlí súu, mí hò ọ.
 You-IMPV give-me come money tax to-pay rec, I see F-I
 (Show me the payable tax money in question, (so) I see it.)

An example of an initial subject joining the O pivot to force a plural in the second subject pronoun:

(piv7) À'á Ø bèn Láádì vu làà ààm sàlí bab- bí.(4-35G)
 Gr-Mother she calls Láádì they go peanut digging field-in
 (Grand-Mother calls L. and they go digging peanuts in the field.)

Here is a case where the I pivot requires an added word from the context to disambiguate the following subject pronoun: Kəə is added to show that the following à refers to Lion's own child and not to the human child in the story:

(piv8) Kəə Ø bèn wakéé pèè dèè pú waa wòd Kəə à lá ú.
 Lion she takes woman rec cooks gives-to Child her Lion he-IMPV
 eat IMPV (4-47D)
 ((Mother) Lion took that [known] woman, cooked it and gave it to
 her child Lion; he should eat it)

Note the series verbs dèè pú here show non-Dii influence, especially from Mbum in this case, because the traditional Dii would use the verbal suffix -d: dəəd...

8.5 SIMPLE AND COMPLEX SENTENCES (Cplx Sent)

Complex sentences have a single primary position which may be preceded and/or followed by subordinate clauses. It's useful, first of all, to distinguish between simple and complex sentences. If there is no initial or terminal subordinate clause, then the clause occurring in the primary position may be said to constitute a simple sentence. Three examples follow.

Fact-Impf:	Waa v̄u lúú ú.	The children leave.
Fact-Perf:	Waa v̄u lúú s̄'ú.	The children have left.
Impv:	Waa v̄u, ì lúú ú!	Children, leave!

Complex sentences have an optional initial subordinate clause (or more, if they're Sb TeLoC), one main (obligatory) clause (or sentence), and optionally a subordinate clause in terminal position in the sentence. The following list shows which types of clause have been found in each of the 3 positions mentioned:

(cplx1) <u>initial</u>	<u>primary</u>	<u>terminal</u>
Sb TeLoC	Fact-Impf Cl	Sb TeLoC
Sb Con	Fact-Perf Cl	Sb Man
Sb Cau (<u>ka...yè</u>)	Impv Cl	Sb Pur
Sb Hyp	Impv Sent	Sb Pur Neg 'Lest'
	Piv Sent	Sb Comp
	Hyp Cl	Sb Cau (<u>ka...yè</u>)
		Sb Cau (<u>moo...</u>)
		Sb Until

This list does not indicate which clauses may occur with which other ones in the list, but is indicative only of which clauses have been found in each position.

Some examples:

(cplx2) Init:Sb TeLoC Fact-Impf	Prim:Impv
-----	-----
Kám là yà téé,	àm pìd s̄áááá,
Sb-you go arrive dem,	you-IMPV put-down gently,

Ter:Cau Fact-Impf (serial)

 moo mí mbàà di tíj wòd-lí. (3-135&6)
 because I sit am-here in it- in
 (When you arrive, put (the pot) down very gently because I'm
 inside of it.)

(cplx3) Init:Sb TeLoC Fact-Perf

Ka hò dàg- à gbòò ka vùd- dũ sí fọ́ọ ọ máa,
Sb-he sees neighbor-his friend sb-he exposes-him F-P body F-P dem

Init:Sb TeLoC Fact-Perf

ka nẹ̀j nán vu 'wàà sù'ú máa,
sb-he chases man pl finishes F-P dem,

Prim:Fact-Impf (serial)

Ø vé' yaa ya mà' dàg- à gbòò pèè. (3-145)
he returns comes comes grabs neighbor-his friend rec
(When he sees that his friend has exposed him, after having
chased the men, he returns & grabs his friend.)

(cplx4) Prim:Piv Sent(Impv + Fact-Impf) Ter:Sb Pur Impv

Ì pú- n mí là úud vu àu lá. (4-9H)
You-IMPV give-me I go blow-for them they-IMPV eat
(Give me (the horn) and I'll blow it for them so they can eat.)

(cplx5) Init:Sb Con Fact-Impf

Kpoo ka nɔɔ yè sị',
Baboon sb-he dies dem although,

Prim:Fact-Impf (serial)

lòò vu bàà gbó mbàà vuù vu-lí
stick they continue beat sit they there

Ter:Sb Until Fact-Impf

háá Ø yà sèy Bậậạm ka fíi ya hóg- ọ. (4-9N)
until it arrives time Rabbit sb-he returns comes bush-from
(Even though Baboon was dead, the sticks kept on beating him
until Rabbit arrived, returning from the bush.)

8.6 INTERRUPTED SENTENCES

In an attempt to account for the full variety of living language phenomena (interruptions, mistakes corrected after pauses to think, etc.), an ‘interrupted sentence’ may be postulated. Anywhere in a sentence, obviously, the speaker may be interrupted, and these interruptions need not correspond to grammatical boundaries, although many corrections of mistakes do go back as far as the beginning of the phrase containing the item to be corrected. The sentence portion left unfinished will be called an interrupted sentence.

A speaker may also sometimes pause to gather his/her thoughts, possibly backtracking over a portion of the sentence to replace/add/delete a word that he/she meant to say differently. Here are two examples of this latter phenomenon:

(int1) Kəə ka gbó kẹ̀ṅ máa, Ø gàṅ Kəə...Ø gàṅ kẹ̀ṅ...(3-146)
Lion sb-he kills monkey dem, he carries Lion...he carries monkey...
(After killing the monkey, Lion carries Lion...carries the monkey...)

(int2) Ø ɔd- dɔ... Mbùù Ø ɔd- dɔ:... (3-125)
He says-to-him... Hyena he says-to-him:...

8.8 RESPONSE SENTENCES (Res Sent)

A response sentence consists of an expletive (3.13), either of response or of exclamation (with the exception of those expletives of exclamation that seek to attract someone's attention), and is highly dependent on the preceding context:

(res1) áá'à (3-60)	No.	èè (3-127)	Yes.
hà' (4-7)	Oh!	èè (3-111)	Indeed!

CHAPTER 9

FOLKTALE STRUCTURES

Folktales may be described structurally from several points of view. Since in recent years the study of the structures of whole discourses has been intense and widespread, several distillations of key ideas and approaches have been published and proved useful in preparing the analysis proposed in this chapter (especially Grimes 1975, Longacre 1996, and Pike and Pike 1980).

Since in the previous chapters I've started with smaller and/or simpler structures and worked toward larger and more complex units, so too in this chapter, after a cursory look at the tale in its entirety, I'll work upward from the sentence to the paragraph (...to interchanges, episodes...).

This chapter deals with the following subjects:

- 9.1 overall folktale structures
- 9.2 paragraphs in the body of tales
- 9.3 introduction and dismissal of major participants
- 9.4 foregrounding of participants and avoiding ambiguity
- 9.5 backgrounding of participants and props
- 9.6 old and new information
- 9.7 interchanges, episodes,...

9.1 OVERALL FOLKTALE STRUCTURES

So far in my research, I've established that Dii folktales may have as few as three elements in their structure, or as many as six. The six possibilities are as follows, with the optional elements indicated by parentheses. Each is also here given an abbreviation.

- | | | |
|-----|---------------------------|----|
| (1) | Formal Introduction: | FI |
| 2 | Explanatory Introduction: | EI |
| 3 | Body of the tale: | B |
| 4 | Conclusion of the Action: | CA |
| (5) | Explanatory Closing: | EC |
| (6) | Formal Closing: | FC |

Each of these will now be taken in turn and exemplified. Page numbers cited below refer to the second edition of Dii tales Muumúuní (Tanlaka 1983).

9.1.1. Formal Introduction: FI. The FI may begin with an interchange between teller and listener:

teller--Muumúuní, listener--Mùù! ‘A tale...tell!’ which may be repeated two or three times before the following expression appears:

(1.1) Sèy tóó- lí máa,...(p. 1, 3)
Time a-certain-in dem (Once upon a time...)

Reference may sometimes be made to the person from whom the teller (ostensibly) heard the tale, as in the following case:

(1.2) À’á Ø bàà pa’a-n moo mèn tóó- lí, Ø ò: ‘...’
Grandmother she habitual tell-me word evening a-certain-on, she
say: ‘...’ (p. 14)
(Grandmother used to tell me stories some evenings, saying: ‘...’)

The reader will note that the suffix vowels for temporals, locatives, clause markers and verbal nouns are written in this chapter as they’re published in popular literature. In addition, however, low tone is marked: `; and the third singular ‘zero’ subject pronoun’s position is overtly marked by a ‘Ø.’

Longacre calls the Formal Introduction the ‘aperture’ (1996:36).

9.1.2 Explanatory Introduction: EI. The EI introduces the tale, the major initial characters, and often gives the setting. Longacre (1996:36) calls this feature the ‘stage.’ Three examples follow. The abbreviation ‘F-I’ in the following examples means ‘FACT-IMPF’ (factative imperfective); see chapter 5.

(1.3) Bậậậậ Ø ọd Kpæэгéd à ba’ bi dèn sá lí-ì. (p. 7)
Rabbit he says-to Turtle he-IMPV send him drum to-make-F-I.

(1.4) Kaa tóó Ø di- lí, vư dòn nòm vư né,
Village a-certain it is-there-F-I, they bury-NEG dead pl F-I-NEG,
ạ máa vư vậ vư kan sậậậ. Pig wòò téé, vư hà’ vư
but they wrap them with cloths. After that dem, they put them

la’ gúba kaa sậậậ- é. Ve’ kan ve’ vư bàà kó
tree up-in village middle-of. Year after year they habitual do

í yògò. (p. 14)
like that.

- (1.5) ...mam Ø 'wó'd hág- á yè-lí 'wààpád. Púg vᵤ nùgun
...water it dries-up earth-on here all. The-animals they find-NEG

mam zᵃlí né. (p. 10)
water to-drink F-I-NEG.

9.1.3. Body of the tale: B. The body, or the tale properly speaking, follows. Sections 9.2 to 9.7 explain the structure of paragraphs making up the body of the tale, examining in detail one short but complete example of a tale, and taking a cursory look at interchanges, episodes, and their structures.

9.1.4. Conclusion of the Action: CA. The CA is the concluding sentence of the action section of the tale. Some students of tales don't recognize this as a separate component, but it's useful to do so for Dii tales since it's the only signal that the end of some tales has been reached. The other closing components are all optional. The verb(s) in the CA explain the finality or the end of the action, as the following two examples illustrate.

- (1.6) Nán vᵤ là kè béég,... vᵤ gáj nᵐ vᵤ 'wààpád, vᵤ là
People they go dig grave(s),...they carry dead plural all, they go

dòd vᵤ wᵤ-lí. (p. 16)
bury them there.

- (1.7) Yag mèn ka dó máa, kóó nónná Ø dàà vé'
Mouth evening which-it enters dem, even who he passes returns

làà wòd-lí lig- í. (p. 10)
goes his- to house-to
(When evening had come, each one returned to his house.)

9.1.5. Explanatory Closing: EC. The CA may be followed by an EC that explains the 'why' of the story or that draws a lesson or moral from it. Longacre (1996:36) calls this feature 'closure.' Portions of some of the EC may be semi-formulaic in character, as the words underlined below illustrate.

- (1.8) Moo wòd nᵐ háá zága bᵃᵃ, kaa nᵐ ví téé, kaa
For that F-I until day today, sb-we die we dem, sb-we

ním ví ní yè nɔ. (p. 7)
 wake-up-NEG we F-I-NEG dem F-I
 (That's why to this very day, when we die, we don't wake up again.)

(1.9) Dìgà sèy wòò-lí háá Ø yà 'yàgà yè, ba di ví nɔm vɛ
 Since time that-at until it arrive now dem, we are we dead plural

dònné hág- á. (p. 16)
 burying ground-in
 (Since that time until now, we bury our dead in the ground.)

(1.10) Ì kì moo yè duulí nà'à. Dèbtèrè Tayii wòò ám,
 You-pl-IMPV hear word dem good very. Book God his also

Ø did ba ví òlè- è: "Nán í kuu bós tíj
 it is us us telling-F-I: 'Person the-one sb-they advance before

máa, vún di vé"é pigim..." (p. 10)
 dem, they-FUT be going-back behind...'

(Listen well. God's word also tells us: 'Those who go ahead will be put back...')

9.1.6. Formal Closing: FC. Certain stylized formulas are used to close tales, of which the following are examples. Longacre's term here (1996:36) is 'finis.'

(1.11) Mí- w nón né, àmmɔ nód! (MD)
 It's-me-F-I dream-NEG F-I-NEG, you-IMPV dream
 (I'm not dreaming, you have to!...(to pass the turn on to the next person to tell a tale).)

(1.12) Moo súu Ø dàà sí"à? Wòò-lí yè. (Bohnhoff 1968, text A)
 Word rec it passes ends-Q It- at dem
 (Is the story over? That's it! (and it's understood that the hearer not continue by telling yet another tale).)

(1.13) Dàa Ø sí' dàa wòò- lí yè. (Bohnhoff 1968, text D)
 Word it ends passes there-at dem (That's it!)

(1.14) Dàa Ø sí' là wu-lí. (Bohnhoff 1968, text G)
 Thing it ends goes there.

(1.15) Ø 'wáa sú'ú.
 It finishes F-P (It's finished.)

This last expression seems to be used if the situation is ambiguous and someone wonders if that's the end, but isn't the most frequent expression used to close tales; it's used mostly by children who don't tell the tales well, or before a non-Dii who doesn't fully understand yet.

9.2 PARAGRAPHS IN THE BODY OF TALES

It should be emphasized that Dii speakers do not place an indication of time/tense in each of their sentences, much less with each verb, as English and French speakers often do. A single temporal expression (e.g. ‘once upon a time,’ or ‘it happened one day’) at the beginning of a tale may be the only clear indication of time in that whole tale. Most of the subject pronouns (since they and not verbs bear the tense suffixes) are atemporal in tales. One of the signals that a new paragraph is starting, however, may be a temporal expression, usually indicating that a short time has passed since the action described in the previous paragraph; see P.1 below.

Many sentence-initial subordinate clauses also contain elements that have temporal significance (ká...máa ‘dem = past’ or tée ‘dem = future’). These clauses usually also indicate a transition between paragraphs, and they often redundantly recapitulate a part (or all) of the action of the preceding paragraph. For example, in one paragraph of one tale, the Hunter embarrasses and exposes his friend the Lion. The next paragraph begins: ‘When he saw that his friend had embarrassed him,...’ (3-145). The Dii signals in this sentence are: ká... ká... máa,... Grimes terms this type of linkage ‘chaining’ (1975:95-6, 259, 316-8).

Dii paragraphs are signaled by one of the following five structural indicators. They will hereafter be referred to as P.1, P.2, etc.

P.1: ‘Short-time’ expressions. By this term is meant that only a short time is indicated to have lapsed between the preceding and the following actions in the tale. Some examples follow. It’s not usually ‘clock time’ in hours and minutes, but relative time that’s indicated (Grimes 1975:36-43, 230-2).

- (2.5) Yąg mèn- né máa,
Mouth evening-in dem (That evening,...)
- (2.6) Yąg mèn ka kó máa,
Mouth evening sb-it does dem (When evening came,...)
- (2.7) Yąg mèn-né, Mouth evening-in,...
- (2.8) Pig wòò-lí máa, After that-at dem,...
- (2.9) Zągą-lé máa, Day-on dem (Later in the day,...)
- (2.10) Yąg kà’ąm ka tú máa,
Mouth morning sb-it clears dem (When morning came,...)

(2.11) Tíj waaná' máa, Ahead a-little dem (A bit later,...)

(2.12) Zàa máa, A-bit dem (A bit later,...)

These 'short time' expressions are to be distinguished from the 'another day' or 'another time' expressions seen below in 9.7 to introduce episodes.

P.2: Sentence-initial subordinate clauses. In Dii tales, many initial subordinate clauses are temporal-locative-conditional (Sb TeLoC), but some are concessive (Sb Con). They all serve to introduce paragraphs. Especially for the Sb TeLoC clauses, the content of the clause is likely to be recapitulative of part (or all) of the content of the preceding paragraph. In this way, these Sb TeLoC usually contain what is termed 'old information' (see 9.6), data either described in or inferred from the preceding context. Occasionally, however, a Sb TeLoC or Sb Con may contain 'new information' in Dii tales, information not previously introduced by the teller.

P.3: Exclamatory expressions, more or less strong, may also introduce paragraphs:

(2.13) àséé well then, kàdî or kàd so, ndáá hey, amáa but.

P.4: Following a direct quotation, the next sentence will begin a paragraph, since a change of foregrounded participant is usually included at this point in tales.

P.5: Noun/pronoun occurrences. A key criterion for giving paragraphs the current structural definition is how nouns and pronouns are used to introduce (and reintroduce) participants in a tale, and how they're referred to later in the same paragraph. This noun-pronoun interchange is so complicated that it merits the whole section 9.3 below. At this point I merely want to stress the importance of this point in the definition of what a paragraph is.

* * * * *

Before going further in explaining the structures of the Dii tale, it would be beneficial to examine one entire tale, with its major parts labeled in the left margin. A literal translation will not be given here (see 9.4), nor will the hyphens used elsewhere be used here, but between the paragraphs below, a free English translation is inserted. In the body

of the tale, P.1, P.2, etc. are placed in the left margin to explain which of the paragraph signals is used in each instance.

The following tale was written down by Pastor Kadia Mathieu, and is therefore not a transcription from a recording.

The symbol ‘Ø’ (called ‘zero’) indicates that the subject pronoun is in the third person singular. All other subject pronouns have overt forms, so ‘no pronoun’ = third person singular. In referring to noun and pronoun usage later in section 9.4, this Ø symbol will be most useful, so I include it here even if the reader doesn’t see its usefulness yet.

Súsuu vu kan Yà’àdè
(Spider and Dog)

FI Sèy tòólí máa, 1
EI Súsuu Ø dög yag saa moolé be"í. 2

(Once upon a time, Spider went courting up in the heavens.)

Ka dög máa, Ø là màà wakéé waa vu wulí duulí nà’à. 3
Ø mòò vu yag saa. Vu mbàà kannò sèy ’wààpád. 4

(When he went up, he found many Young Women there. He courted them. They were together all the time, again and again.)

B Sèy tòólí máa, Ø vé’ zùè hágá ya màà Yà’ád, Ø ọddu: 5
"Dan gbòò, àm yaa ba dög be"í. Náá gíb waa vu hí’ duulí." 6

(One time he returned to earth, found Dog and said to him, ‘My friend, come, let’s go up to the heavens. There are lots of Young Women up there.’)

P.4 Yà’ád Ø híí: "Tò, ba dög sínná." 7

(Dog answered, ‘OK, let’s go.’)

P.4 Súsuu Ø bè ndèy wòò túú. Yà’ád Ø dáá dùù wulí háá vu 8
dögga yà be’. 9

(Spider took his web, spun it, and Dog climbed up on it to arrive in the heavens.)

P.2 Sèy kuu di lààlí lig náá gíb waa pèè vòòlí máa, Súsuu Ø 10

ọd Yà'ạd: "Sèy kaa yà là wakéé waa yè vòlì, kuu mòò moo víd 11
pẹn, kán hí'i tée, àm hí'i móó sá. Mó kì sá'áa?" 12

(While they were going to the house of those Young Women, Spider told Dog, 'When we get to these Young Women's house, and if they tell a joke and I laugh, don't you laugh! Do you hear?')

P.4 Yà'ạd Ø híí: "Èè." 13

(Dog answered, 'Yes.')

P.4 Súsuu Ø gàà nú' bìi bà duu né, tò Yà'ạd bà à hí'i, bà ùu hò 14
nú' wòò sù'ú tée, bà vún sén bi ní, moo Yà'ạd nú' wòò Ø duu 15
mbàà ná'. 16

(Spider knew that his teeth weren't pretty, and if Dog would laugh, and if they should see Dog's teeth, then they wouldn't like him, because Dog's teeth were just beautiful.)

P.2 Kuu yà là máa, náá gíb waa pèè vu pú vu ya mbààlì duulí 17
nà'à. Vu pú vu kan hẹn lálí ọm. 18

(When they arrived, the Young Women very politely gave them places to sit. They gave them food, too.)

P.1 Pig wòò máa Súsuu Ø lúú là dáá mbàad wakéé waa pèè vu 19
nagá, vu fọ́ọ háá. Vu hí'i ya wòò pád. 20

(Afterward, Spider got up and went to sit right by the Young Women, and they played a long time. They were all laughing together.)

P.3 Ọmáa Yà'ạd Ø hí'i né, Ø mbàà simná. 21

(But Dog didn't laugh; he sat silent.)

P.1 Tíj waaná' máa, vu mòò moo víd, vu là zà' Yà'ạd. Yà'ạd 22
Ø hí'i háá. 23

(After awhile, they cracked a joke and went and touched Dog. Dog laughed out loud a long time.)

P.2 Sèy wakéé waa pèè kuu hò nú' Yà'ạd wòò ka duu nà'à 24
máa, vu nẹn Súsuu ndẹy gbò. Vu bẹ Yà'ạd 'yé vòlì, Ø mbàà kan 25

vu. Súsuu Ø kó zóó yéé dàà fíí zùù hágá. Yà'əd Ø kée sí pigim 26
 vu dágá. Ø mbàà kan vu háj Ø tàà. Ø ọd vu: "Mí híj fííní zùù 27
 hágá." 28

(When the Young Women saw Dog's very beautiful teeth, they chased Spider off. They surrounded Dog and he sat with them. Spider got angry and went back down to earth. Dog was left there alone. He sat with them a long time until he was tired. He told them, 'I want to go back down to earth.')

P.4 Náá gíb waa pèè vu sùg sààm talí vòò gín lúggà wulí, 29
 vu ta Yà'əd wulí, vu wàṣwọ gbò zùù hágá zug. 30

(The Young Women gathered up their wrap-arounds, tied them together very long, attached Dog to them, and lowered him to earth zug.)

CA Ø lúú dàà làà wòòlígí. 31

(He got up and went to his house.)

9.3 INTRODUCTION AND DISMISSAL OF MAJOR PARTICIPANTS

In the tale above, only Spider and the Young Women are introduced in the Explanatory Introduction EI, while Dog is introduced as a participant only in the first line of the Body of the tale. It's thus clear (and other Dii tales bear this out) that in Dii, not all major participants are introduced in the introduction of a tale (but some always are). A major participant might not be introduced until far into a tale (cf. Baboon in The Cornucopia, Bohnhoff 1968, text G).

The tale in 9.2 also illustrates the point that in Dii, not all major participants are formally 'dismissed' at the end of the tale. Spider leaves in rage at line 26 and isn't mentioned after that, and the last reference to the Young Women is in line 30 (pronoun subject), so only Dog is left to be dismissed in the Conclusion of the Action (CA) section of the tale. This situation contrasts, therefore, with that of the *kicca*/moral story type of tale in Fulfulde, where 'major participants are normally introduced in the formal opening and dismissed in the formal close' (Stennes 1969:76).

Major participants must be introduced by using a noun, however, never just a pronoun (cf. Stennes 1969:51 for a similar situation in Fulfulde). Dismissal may be by simple pronominal reference, as for Dog in line 31 in our tale above, or it may be by nominal reference (Spider in line 26).

9.4 FOREGROUNDING OF PARTICIPANTS AND AVOIDING AMBIGUITY

As a tale is told, one or more of the major participants is at the center of attention; i.e., he/she is in the foreground (see ‘prominence’ in Grimes 1975:327). These ‘foregroundable’ participants are usually animate, can initiate actions and events, and are usually few in number in a given tale. Such foregroundable participants are to be distinguished from non-central participants that are left in the background, don’t initiate actions, and may be called mere ‘props’ in the story (Grimes 1975:43-4). The structures used in backgrounding participants and props will be discussed in detail in section 9.5 below.

By way of concrete example, there are only three foregroundable participants in the tale in 9.2: Spider, Dog, and the Young Women. The props, on the other hand, are numerous but not active in the events: sky, Spider’s web, house, tooth, seats, food, jokes, earth.

The participant to be foregrounded in Dii tales is introduced according to the following rule R; R and the four major exceptions to it (E1, E2, etc.) are explained in detail below.

Rule R: A participant may be foregrounded

- 1) only in a clause in a primary sentence position, or in a Sb TeLoC clause in sentence-initial position,
- 2) only by referring to him/her using a noun (or a non-personal pronoun) and
- 3) only in subject position.
- 4) In following sentences, this same participant is referred to by the subject pronoun until the teller desires to foreground another participant.

NB: the subject position of any other subordinate clause is never used to foreground a participant. It’s immaterial whether these other subordinate clauses occur following the primary position in a sentence, or whether they precede it. (In this latter case we may speak of this clause as marginal, and in the ‘pre-margin’ of the sentence.) A pre-margin clause which is the equivalent of an expression of passage of time (e.g., vìd ka sà’ sú’ú máa, ‘when night had fallen’), is also never used to foreground a participant.

Exception E1: When the tale teller recounts conversations, the foregrounded participant may be changed by the use of the pronoun subject without the use of a noun: pr₁... pr₂... pr₁... pr₂... (e.g. he said,... you said,... he said,...).

Exception E2: If one participant reference is singular and another plural, the foregrounded participant may be changed simply by switching the subject pronoun from singular to plural (or vice versa), without resorting to the use of a noun: pr_s... pr_{pl}... pr_s... pr_{pl}... (e.g. he said,... they said,... he said,...). A similar structure to E2 is noted for Tikar by Stanley (1982:125).

Exception E3: In what is called the dative clause, the foregrounded participant is obligatorily in indirect object position, while the grammatical subject is in the background. See 5.1, section i) for a fuller explanation; an example follows.

(4.1) Zóó Ø dẹ' Mbùù sú'ú.
Heart it makes-happy Hyena F-P (Hyena is happy.)

Exception E4: The direct or indirect object in one clause may be moved to the foreground in the immediately following sentence by simple pronominal subject reference, without repeating the noun (or non-personal pronoun). In a variant of this procedure, a preceding direct or indirect object participant may be added to the already foregrounded subject (and the subject pronoun becomes plural, for example) without repeating the noun(s) involved.

This pattern of foregrounding (introduction by a noun, subsequent reference by a pronoun, and a later re-foregrounding by a noun form) is similar to that noted in Tikar by Stanley (1982:122). This type of redundant anaphoric linkage pattern is described by Grimes (1975:351) as making use of inclusion hierarchies by repeating with a less specific word than the one used the first time, e.g. proper name... pronoun... pronoun....

Before commenting further on foregrounding procedures, I want to display the tale in 9.2 in such a way that foregrounded participants and the event line contents stand out. The column on the far right refers to the rule and its exceptions to illustrate these procedures in detail. This tale contains examples of E2 and E4, but other tales must be consulted for illustrations of E1 and E3. See Grimes (1975:82-91) and Wiesemann et al. (1984:10-5, 193-240) for the type of chart used to display tale structures here. The contents of each column begin under their heading, but are allowed to extend to the right as far as necessary; this is more convenient than trying to squeeze longer items into such narrow columns.

The event line (or time line) below in narratives (Longacre's 'storyline', 1996:21), relate one after the other, the events as they unfold in the tale.

Although foregrounding is not connected to paragraph structures in the Dii language, the paragraph breaks are indicated on the following chart by: 'para. - - -...'

The line numberings on the left margin correspond to the presentation made in 9.2. The contents of the background column will be taken up in section 9.5. Literal translations are inserted between the lines of Dii text.

<u>line</u>	<u>transition</u>	<u>foreground</u>	<u>event</u>	<u>background</u>	<u>citation</u>	<u>setting</u>	<u>rule</u>
1	Sèy tóólí máa, Time a-certain-in dem						
2		Súsuu Ø Spider he	dòg go-up				R
			moolé speaking	yag saa mouth youth		be"í. sky-in	
para. - - -							
3	Ka-...máa, (-à) Sb dem	he	dòg go-up				R
		Ø he	là màà go find	wakéé waa vu...duulí nà'à. women small plural...good very			R
						wulí there	
4	Ø He		mòò say-to	vu yag saa. them mouth youth.			R
		Vu They	mbàà sit	kanno sèy 'wàápád. with-him time all.			E4
para. - - -							

<u>line</u>	<u>transition</u>	<u>foreground</u>	<u>event</u>	<u>background</u>	<u>citation</u>	<u>setting</u>	<u>rule</u>
5	Sèy tóólí máa, Time another-at dem						
		Ø he	vé' zùù return descend			hágá earth-on	E4
			ya màà come find	Yà'ạd, Dog,			
		Ø he	ọd- say-to	-du: him:			R
6					"Dan gboo, ụm "My friend, you-must		
					yaa ba dọg come we-2 go-up		
					be"í. Náá heaven-to. Young		
					gíb waa vu Women small they		
					hị' duulí." are-full there."		
para.							
7		Yà'ạd Ø Dog he	híj: answer:				R
					"Tò, ba dọg sínná." 'OK, we-2 go then.'		
para.							
8		Súsuu Ø Spider he	bè take	ndèy wòò web his			R
			túú. spin.				
		Yà'ạd Ø Dog he	đáá dùù climb follow			wulí, it-on,	R

<u>line</u>	<u>transition</u>	<u>foreground</u>	<u>event</u>	<u>background</u>	<u>citation</u>	<u>setting</u>	<u>rule</u>
9	háá until	vũ they	dõgga yà go-up arrive			be'. heaven.	
para. -----							
10	Sèy k-...máa, Time sb dem						
		-ũũ they	di be-in-process-of				E2
			lààlí going			lig náá gíb house Young Women	
						waa pèè vòòlí small rec them-to	
		Súsũũ Ø Spider he	ođ say-to	Yà'ạđ: Dog:			R
11					"Sèy kaa yà 'Time sb-we arrive		
					là wakéé waa yè go Women small dem		
					vòòlí, kũũ their-at, sb-they		
					mòò moo víđ pẹ́n, tell word joke first,		
12					kán hí'i tée, sb-I laugh then,		
					ạ̀m hí'i móó you-IMPV laugh you		
					sá. Mó kì IMPV-NEG. You hear		
					sá'áa?" F-P?'		

<u>line</u>	<u>transition</u>	<u>foreground</u>	<u>event</u>	<u>background</u>	<u>citation</u>	<u>setting</u>	<u>rule</u>
para. 13		Yậ'ạđ Ø Dog he	hỉj: answer:		"Èè." 'Yes.'		R
para. 14		Súsuu Ø Spider he	gàa know				R
					nú' bì bà tooth his that-it		
					đuu né, tò be-pretty F-I-NEG, if		
					Yậ'ạđ bà à hí'i, Dog that he laugh,		
					bà uu họ nú' that they see tooth		
15					wòđ sú'ú tée, his F-P dem,		
					bà vún that they-FUT		
					sén bi ní, like-NEG him F-I-NEG,		
					moo Yậ'ạđ nú' wòđ because Dog tooth his		
16					Ø đuu mbàa ná'. it is-pretty very much.		
para. 17	K-...máa,	-uu Sb dem they	yậ là arrive go				E2
		náa gíb waa pèè vu Young Women small rec they					R

<u>line</u>	<u>transition</u>	<u>foreground</u>	<u>event</u>	<u>background</u>	<u>citation</u>	<u>setting</u>	<u>rule</u>
			pú give	vũ ya mbààlí duulí nà'à. them place to-sit good very.			
18	Vũ They		pú give	vũ kan hẹn lálí ụm. them and thing to-eat too.			R
para. -----							
19	Pig wòd maa, After that dem	Súsũ Ø Spider he	lúú là dǎá arise go climb				R
			mbàad sit-by		wakẹẹ waa pèè Woman small rec		
					vũ nagá, plural hand-by,		
20	vũ they		fóó play	hǎǎ. a-long-time.			E4
	Vũ They		hí'i laugh	ya wòd pád. place them all.			R
para. -----							
21	Amáa But	Yà'ụd Ø Dog he	hí'i laugh	né, F-I-NEG,			R
		Ø he	mbàà sit	simná. silent.			R
para. -----							
22	Tíj waaná' maa, Ahead little dem,						
		vũ they	mòdò speak	moo víd, word joke,			E2
		vũ they	là zà' go touch	Yà'ụd. Dog.			R
23		Yà'ụd Ø Dog he	hí'i laugh	hǎǎ. a-long-time.			R

<u>line</u>	<u>transition</u>	<u>foreground</u>	<u>event</u>	<u>background</u>	<u>citation</u>	<u>setting</u>	<u>rule</u>
para.	-----						
24	Sèyè...k-...máa, Time sb dem						
		wakéé waa pèè...-uu women small rec they					
			hò see	nú' Yà'əd wòò ka duu nà'à tooth Dog his sb-it is-pretty very			R
25		vu they	nèḥ chase	Súsuu ndèy Spider web			R
			gbò. leave.				
		Vu They	ḡè take	Yà'əd Dog			R
			'yé put			vòólí, them-with,	
		Ø he	mbàà sit			kan vu. with them.	E2
26		Súsuu Ø Spider he	kó do	zòó yéé heart red			R
			dàà fíí zùù pass return	descend		hágá. ground-to.	
		Yà'əd Ø Dog he	kéé is-left	sí pigim, F-P behind,			R
27		wu he	-- --	dágá. one.			R
		Ø He	mbàà sit			kan vu with them	R
	hájá until	Ø he	tàà. is-tired.				

<u>line</u>	<u>transition</u>	<u>foreground</u>	<u>event</u>	<u>background</u>	<u>citation</u>	<u>setting</u>	<u>rule</u>
		Ø He	ɔd say-to	vʉ: them:			R
28					"Mí híí fíiní 'I want return zùù hágá." descend earth-to.'		
para. 29		Náá gíḃ waa pèè vʉ Young Women small rec they					R
			sùg gather	sààm talí vòò cloth to-tie their			
			gín knot-up				
			lúggà be-long-go			wulí, there,	
30	vʉ they	ta tie		Yà'əd Dog		wulí, it-to,	R
	vʉ they	wàḃ- lower-		-wɔ him			R
			gbò zùù leave descend			hágá zug. ground-to ideo.	
para. 31	Ø He	lúú dàà làà leave pass go				wòòlí lígí. his-to house-to.	E4

The rule R and its four exceptions account for 93.6% of all subject noun and pronoun occurrences in a sample of 10 Dii folktales. The symbol '(R)' in Table 9.1 indicates when an 'extra' noun occurs in addition to the subject pronoun already expected, creating extra redundancy (or for some other as yet unknown reason). Table 9.1 lists the tales examined, including a reference to a published edition or to my data notebooks. The last tale in the table is the tale that was just analyzed above.

The appearance of some other Dii pronouns (the logophorics, e.g., see 7.3) is controlled by factors of reference on the sentence level, and isn't therefore a concern in this section on foregrounding. Several pronouns in the background column are of this type, and will be treated in section 9.5.

The term wulí 'there/in-it/with-it' is used where locative or accompaniment reference needs to be made and the teller doesn't want to repeat the noun. Wulí in line 3 refers back to be' in line 2, and in line 8 it refers back to ndèy wòò (also in line 8). Wulí in lines 29-30 refers back to sààm talí vòò in line 29.

Pronouns and the locative/accompaniment referent wulí provide options to Dii tale tellers when they want to avoid using a noun. Wulí, however, must refer back to a noun in the immediate context, not to one further back in the tale.

An adjective súu 'just mentioned' also refers to a noun in the immediate context, but unlike wulí, the noun must be repeated. The function of súu is thus not to avoid the repetition of a noun, but to assure the listener(s) that this noun refers to the same participant as the participant just mentioned. It thus disambiguates noun references.

The adjective pèè, which occurs several times in the tale cited above, also has a disambiguating function. It means 'already mentioned,' but its field of reference is much larger than that of súu. Pèè (or tèè for some speakers) may refer to a noun used much further back in the tale, or (in real life situations) may refer to a person or thing talked about several days (or even weeks or years) ago.

The three recall adjectives súu, pèè and tèè, therefore, all function to disambiguate nominal references, and all require that a noun be present that they can modify. However, the noun used in a given reference might not be the exact noun used earlier! The participant referred to must be the same, but the noun may differ. See wakéé waa vu 'Young Women' and náá gí b waa vu 'Young Women of marriageable age' used interchangeably in the tale above, both with pèè (lines 10, 17, 19, 24, 29). This confirms Grimes' distinction between 'reference' and 'identification' (1975:45-50).

The three recall adjectives in question also share another trait: they are used with common nouns, never with proper nouns. In the tale above, Spider and Dog are never modified by pèè, because they are regarded as proper names for anthropomorphized major participants. The women, however, are referred to by a common noun, and in the tale above, pèè occurs several times with the nouns used to refer to them. But

pèè is optional, and may be used with any of several participants or props, or with several simultaneously, to keep references straight in the mind of the teller and his listeners.

One final comment needs to be made concerning how the Dii tale teller foregrounds participants. We need to know how many nouns and how many personal pronouns are involved in this procedure. The totals are listed in Table 9.2. It's significant that personal pronouns are used more than twice as frequently as nouns when referring to foregrounded participants in the ten folktales examined. The striking difference between this ratio and that used in backgrounding procedures will be demonstrated in 9.5.

<u>Name of the tale</u>	<u>R</u>	<u>E1</u>	<u>E2</u>	<u>E3</u>	<u>E4</u>	<u>(R)</u>	<u>?</u>
Bàbàṣam kan Gbakiiì (Bohnhoff 1968, text D)	52	0	0	1	1	2	0
Nàa báa idú (Bohnhoff 1968, text B)	40	3	1	2	2	1	2
Mbùù kan Nɔmmè (Bohnhoff 1968, text E)	46	0	6	2	0	3	1
Kəə mbàà gímná (Bohnhoff 1976, text TJ2)	54	1	1	3	0	0	2
Bàbàṣam zò' Ndàgàd sóo (text 4-48F)	56	1	1	0	0	1	6
Hóg kúṣíṣé (text 4-47E)	20	0	1	1	0	2	0
Nɔm vu kan Mbùùì (text 4-47J)	19	0	0	1	0	2	0
Kəə vu kan Nánán vu yu (text 4-47B)	56	0	4	1	4	8	1
Bàbàṣam vu kan Gà' nannè (Bohnhoff 1968, text G)	155	2	6	4	4	8	1
Súsuu vu kan Yà' àdè (text 4-47F)	30	0	4	0	4	0	0
Totals	528	7	24	15	15	27	13

Percentage of grand total
of 629 occurrences: 83.9 1.1 3.8 2.4 2.4 4.3 2.1

Table 9.1: The number of nouns and pronouns used to refer to foregrounded participants in 10 folktales

<u>Name of the tale</u>	<u>n</u>	<u>pr</u>
Bàbàṣam kan Gbakìì	20	56
Nàa báa idú	22	52
Mbùù kan Nòmme	20	57
Kəə mbàà gíríná	23	61
Bàbàṣam zò' Ndàgàd sóo	28	65
Hóg kṣṣlṣ	15	25
Nòm vu kan Mbùù	14	28
Kəə vu kan Nánán vu yu	41	72
Bàbàṣam vu kan Gṣ' nannè	107	180
Súsuu vu kan Yṣ'ṣdè	15	38
Totals	305	634
Percentage of grand total of 939 occurrences:	32.5	67.5

Table 9.2: Total number of nouns and personal pronouns used in 10 tales to refer to foregrounded participants

9.5 BACKGROUNDING OF PARTICIPANTS AND PROPS

Although at several points reference has already been made to the existence of backgrounded participants and props, no thorough explanation has as yet been given of how a Dii tale teller uses nouns and pronouns to signal this information.

Before making any specific assertions concerning whether a backgrounded referent or prop may be specified using a noun or a pronoun form, I'd like to reiterate several assumptions I'm making.

Assumption 1 (A1). Since the subject pronoun is always pronounced earlier in the sequence of morphemes than the direct or indirect object(s), it's assumed that all references to foregrounded participants are clear and are as already outlined in the Rule R and the exceptions E1, E2, E3, and E4. Please note: if a referent isn't foregrounded (or 'foregroundable' as in B2 below), it's assumed to be backgrounded.

Assumption 2 (A2). The logophoric bi pronouns (7.3), whether as subject or object, always refer back to the preceding matrix subject pronoun, and are therefore always clear in their referents. They form part of the assumed context for treating the remaining direct/indirect object forms.

Assumption 3 (A3). The recall adjectives súu, pèè, and tèè have been treated in detail at the end of 9.4; all three are used only with nouns, so the use of a pronoun with them is excluded, whether the noun refers to a foregrounded or backgrounded major participant, or to a prop.

Assumption 4 (A4). If the narrator chooses to use a possessive, this possessive is always used with a noun to refer to a participant or prop.

Assumption 5 (A5). Exception E3 in section 9.4 states that the indirect object of a dative clause is always foregrounded, so its grammatical subject, whether a noun or a pronoun, is therefore backgrounded. This is the only case where a backgrounded participant may be referred to by the grammatical subject in clauses on the event line of the story.

The contents of direct quotations must be analyzed as wholes, and separately from the larger texts within which they occur; these quotations are therefore beyond the scope of the analysis in this section.

We're now ready to look closely at the backgrounded participants and props occurring with verbs on the main event line of the tale. We'll see whether nouns or pronouns are used to refer to them, and what the conditioning factors are. Following the three 'background assertions' B1 to B3 below, the tale in 9.2 will be examined once again.

Background assertion 1 (B1): Almost all backgrounded participants and props are introduced (or mentioned subsequently) in an object slot, and usually by using nouns. Once a backgrounded participant or prop is introduced, he/she/it may be referred to later by a non-personal pronoun ('that one', etc.), a limiter ('all', etc.), or by a pronoun.

In addition, the most recently backgrounded participant or prop introduced in an object slot seems to be held in an 'immediate background' temporary memory area, and may be referred to in the immediate context by a personal pronoun, by the use of wulf 'on-it, with-it,' etc. Other than in the immediate context, reference to a backgrounded participant by the use of a personal pronoun is almost impossible.

The column 'n' (noun) in Table 9.3 lists for each of 10 tales the number of nouns used to refer to backgrounded participants and props. The column 'pr' gives the number of personal pronouns used to refer to those same participants and props. It's easily seen that nouns are used much more frequently than personal pronouns to refer to the backgrounded participants and props in these tales: 80% and 20% respectively.

Background assertion 2 (B2): It seems a distinction between foregroundable participants and non-foregroundable participants is useful. When in a tale (of only 2 foregroundable participants, singular or plural) the subject slot indicates alternate foregrounding of first one, then the other, the object pronouns always refer to 'the other one,' i.e. whichever foregroundable participant is not at the moment being foregrounded.

When this rule is applied, a direct or indirect object personal pronoun is always used to refer to the participant, and the context is considered unambiguous. Personal pronouns are freely used in this way when referring to foregroundable participants alternating in object position.

Props, however, are always in the background and are never 'foregroundable' as just defined above. See the first paragraph in 9.4 for the full definition of a prop. It seems that we must recognize, on the basis of Dii tales, a three-tiered focus structure;

- 1st participants may be in the foreground, or
- 2nd foregroundable; and
- 3rd all other participants and props are out of focus.

Background assertion 3 (B3): If a narrator refers to a participant or prop as the grammatical object of one of the ‘obligatory transitive’ verbs, this object is usually a noun instead of a pronoun. The column B3 in Table 9.3 indicates there are quite a few obligatory transitives used in the 10 tales of this sample.

We’re now ready to illustrate these points by application to the tale already examined in 9.2. Again, the line numberings on the left correspond to the presentation made in 9.2, and the A2-A5 and B1-B3 references are placed on the right margin. Since locative and temporal references (nouns and pronouns) seem to follow the same sort of rules as for the backgrounded participants and props, all will be listed together below, with (lo) or (te) to identify the latter two types of constructions.

line	background	rule(s)
2	yag saa ‘courting’ be’(’í) ‘(in the) heavens’ (lo)	B1,B3 B1
3	wakéé waa vu ‘Young Women’ wulí ‘there’ (= be”í, lo)	B1,B3 B1
4	vu ‘them’ (= Young Women) yag saa ‘courting’ (kan)no ‘(with) him’ (= Spider)	B1 B1,B3 B2
	sèy ’wààpád ‘all the time’ (te)	B1
5	hág(á) ‘(to the) earth’ (lo) Yà’ad ‘Dog’ (od-)-du ‘(said-to) him’ (= Dog)	B1 B1,B3 B2
8	ndèy wòdò ‘his web’ wulí ‘on-it’ (= the web, lo)	A4,B1,B3 B1
9	be’ ‘heaven’	B1,B3
10	lig náá gíb waa pèè vòdì ‘house Young Women recall their-to’ (lo)	A3,A4,B1
11	Yà’ad ‘Dog’	B1
14	nú’ bì ‘his teeth’ Yà’ad...à ‘Dog...he’ ùu ‘they’ (= Young Women)	A2,B1,B3 B1 B2
15	nú’ wòdò ‘his teeth’ (= Dog’s) vún ‘they-would’ (= Young Women) bi ‘him’ (= Spider) Yà’ad nú’ wòdò ‘Dog’s teeth’	A4,B1 B2 A2 A4,B1
17	vu ‘(to) them’ (= Dog, Spider) ya mbààlì ‘place to-sit’	B2 B1,B3

18	vũ ‘(to) them’ (= Dog, Spider)	B2
	hẹn lálí ‘thing to-eat’	B1,B3
19,20	wakéé waa pèè vư nágá	
	‘Young Women recall plural hand-by’ (lo)	A3,B1
20	ya vòò pád ‘they all together’	B1
22	moo víd ‘word funny’	B1,B3
	Yậ’ậd ‘Dog’	B1,B3
24	nú’ Yậ’ậd wòò ka đuu nà’à máa,	
	‘teeth Dog his which are-beautiful very that’	A4,B1,B3
25	Súsuu ndèy ‘Spider’	B1,B3
	Yậ’ậd ‘Dog’	B1,B3
	vòòlí ‘them-among’ (= Young Women) (lo)	A4
25,26	kan vư ‘with them’ (= Young Women)	B2
26	zốố yếế ‘heart red’ (= anger)	B1,B3
	hágá ‘earth-to’ (lo)	B1
27	kan vư ‘with them’	B2
	(qđ) vư ‘(said-to) them’ (= Young Women)	B2
29	sậậm talí vòò ‘clothes tied their’	A4,B1,B3
	wulí ‘there’ (lo)	B1
30	Yậ’ậd ‘Dog’	B1,B3
	wulí ‘with-it’ (= clothes tied into rope)	B1
	(wậậ-) -wọ ‘(let-down) him’	B2,B3
	hágá ‘earth-to’ (lo)	B1
31	wòòlí ligí ‘his house-to’ (lo)	A4,B1

The above assumptions A2-A5 and background assertions B1-B3 account for 100% of the backgrounded participant and prop references (noun and pronoun) in the tale. When the same sort of tabulation is done for all ten folktales examined in 9.4, the number of applications of A2-A5 and B1-B3 are as in Table 9.3. A1 is so general as not to need tabulation.

The most striking finding of this section is that by far the majority (80%) of references to backgrounded participants and props is by nouns rather than by personal pronouns. The reverse was found to be true for foregrounded participants in 9.4.

Name of the tale	A2	A3	A4	A5	B1	B2	B3	n	pr
Bàbàṣam kan Gbakìì	0	4	6	1	47	9	22	45	10
Nàa báa idú	0	4	3	2	39	5	13	34	7
Mbùù kan Nómme	0	0	7	2	42	16	11	41	16
Kəə mbàà gímná	0	1	4	3	33	11	8	3	11
Bàbàṣam zò' Ndàgàd sóo	4	0	9	0	58	18	30	56	19
Hóg kẹ́lẹ́	0	0	0	1	22	1	2	21	1
Nòm vu kan Mbùù	0	0	3	1	23	7	8	23	7
Kəə vu kan Nánán vu yu	3	12	18	1	64	15	18	63	17
Bàbàṣam vu kan Gà' nannè	0	7	19	4	227	33	64	218	34
Súsuu vu kan Yà' àdè	2	2	8	0	35	10	18	31	12
Totals	9	30	77	15	590	125	194	535	134
% of the total occurrences for nouns & pronouns:								80%	20%

Table 9.3: Tabulation of applications of A2-A5 and B1-B3 as well as of noun and personal pronoun references to backgrounded participants in ten tales

9.6 OLD AND NEW INFORMATION

Reference has already been made above to how new information is introduced in a story as it unfolds. What has already been related or mentioned once, or what is expected to be inferred from the context, may be termed ‘old information;’ unknown information as the story unfolds is called ‘new information.’

The foreground-background display of the tale in 9.4 lays out for easy inspection each event (and its participants and props) as it’s related. (Direct quotations are excluded from discussion until later in this section.)

New information is introduced principally by the use of the following grammatical constructions. Data from other tales has been used to add the items enclosed in double parentheses.

- main verbs in independent clauses/sentences;
- verbal noun clauses following main verbs of movement or process (intentional and inchoative verbs, see Table 5.2);
- temporal or locative expressions in the post-margin;
- indirect statements or quotations ((or other sentence-terminal clauses such as purpose, ‘until’ clauses, etc.));
- nouns introducing participants or props;
- ((relative clauses)).

Old information, however, is conveyed by the following:

- sentence-initial subordinate clauses, which in this case all initiate paragraphs and often recapitulate the action of part (or all) of the preceding paragraph;
- pronouns referring back to a noun in context;
- nouns referring to already introduced participants and props;
- wulí ‘there/in-it/with-it;’
- nominal expressions modified by pèè ‘already mentioned,’ ((or another of the recall adjectives));

--possessive forms, e.g. 'their house.'

If now we return to look at the tale in its entirety, including all the direct quotations, it's clear that in this tale only a relatively modest addition is made to the content of the story line by the direct quotations: Spider's invitation to Dog to join him in visiting the Young Women, Dog's acceptance, the admonition to Dog not to laugh during the visit and his acceptance of this condition, and, finally, Dog's wish to return to earth.

It should be remembered, however, that this tale is quite short because it was written instead of told to a live audience. A live rendition would have added many direct quotations and many more ideophones, would have increased the length of the story a good deal, and might have incorporated a song. This particular tale was chosen to illustrate this chapter because it was produced spontaneously by a native speaker (i.e., it's unelicited text), and because of the relative diversity of structures exhibited despite its being such a short piece. It can serve as an introduction to deeper and more thorough study, and is an illustration of valid structures which have been verified and double checked elsewhere in longer tales that would be cumbersome to include in the format of this chapter. The reader is referred to any of the longer texts listed in Table 9.1.

9.7 INTERCHANGES, EPISODES,...

In sections 9.2 to 9.4 the details of Dii paragraph identity and structure, and of participant identification, were examined. Are there still larger structures that group together our already identified paragraphs into units which have clear characteristics? The specialists agree that many languages, if not all, possess such structures, but they differ considerably in their techniques for describing them, and in their results. Several of their ideas do give clear results when looking at Dii structures, as we'll see below.

If Longacre is our guide, we seem to be able to find units resembling what he terms interchanges, proposal/counterproposal, or acceptance, etc., in the recounted dialogues between Spider and Dog in the tale in 9.2. However, I haven't done enough research on this point to be able to describe the details fully.

The story event line has sentences (in paragraphs) strung out like beads on a string, heading for the dénouement in lines 24-28. Even if some of Longacre's proposals verge on the subjective, he would lay our story out in larger discourse units than sentences and paragraphs.

If Grimes is our guide, we can also locate many 'spans,' stretches of text held together, for ex., by events happening at the same location: on earth (lines 5-8), in heaven (lines 9-30), and on earth again (line 31).

Other spans are initiated by the 'short-time' expressions of P.1:
--'one time' in line 5;
--the temporal-locative-conditional subordinate clause (Sb TeLoC) in line 10;
--another Sb TeLoC clause in line 17;
--'afterward' in line 19;
--'after awhile' in line 22; and
--the Sb TeLoC clause in line 24.

Still other spans are tied together by a single foregrounded participant acting until another one is foregrounded; these spans have already been examined in detail in 9.4.

Other spans could be outlined based on which participants are 'on stage' together at a given time:
--Spider and Dog (lines 5-16);
--Young Women, Spider and Dog (lines 17-25);
--Spider alone (line 26);
--Young Women and Dog (lines 26-30), etc.

Still another span delineator might be who is ‘initiator of action’ over a certain stretch of the story, causing others to agree with him or to react against him. Spider could be seen as initiator in lines 5-21; but starting in line 22 the Young Women seem to be the initiators until the end of the story. Dog, who is among the major participants, is never an initiator at any point in the tale, although he’s several times in the foreground as signaled by the use of nouns and pronouns (in subject position) referring to him!

There’s yet one more clear structural signal that must be interpreted. Large divisions of a story (should they be called ‘episodes?’), may be introduced by one of the following stylized expressions. Each teller of tales has his own style and preferred expression(s). Those most frequently used contain a temporal element, but as Grimes remarks (1975:36-43, 230-2), relative time (before, during, after,...) is more often central to the presentation of event sequences than is time as measured by a clock or a calendar.

- (2.1) Zǎgǎ í tóo yè máa,...
Day the-one another dem dem (On another day...)
- (2.2) Zǎgǎ tóo máa,... Day another dem
- (2.3) Sèy tóo máa,... Time another dem
- (2.4) Sèy tóo-lí máa,... Time another-at dem

The tale in 9.2 has such an expression in line 5. Various tale tellers each have their own styles, but there are only two such expressions in KM’s long tale ‘Rabbit and the Cornucopia’ (text G in Bohnhoff 1968). The first is at the beginning of the body of the tale (where Rabbit’s friends benefit from the cornucopia); the second introduces the section in which Baboon steals and looses the cornucopia, which leads Rabbit to look for another cornucopia, which in turn leads to the rest of the story.

In the 8th tale listed in Table 9.1, there are only two such expressions. The first is at the beginning of the tale and covers the period where the woman and her son move into the lioness’s area and the son and the lion cub become friends but their mothers aren’t aware of each other. The second introduces the section where the lioness discovers the woman, kills her for food, but the two offspring grow up together until the young lion cub gets big enough to kill his own mother in revenge, and the two offspring remain undying friends the rest of their lives.

It's significant that several tales have only one such temporal expression near the beginning, either in the EI (explanatory introduction), or at the beginning of the body of the tale; examples of this are the 5th and 7th tales in Table 9.1. Tales 9 and 10 on the list have such temporal expressions at the very beginning and again at the start of the body of the tale.

CHAPTER 10

IDEOPHONES: SYNTAX AND DISCOURSE CONSIDERATIONS

10.0 IDEOPHONE PHONOLOGY, SEMANTICS

Section 1.8 describes the distinctive phonological characteristics of Dii ideophones, comparing them with non-ideophones. Section 3.11 attempts to define them and maintains they can be analysed as a morpheme class in Dii. An effort was also made in that section to sketch the semantic domains into which Dii ideophones fall, and each domain was illustrated by a list of ideophones from the Dii dictionary. An effort was also made to illustrate how ideophones utilise ‘sound symbolism’ in linking certain meanings with certain phonemic shapes. The reader is referred to those two sections for those topics.

10.1 INTRODUCTION

This section seeks to describe in detail the syntactic traits of Dii ideophones, showing them to be as distinctive syntactically as they are phonologically.

In context, three types of gradation (axes) are posited in describing the uses of ideophones: a dramatic axis rates an ideophone somewhere between ‘uncreative, everyday’ and ‘creative, dramatic;’ another axis evaluates an ideophone use between ‘serious’ and ‘humorous;’ a third axis rates an ideophone’s syntactic characteristics somewhere between ‘regular’ and ‘exceptional.’

Those Dii ideophones that modify only one element in a clause may be rather easily fitted into traditional adjectival or adverbial analyses, but others show one or more of the following distinctive syntactic traits: 1) many are introduced by a semantically empty verb ‘do’ or adverb ‘like this;’ 2) only an ideophone may ‘replace’ a verb in a clause; and 3) only an ideophone may modify more than one element in a clause, in which case this analysis posits a second clause containing only the ideophone, and a higher node in the structure to tie the two clauses together.

This section examines Dii ideophone syntactic structures in detail, therefore, and strengthens the decision to treat them as a lexical class in view of their unique syntax and uses in discourse.

Ideophones function in many languages as adjectivals or adverbials, sometimes as nominals and/or verbals, and are often associated with stylistic focus, with poetry or drama, and especially with oral and informal contexts. While the main assertions of this section are syntactic, it's impossible to avoid some implications for discourse structure. As Samarin (1971b:158) remarks, we must specify the contexts found using ideophones.

A survey of the literature finds such terms as the following used to describe the syntactic functions of ideophones, although some of the terms below also treat semantic characteristics:

precision:	Kunene 1965:21; Noss 1982:1, 1985b:426
arresting description:	Kunene 1965:19
expressive:	Noss 1982:6; Vandame 1963:124
a focus item:	Noss 1984:7, 1985a
vivid representation:	Doke 1935; Kunene 1965:20
interjectional descriptive:	Doke 1935
<u>exclamatif-descriptif</u> :	Alexandre 1966:9
<u>impressionistic/impressif</u> :	Alexandre 1966:9; Noss 1975:16-17
<u>intensif/intensification</u> :	Bearth 1971:203; Kunene 1965:21; Moyo 1973:15
<u>qualificatif onomatopéique</u> :	Alexandre 1966:9
<u>prédicatif/supplante a verb</u> :	Alexandre 1966:11; Noss 1984:12, 1985b:425
<u>procédé stylistique...surtout dans la littérature orale plutôt que dans la conversation courante</u> :	Alexandre 1966:13; Moyo 1973:18
dramatisation:	Kunene 1965:20; Moyo 1973:23; Noss 1982:3, 1984:1,13, 1985a, 1985b:424

Almost all of the above terms, taken from treatments of ideophones in other languages, are appropriate in describing ideophone syntax and discourse functions in Dii.

Four questions stimulated this study and guided the analysis offered here:

1. Do ideophones only occur in limited syntactic contexts, e.g. (Newman 1968) only in affirmative declarative sentences?
2. Do the 'expressive power,' the 'vivid representation,' and the dramatic and poetic qualities of ideophones limit their use to lively oral presentations (e.g. folktales)? Do they also occur in everyday conversations and in non-dramatic, non-poetic contexts?

3. Can Dii ideophones still (as in Bohnhoff 1982, and here in chapter 3) be treated as a distinctive grammatical class, in contrast to adverbs, adjectives, etc.?
4. Can the uses of ideophones be adequately and/or easily described in terms of the non-ideophonic grammatical structures of Dii as laid out in the preceding chapters?

Two statements need to be made concerning the approach used here:

- a) No attempt is made here to describe the derivation of ideophones from verbs, nouns, adjectives, or adverbs; ideophones don't seem to be derivable from other word classes.
- b) Nor is an attempt made to fit Dii ideophones into a stratificational (transformational, or...) framework. A broader and more traditional approach is used, although some implications for linguistic theory will be suggested at the end of the paper.

This study is language-specific, so no cross-linguistic generalizations are formulated. After examining the syntax of Dii ideophones, however, I will turn to some generalizations made by linguists to see whether they hold also for Dii.

10.2 QUESTIONS 1 AND 2

It's relatively easy to provide an answer to question 1 above. Dii ideophones do not occur only in affirmative declarative sentences, but are found in negative sentences as well as in other moods/aspects than the declarative. An ideophone (underlined) in a negative sentence follows. Sentence (34) below is a more complex example of an ideophone in a negative sentence.

- (id1) Mí sén yəg vbúvbúgú ní. (4-119)
 I like-NEG mouth traitorous F-I-NEG
 (I don't like traitors.)

The abbreviation 'F-I' stands for 'factative imperfective clause marker,' see section 5.1.1. Welmers (1973:343-415) calls them 'construction markers.'

Although the majority of examples below are in the factative mood (or declarative, or indicative, depending on the term chosen), imperatives are seen in (4) and (28), subordinate clauses in (3) and (18), and an interrogative in (30).

The suggestion of question 2, that ideophones might be limited to oral dramatic/poetic contexts, can be quickly disproven by a short walk in the market or a visit in any Dii home. Ideophones occur widely every day in normal, relaxed conversations, not necessarily dramatic or poetic. The same is true for Gbaya (Noss 1985b:424) and for all the neighboring languages that I'm aware of in this part of Cameroon. I will return to the poetic and dramatic uses of ideophones below.

Initial questions 3 and 4 will require major discussion for adequate treatment.

10.3 UNMARKED POSITIONS OF CLAUSE ELEMENTS

In order to treat the syntactic characteristics of ideophones, it's perhaps useful to remind the reader about the order of Dii clause constituents apart from ideophone occurrences. The neutral or unmarked positions for clause constituents in clauses containing verbs in Dii are as follows. As per b) in section 10.1, this description is of surface structures. Several clause types have a Complement (C) position instead of IO and DO positions.

(id2) Te S PM P IO DO Lo IA Man Sim CM
C

The abbreviations above allow a presentation on a single line of the following constructions:
(Te) temporal, (S) subject noun, (PM) subject pronoun, (P) verbal predicate, (IO) indirect object, (DO) direct object, (C) Complement, (Lo) locative, (IA) instrument accompaniment, (Man) manner, (Sim) simile or comparison, (CM) clause marker.

It should be noted that this order of elements is strictly observed in a 'normal' clause; focus or stress on a morpheme (excluding ideophones for the moment!), or foregrounding of a participant, can cause certain elements to appear in clause-initial position, but such constructions are outside the scope of this chapter. The subject of most interest here is where do ideophones (which are often but not always focus and stress centers) occur in relationship to the other clause and sentence elements.

10.4 IDEOPHONES AND SENTENCE-FINAL POSITION

As the researcher begins studying ideophones in Dii, he is struck by the fact that a high percentage of them occur in clause-final position (usually even in sentence-final position). As more complex syntactic examples and more discourse genres are examined, however, the

researcher must limit himself to affirming that ideophones ‘usually’ occur near the end of the clauses in which they are used. Sentence (3) illustrates an ideophone (underlined) used near the end of an initial subordinate clause, for example.

(id3)		Te		PM	P		C	CM	
	-----		---	----		-----	--		
	Ya	ka	tú	ya	<u>pùm</u>	tée,	ba	káń	lúúlí-ì.(4-112)
	Place	sb-it	is-clear	come	early	dem	we-2	just-simply	leaving-F-I
	(When it’s real early, let’s simply leave.)								

My informant Kadia Mathieu says ideophones never occur in sentence-initial position in Dii.

10.5 THREE FUNCTIONAL AXES

Dii ideophone uses show a gradation along three functional axes, none of which can be neglected as an ideophone is examined in its context. The second and third axes show how certain pragmatic elements are essential to an adequate description of ideophone occurrences.

a) Some ideophones occur entirely within ‘regular’ syntactic structures, in this case with strong adjectival or adverbial characteristics; others put stress on the ordinary structures by ‘supplanting’ a verb in the predicate, or by other ‘exceptional’ syntactic properties that will be examined below. This trait will be called the REGULAR <---> EXCEPTIONAL structures axis, and abbreviated REGL <---> EXPT below.

The question of our yardstick is immediately raised. Is it justifiable to judge ideophone uses by ordinary, i.e., non-ideophone, syntactic patterns? I’ll show below that for Dii, what is ‘exceptional’ for other grammatical categories may be ‘regular’ for ideophones. Still, as a starting point for comparison, I’ll consciously limit myself to non-ideophone syntax, since it’s over against the ‘regular’ syntax that the full genius of ideophone syntax becomes clear. I thus don’t use the word ‘exceptional’ here in a derogatory manner, but as a means to lead to an appreciation later of the central qualities of ideophone syntax.

This axis, like the remaining two, describes a continuum, and any ideophone use in a given context may be appropriately described by placing a dot at some point on this continuum. We’re dealing with a gradient relationship here, not a yes-no binary one. An entirely ‘regular’ occurrence could be graphed as follows: REGL < .--- > EXPT, for example, while REGL < ---. > EXPT would serve to symbolize a highly exceptional pattern. Using only three hyphens in the description is

entirely arbitrary. A larger number would bring more detail and sensitivity into the graph.

b) Some ideophones are used in the most mundane, everyday, unemotional contexts; these may be quite uncreative and fossilized, recognized and used widely. In these contexts Dii ideophones are not focus items (Noss 1984:7, 1985a). Others are used in contexts of high drama, as in the climaxes of tales, and have a great deal of dramatic, creative, poetic, and emotional potential; such ideophone occurrences display the full artistic potential of a skilled story teller and may be ideosyncratic and highly individualized in their forms. This will be termed the EVERYDAY <---> DRAMATIC axis, and abbreviated EVDY <---> DRAM below. Again, a dot may be placed on the continuum to indicate the degree of drama or emotion the teller wishes for a given ideophone use. (See also Noss 1985a:11.)

c) Another gradation along which ideophones must be judged is the SERIOUS <---> HUMOROUS axis, abbreviated SERI <---> HUM below. Some are never funny ('rarely funny' might be a safer term), while others never fail to excite some degree of humor: a smile, laughter, silliness, comedy, or humorous ridicule. While the 'typical' Dii ideophone draws attention to itself by its very form and use, there are, however, some that are quite serious (SERI < .--- > HUM), so it is an overgeneralization to assert that all ideophones are 'fun words.'

Such 'totally serious' ideophones may be seen in ndóg and 'néñ in sentences (13) and (14) below. But the idea of humor here is far from simple. As the illustrative list in the preceding paragraph shows, humor may be either positive or negative, showing pleasure and approval; or it may be used to mock and insult someone. Is this a POSITIVE/APPROVAL <---> NEGATIVE/DISAPPROVAL axis?? (See also Welmers 1973:474 and Samarin 1970:164.)

Allusions may be found in the literature to these ideas, but in Dii it seems clear that at least the above three gradations must all be considered, along which a particular ideophone in a particular context must be rated. Some ideophones occur in regular syntactic structures, in everyday, mundane and non-humorous situations, much as adjectives and adverbs often do:

REGL < .--- > EXPT
EVDY < .--- > DRAM
SERI < .--- > HUM

Ideophones are not per se automatically poetic/dramatic, hilariously funny, or found only in some exceptional syntactic context. Such ideophones would, however, be graphed as follows:

REGL <---.> EXPT
 EVDY <---.> DRAM
 SERI <---.> HUM

Before concluding this section, I must mention compliments and insults and their frequent use of ideophones. No study on the syntactic uses of ideophones would be complete without some attention given to the art of compliment and insult. Space limitations here require, however, that this topic be treated separately on another occasion. A compliment and an insult are cited here for illustrative purposes.

(id4) P DO CM

 Hò- gọ... waa dígínnn yè nọ! (4-116)
 Look-at-him child shining-black there F-I
 (Look at him, with such [beautifully] shining black skin!)

(id5) S C CM

 Dọ̀n tóg mgbinmgbin yè, mó yọ! (4-118)
 Person ear deaf this you F-I
 (You've got the deafest ears around, brother!)

10.6 IDEOPHONES AND ADVERBS

In the next four sections I'll match ideophone examples with traditionally understood clause structures.

If an ideophone occurs in a given clause without an adverb, the analyst might be tempted to say the ideophone occurs in the Manner slot, modifying the verb. The following two examples show both transitive and intransitive verbs occurring with such ideophones:

(id6) S PM P Man?

 Kẹ́ẹ̀ wòò Ø nàh zùù wù r wù r wù r wù r. (3-92)
 Wife his she crushes descending w. w. w. w.
 (His wife crushes (grains) with a descending motion, w.w.w.w.)

(id7) S PM P P Lo Man?

 Kpoo Ø wàh sí zùù la'- 'í ḡilig. (4-107)
 Baboon he jumps goes-down descending tree-from 6.
 (The baboon jumps down from the tree and lands 6.)

The ‘Ø’ here indicates the absence of an overt subject pronoun, which is interpreted as 3 sg in non-stressed factative clauses, whether imperfective or perfective; see section 3.6.3. This systematic absence of a subject pronoun form is not optional in Dii, so ‘Ø’ in the text here is a reminder of this fact.

To return to the three axes posited above, the ideophone in sentence (6) in the public speech where I recorded it had the following traits:

REG < .--- > EXPT
 EVDY < ---. > DRAM
 SER < .--- > HUM

The speaker wanted to stress the contribution that a good wife makes to a family’s well-being; he used regular syntactic structures, was very serious, but made his point with some dramatic emphasis and strong emotional approval. Such detailed illustrations of the dots on the three axes would rapidly make this section too long, however, if I were to do it for each sentence.

In the case of onomatopoeia, it’s a bit difficult to maintain that the ideophone fills a normal Manner slot, although semantically the ideophone usually modifies the verbal idea. While in (8) and (9) the ideophones surely add precision to the verb in the predicate, in (10) the ideophone modifies the words ‘shame’ and ‘in the eyes’ more than it does the verb.

(id8) PM P DO Lo Ideo
 ---- - - - - -
 V_H vèè-w_H dàg- gí k_pag. (3-128)
 They hit- him head-on kp. (They hit him on the head.)

(id9) S PM P Ideo
 ---- - - - - -
 La’ Ø dii dèg ság. (3-42)
 Tree it stands go-up straight (The tree grows/stands straight up.)

(id10) PM P IA Lo Ideo
 -- - - - - -
 Ø vúd- dà kan sém nó- lẹ mbíd. (4-60)
 He goes-out-go with shame eyes-in full
 (He goes out, shamed before everyone’s eyes.)

If the analyst wishes to assert that ideophones fill the clausal Manner slot, he must clarify the relationship of ideophones to adverbs which normally occur in this slot and which normally modify verbs or other adverbs in Dii. The following two sentences illustrate the

occurrence of adverbs in the same clause as ideophones. Both adverbs and ideophones are underlined in the following three examples.

(id11) S PM P DO PM P Man Ideo

 Nà'á Ø yúú nan mbàÿ Ø ìì dón ndɔŋgɔd. (4-122)
 Mother she turns couscous cassava it is-elastic only elastic
 (Mother makes cassava couscous and it's very stretchy.)

(id12) S PM P Man Ideo

 Hòòg Ø ìì náa vbè'éd. (4-115)
 Okra it is-gluey like-so vb.

Looked at closely, however, the above manner adverbs are only dummy introducers, semantically empty, and point to the ideophone for the real content of what is said. Note that ideophones don't seem to occur freely with all types of manner adverbs, but they do occur freely with: náa, í yògò, dón, ná', all of which mean 'like this' or 'thus.' Such adverbial introducers have also been noted in Gbaya (Noss 1975).

In (13), however, the ideophone ndóg modifies semantically the locative adverb bá'. There are, therefore, a few contexts in which an ideophone occurs with an adverb that isn't (just) a dummy introducer.

(id13) PM P Man Lo Ideo

 Vɛ mbàà dón bab- bí b' ndóg. (3-92)
 They stay only field-in near very-near
 (They stay continually very near their field.)

As seen in this section, it's possible to assert that some Dii ideophones fill a Manner slot in clauses and function like adverbs. In this slot, they modify either verbs or adverbs, and are sometimes introduced by an adverbial dummy. In which case, then, if in either, should their slot bear the title 'Ideo' rather than 'Man'?

10.7 IDEOPHONES AND ADJECTIVES, NUMERALS, NOUNS

Ideophones are frequently found to modify adjectives, numerals, or nouns. Only clause-level positions have been identified in previous sentence examples. In examples (14) through (18), however, ideophones occur inside the phrases which serve as clause constituents.

NUMERAL:

all be termed ‘dummy morphemes’. Mòdò and kó are used to introduce onomatopoeic ideophones, while kó may also introduce a verb borrowed from a foreign language. Mbàà has much wider uses; it may occur independently or serially with a preceding regular verb, and it may be followed by an adjective or manner adverb, as illustrated in the sentences below. Samarin (1971b:150-151), Voeltz (1971:142-6), and Kunene (1965:22, 33-5) take note of such verbal ideophone introducers in other languages. In the following examples, the introducers are underlined.

(id19) S PM P P Ideo

 Dòdò wòdò Ø tòdò mbàà ʊgʊd. (4-118)
 Wine his it tastes-good is tasty
 (His wine has an excellent taste.)

(id20) S PM P Ideo Lo

 Be' Ø mbàà zùù tívbíd zù. (4-119)
 Sky it is descends far there (The sky is far far away there.)

(id21) S PM P Man Emph

 Yag zèè wòdò Ø mbàà náa mgbèè kèd. (4-110)
 Mouth buffalo his it is thus terrifying emph
 (The face of a buffalo is really terrifying to see.)

(id22) S PM P C Ideo

 Sààm wòdò Ø mbàà kúmná 'nè'nèè'nèg. (4-117)
 Garment his it is oily oily (His clothes are all oily.)

(id23) PM P DO PM P Man Ideo Emph

 Ø tètè sààm Ø mbàà dón mé'é'é kèd. (4-114)
 He weaves cloth it is only narrow emph
 (He weaves a strip of cloth that's really narrow.)

(id24) S-FOC PM P Ideo

 Móótà 'màṅ ka gàṅ hẹn ka zịị máa, Ø kó yẹgẹyẹgẹ.
 Vehicle new sb-it carries thing sb-it is-heavy dem it does
 (A new vehicle heavily loaded squeaks y.) squeaking. (4-95)

More than one introducer may occur in a single sentence in Dii.
 Here is one with three:

(id25)	PM	P	Man	Man	Ideo	Emph
	--	---	-----	----	----	-----
	Ø	víj	<u>mbàà</u>	<u>dón</u>	<u>náa</u>	nóód kəd. (4-108)
	It	is-dirty	is	only	thus	dirty emph (It's very dirty, really!)

10.9 SUMMARY OF 'REGULAR' SYNTACTIC USES

In sections 10.6 to 10.8, the following adverbial and adjectival contexts have been shown to utilize ideophones (the illustrative sentence numbers are in parentheses):

regular verb + ideophone (3, 6, 7, 8, 9, 10?)

regular verb + noun + ideophone (1, 18)

regular verb + adj./num./adv. + ideophone (4, 10?, 14, 15, 17)

regular verb + adverbial introducer + ideophone (11, 12)

regular verb + mbàà + ideophone (19)

regular verb + mbàà + adverbial introducer + ideophone (23, 25)

mbàà + ideophone (20)

mbàà + adjective + ideophone (16, 22)

mbàà + adverbial introducer + ideophone (13, 21)

kó + ideophone (24)

This overview summarizes the various adjectival and adverbial uses cited in the sentences above. From this listing, it's clear that ideophones occur syntactically in a wider range of contexts than any other grammatical category. Even so, only the most regular of the syntactic uses of ideophones in Dii have as yet been examined. Note also that ideophones are the only grammatical category that occurs with introducers (if we exclude foreign verbs introduced by kó).

I would propose initially that if an ideophone can be seen to modify a noun, adjective, or adverb in traditional syntactic terms, then that ideophone should be analyzed in just that way, as other adjectivals and adverbials are. In the remaining cases, where an ideophone modifies semantically more than one element in the sentence, or occurs in still more complex structures as yet unexamined here, a more complex analysis has to be proposed. This is the subject of the next section.

10.10 'EXCEPTIONAL' SYNTACTIC STRUCTURES

When compared to the uses of non-ideophone grammatical categories, certain ideophone occurrences are highly exceptional. Our task is to describe these 'exceptional' but 'normal' ideophone functions. Several persons have noted that certain ideophones 'replace the verb' in their clause; others still that ideophones sometimes replace a whole

clause or ‘modify a whole clause’ (Noss 1984:8-13, 1985b:425; Samarin 1971b:149; Vandame 1963:122-4; Wise 1971:71-2, 131-2; Alexandre 1966:26; Hagège 1970:312).

At this point it becomes impossible to exclude considerations of discourse from the syntactic statements. We need to specify where in a discourse or conversation ideophones tend to occur; and if an ideophone does ‘replace’ a verb, is there a definite pattern to this replacement?

Let’s look again at our three functional axes:

REGULAR <---> EXCEPTIONAL syntactic structures
 EVERYDAY <---> DRAMATIC social contexts
 SERIOUS <---> HUMOROUS uses.

The more a specific instance is judged to be toward the left side of the 3 axes (R-E-S), the less striking and ‘more neutral’ the instance may be said to be. In such R-E-S contexts, an ideophone draws less attention to itself.

My texts show several cases where an ideophone replaces a verb in folktales; they are usually found near the plot climax. From the point of view of the first two axes, this position near the plot climax is of course dramatic; it’s also an ‘exceptional’ syntactic device, and in folktales the climax also often coincides with a higher degree of humor. It would seem, therefore, that such replacements are more likely to occur in E-D-H (exceptional/dramatic/humorous) contexts than in relatively neutral R-E-S ones.

Two examples of ideophones ‘replacing’ a verb (i.e., there’s no verb in the same clause) follow. The ‘replaced’ verb in question is inserted here between square brackets.

(id26) S PM P Ideo S PM Ideo

 Nag Ø sɛ’ɛy kɔ́ŋ, mem Ø [líŋ] sàw sàw. (4-32)
 Hand it is-cut-off in-middle blood it [spurts-out] in-jets.

(id27) S PM P DO? CM? PM DO Ideo

 Zág Ø dī lá nəmm-è, Ø [hì] hìŋ vbiw vbiw. (4-86E)
 Panther he is-there at? sleep-F-I?, he [snores] snore vb. vb.
 (Panther was still sleeping, snoring away: vb. vb.)

Whether ideophones in such syntactic contexts may really be said to ‘replace’ the verb, or whether such constructions are simply alternate syntactic realizations of given semantic combinations, are questions to be dealt with in linguistic theory. I feel uncomfortable saying there ‘was’ a

verb ‘there’ that was ‘replaced’ as the speaker put his thoughts into speech, and I only use the term ‘replacive’ because it’s used by several authors. Many perfectly acceptable Dii clauses have an ideophone and don’t have a predicate verb, and (at least in stratificational theory) I see no need for the term ‘replacive.’ All of this is of course from the encoding perspective. Eventually the linguist has to deal also with the decoding process in his descriptions, but I don’t suppose that the term ‘replacive’ would be any more useful there.

10.11 ANALYSIS OF COMPLEX SEMANTIC REFERENTS

A question of larger scope is whether an ideophone in clause-final position is an adverbial in the same clause as the verb, or whether perhaps it’s the sole realization of a second clause whose other elements are all ‘understood’ except for the ideophone (Noss 1984:8-10, 1985b:425; Wise 1971:71-2, 131-2). Semantically, many ideophones refer to much more in the preceding clause than just the verb. In (28), for example, the ideophone can hardly be said to be only adverbial, since the verb ‘exactly like’ requires two participants for the one to be like the other, and the grammatical subject here is in the singular.

(id28) PM P Ideo
 -- ----- -----
 À màn kííd. (4-78b)
 It-IMPV be-like exactly-like
 (It must be exactly like (some other thing).)

(id29) S PM P DO Ideo
 ----- --- --- ----- -----
 Sèy Ø kè dug wò r wò r. (4-29)
 Time it digs race fast. (Time goes by so fast!)

In (29) the ideophone reflects both the verb ‘dig’ and the direct object ‘race.’ A similar remark has already been made above concerning sentence (10), where an ideophone modifies two or more elements in the preceding clause. Are we forced therefore to conclude that in some cases the ideophone is to be treated as on the same syntactic level as the whole preceding clause (Wise 1971)? This is certainly an attractive analysis for such sentences as (28) and (29).

A more complicated example is seen in (30), where the ideophone refers to two verbs (in series) and two sets of participants.

(id30) Q PM P P I Ideo Q

 Moo ɛ̀n pɛ́n mɔ́ súú màn vɔ́ kɪ́d- á? (3-30)
 For what first you pay be-like us exactly-like-Q
 (Why do you pay (them) exactly the same as us?)

The serial verb construction of (31) still ends with only one ideophone, lending precision to the action as a whole:

(id31) PM P P Ideo
 -- -----
 Ø dàà tii nɔɔ dàà sɛ̀ngɛ̀n. (4-123)
 He passes turns dies passes s. (He dies.)

If a verb has several meanings, a direct object is often necessary to provide sufficient context so an ideophone can be correctly selected. In such a case, it's on the basis of the verb and the direct object that the appropriate ideophone is chosen by the speaker. Two examples follow where the verb alone would provide insufficient context for the selection of an ideophone by the speaker.

(id32) S PM P DO PM P DO Ideo

 Kɛə... Ø ɔ́d dàà kuu, Ø sà kuu dùn dùn. (3-145, 4-1)
 Lion he digs passes dust he throws-up dust d. d.
 (Lion... paws around in the dust, throwing up clouds of it.)

(id33) PM P DO Ideo
 -- ---
 Ø kɪ́ náb vbɛ̀r vbɛ̀r. (4-84A)
 She turns-around danse vb. vb. (She spins around as she dances.)

Sentence (34) is an example of a serial verb construction in the negative, the second verb being an introducer for the onomatopoeic ideophone.

(id34) S PM P DO P Ideo CM

 Bɔ̀bɔ̀m Ø ùun gá' mɔ̀on tɛ̀d né. (4-16)
 Rabbit he blows-NEG horn speaks-NEG toot F-I-NEG
 (Rabbit does not blow 'toot' on his horn.)

Still other illustrations show that the ideophone provides supplementary information about the subject of a verb, or about the verb itself. In the following 4 examples, tonal differences in the ideophone reflect differences in the real world behind the noun or verb that aren't

explicit in either the noun or the verb. In addition, tùlúg is used with clay pots, but túg with calabashes. Therefore the noun subject, in addition to the verb influences which ideophone is chosen in a clause.

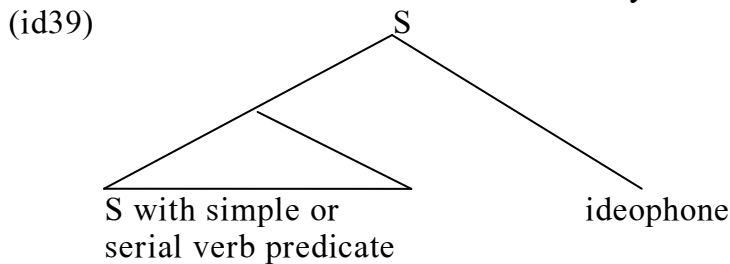
(id35) S PM P Ideo
 ----- --- ----- -----
 Gbág Ø key tùlúg. (4-139)
 Clay-pot it cracks (a-little)-t.

(id36) S PM P Ideo
 ----- --- ----- -----
 Gbág Ø key tùlùg. (4-114)
 Clay-pot it cracks (badly)-t.

(id37) S PM P Ideo
 ----- --- ----- -----
 Dàg Ø 'woy túg. (4-140)
 Calabash it breaks t. (The (small) calabash breaks.)

(id38) S PM P Ideo
 ----- --- ----- -----
 Dàg Ø 'woy tug. (4-140)
 Calabash it breaks t. (The (large) calabash breaks.)

In all of the examples cited in this section, I think it's defensible to say the ideophone occurs on the same syntactic level as the clause that precedes it, since the ideophone is linked to two or more elements in that clause. I'd like to maintain this analysis for all ideophones that have two or more referents in the clause to which they are linked:



I see no way at this point, however, to specify a mechanism for designating clearly which two (or more) elements the ideophone might modify: noun + verb, two or more verbs in series, verb + direct object, or whatever. Some referential indices (such as are used for coreferential pronouns) might be used in the formalization to link an ideophone with the clausal elements it modifies. This proposal would have the disadvantage of requiring a mechanism to ensure the ideophone is correctly positioned in the speech chain, however, since some ideophones don't occur clause-finally.

To return to the proposal made at the end of section 10.9, however, where the ideophone functions adjectivally or adverbially and refers to only one element in its clause, the following question arises: Should section 10.11's bi-clausal analysis not also be imposed on the simpler constructions seen in sections 10.6 to 10.9, in order to unify the syntactic description of ideophones in the grammar as a whole?

My tentative answer is no; I still think the proposal at the end of section 10.9 should be maintained where there's only one noun/adjective/adverb being referred to by the ideophone. The fact that there is only one referent in those cases certainly allows the option of the adjectival and adverbial interpretations, since the ideophones in those clauses seem to function entirely within normal clause structures.

10.12 CONCLUSIONS

Before turning to questions of more general import for linguistic theory, I'd like to summarize the answers found for Dii to the four introductory questions.

Question 1: No, ideophones aren't limited to affirmative declarative sentences. Negative and non-declarative examples abound.

Question 2: Yes, ideophones also occur in the everyday speech of ordinary people, not just in folktales or in highly dramatic or poetic presentations. Some are non-dramatic and not even focus items.

Question 3: In view of the distinctive phonological, semantic and syntactic structures associated with ideophones, it seems advantageous to treat them as a separate grammatical class. (See also Bohnhoff 1982.) The resulting description is far from simple, of course. A full phonological, syntactic, and semantic description of ideophones would be highly complex, probably more complex than for any other single grammatical category in the language. This is part of what gives richness to Dii.

Question 4: Whether ideophones may be 'adequately and/or easily' described in terms of the non-ideophone structures is the most difficult question of the four to answer, but the distributions of ideophones are definitely not wholly describable in terms of non-ideophone syntactic structures.

- a) The ideophones in sections 10.6 and 10.7 may be analyzed in terms of a modifier position relating to the noun, adjective, or adverb in question.

b) Sections 10.6 and 10.8 illustrated the extensive use of verbal and adverbial morphemes introducing ideophones. Ideophones are the only indigenous vocabulary to occur with introducers, although foreign verbs are obligatorily introduced by a semantically empty kó ‘do.’ These introducers are unique in Dii syntax.

c) When an ideophone modifies semantically more than one element in the clause, a bi-clausal analysis is here suggested which is also unique in Dii syntax.

d) Whether proponents of a given linguistic theory would prefer to speak of an ideophone as ‘replacing’ a verb, or whether it would consider the ideophone an alternate grammatical realization dictated from a higher semantic stratum, the phenomenon in question is also unique in Dii syntax.

Of general linguistic significance is whether ideophones somehow ‘bypass’ syntax by being a special phono-semantic class? I answer with an emphatic NO! Although Dii ideophones do have some distinctive syntactic distributions, these distributions are describable syntactically, and of course a full description of ideophone syntax is essential to any full grammar.

This question is not new, and the terms ‘phono-semantic class’ (Newman 1968:116-7 and Fordyce 1983), ‘recurring partials’ (Bloch and Trager) and ‘sound symbolism’ (Samarin 1965:119) put tags on the phenomenon even though they don’t provide explanations. Section 3.11 illustrates sound symbolism in Dii. The point I want to make is that the sound symbolism is in addition to the full syntactic description, not replacing or bypassing any syntactic structure.

If my contention is correct that each ideophone in its specific context must be rated somewhere along each of the three axes:

REGULAR < --- > EXCEPTIONAL syntactic structures

EVERYDAY < --- > DRAMATIC social contexts

SERIOUS < --- > HUMOROUS uses,

then another nightmare is created for the formalization of these gradations within linguistic descriptions. ‘Variable rules’ are at best difficult to formalize and make work (see Labov 1969, Fasold 1970, and evaluations and summaries in Wolfram and Fasold 1974:106-23), and I’m not eager to make a concrete proposal for the description of Dii. Although we must face Grimes’ positive evaluation of the overall phenomenon: ‘hearers are sensitive to mass effects of choices that come

up repeatedly in texts' (1975:347), he doesn't propose a facile formulation of such rules, either.

Some would also probably object that such a gradation as SERIOUS <---> HUMOROUS belongs more to Pragmatics than to syntax. The EVERYDAY <---> DRAMATIC axis might, if one wished, be included under discourse considerations. But few analysts would be happy with having to formalize a gradation even for the REGULAR <---> EXCEPTIONAL syntactic axis, which is the most clearly syntactic of the three axes I'm positing! If other axes in addition to the three posited here prove to be useful, formalization would become more and more complex.

Where does linguistic structure stop and Pragmatics take over? Is full formalization of ideophone syntax even possible? I would like to stress that ideophone occurrences are so highly tied to context that the three axes posited in this paper are necessary to help us describe them syntactically, even though we aren't currently able to formalize all the posited structures by the current tools of the linguistic trade.

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APPENDIX A

SUBPHONEMIC COMPONENTS

It has long been recognized that analyses may be made below the level of traditional phonemes. (Allophones are ignored at this point since we're only dealing with emic contrasts.) The basic ideas for this appendix are drawn from stratificational linguistic theory (see Lamb 1966a,b,c, Lockwood 1972, and Makkai and Lockwood 1973), although the abbreviations used conform to the terminology of chapter 1 in the present volume.

If we take the phonemes listed in Table 1.1 and exclude suprasegmentals and a morpheme boundary marker, we can posit seventeen subphonemic contrasts. We say that phonemes are composed simultaneously of these traits. The phoneme t is composed of: alveolar, stop, and voiceless, while mgb is composed of: velar, labial, stop, and nasal, etc.

The following are all the necessary contrasts for the Dii language and their abbreviations to be used in Table A.1:

stop	Stp	glottal	Glt
nasal	Nas	alveolar	Alv
semi-consonant	SmC	voiceless	Vls
implosive	Imp	vocalic	Voc
fricative	Frc	high	Hgh
trill	Trl	mid	Mid
liquid	Liq	low	Low
velar	Vel	length	Lng
labial	Lab	very low	VLo

Several comments on Table A.1 are in order:

- 'labiodental' and 'bilabial' may be united into a single column, since they never contrast; the same is true for 'alveopalatal' and 'alveolar';
- 'voiceless' need only be specified for two rows of phonemes, since all other Dii phonemes are voiced;
- brackets indicate sharing of a single contrast by more than one column or row; columns and rows are reshuffled to take maximum advantage of these brackets.

Mere exposition of phonemic sign-phononic relationships is not adequate from the point of view of linguistic theory, but further treatment of stratificational phonology is beyond the limited scope of the present work.

	Vel	Lab	Glt	Alv		
Stp	k	kp	p	'	t	Vls
	g	gb	b		d	
	ŋg	mgb	mb		nd	
Nas	ŋ	m	'm	'n	n	
SmC		w	'w	'y	y	
Imp		ɓ			ɗ	
Frc		f	h		s	Vls
		v	[gh]		z	
Nas					nz	
Trl		vb			r	
Liq					l	
Voc		ɯ			i	Mid
		u			i	Hgh
	ɘ	ɘ			i	Nas
	ɘ̄	ɘ̄			ɘ̄	
	ə	o			e	Low
a	ɔ			ɛ	VLo	
Lng	aa, ɛɛ, etc.					

Table A.1: Dii phonemes and their subphonemic components

APPENDIX B

QUICK-REFERENCE LISTS: ROOTS, WORDS, PHRASES, FACTATIVE IMPERFECTIVE CLAUSES, SENTENCES

The following lists are meant to help the Dii speaker who is already familiar with this grammar to locate specific root, word, phrase, or clause titles without unnecessary paging through the grammar. I list only the name and an example of each type, without translation. Words are distinguished from roots by being prefixed with an asterisk.

B.1 ROOTS AND WORDS

*pn	Gbaŋgòṅ
n ₁	dèdèg, bà'á, bà', yú(lí)
*vn	gbólí
*n ₂	nɔm, hùud, vǐǐg, bab
*n _{cp}	bàa lig, í moo sè"é
*n _{kin}	dag nì, dàn nì
npr _q	née/nén, náo/nón, èṅ
npr _{indef}	tóó, tóó...tóó, nónná...nónná
npr _{rel}	í
<u>mí</u> _{subj}	-ń/mí, -a/ba, -m/mó, Ø
<u>mí</u> _{obj}	-n/mí, ba, -m/mó, -gV/-wɛ/-ɔ/-ɛ
* <u>mí</u> _{emph} subject	míí, baà, móó, wɛ
* <u>mí</u> _{emph} non subject	míí, bàà, móó, wòò
* <u>mí</u> _{emph} final	mí, ba, mó, wɛ
* <u>mí</u> _{fut}	mín, bání, món, wání/sín/áń
* <u>mí</u> _{futemph}	mínno, báníno, mónno, wáníno
* <u>mí</u> _{nonfut}	mín, bañ, món, (Ø 'zero' = 3 s)
* <u>mí</u> _{nonfutemph}	mínno, bannno, mónno, (bannno = 3 s)
<u>àṅ</u> _{subj}	àṅ, ba, àṅm, à, (note ba = dual)
<u>àṅ</u> _{sbsubj}	àṅ, àa, àṅm, à, (note àa = dual)
* <u>àṅ</u> _{emph}	àṅno, à baà, à móó, à wɛ
* <u>àṅ</u> _{sbemph}	àṅno, à baà, àṅmmo, à wɛ
<u>bi</u> _{subj}	bi, bi, bi, bi
<u>bi</u> _{obj}	-n/mí, ba, bi, bi
* <u>bi</u> _{emph} subject	biì, biì, biì, biì
* <u>bi</u> _{emph} non subject	míí, bàà, biì, biì

* <u>bi</u> _{emph} final	mí, ba, bi/mó, bi
* <u>bi</u> _{fut}	bín, bán, bín, bín
* <u>bi</u> _{futemph}	bínno, bánno, bínno, bínno
* <u>bi</u> _{nonfut}	biñ, bañ, biñ, biñ
* <u>bi</u> _{nonfutemph}	biñno, biñno, biñno, biñno
<u>i</u> _{subj}	àñ, àa, ìi, ìi
hyp _{present}	kà míñ, kà ban, kà món, kàñ
hyp _{past}	kà mín, kà ban, kà món, kàñ
hyp _{emph}	kà míñno, kà banno, kà mónno, kàñno
qual ₁	'màḡ
*qual ₂	píím, ká'ad, 'wóg
*qual _{ná}	hèèná, vǐǐgná
poss	míí, bàà, móó, wòò
poss _{log}	míí, bàà, bìì, bìì
poss _{kin}	-n, bà, -m, -gV
poss _{kinlog}	-n, bà, bì, bì
foc	máa
rec	pèè, tèè, súu, máa
indef	tóó
dem	yè, yẹ, zù, téé/té, máa/má
pl	vṽ
*lim	'wààpád, waaná'
adjQ	ẹ̀n, nées/nén
*V _{acc}	kón
V _{aux}	là, ya, dòg / dùù, mbóg, fàà, bàà, dọḡ
*V _{dat}	mbàad, tọḡd, kééd, néed, tiid
V _{desc}	mbàà, tii
V _{desid}	hǐǐ (want)
*V _{di}	gbód, kód, pọḡ
V _{eq}	pé(lí)
V _i	'yém, pɛ, sí
*V _{inch}	dí, bé', káḡ, vbín, sǐ', dọḡ, màà (help)
V _{int}	làà, dòg, zùù, yaa
V _{lo}	dí, pé
V _{perc}	màà (find), hò, nùḡ
*V _{rcp}	gbón, sẹ'ḡn, mbógón
*V _{repet}	gbóo, mbógɔ, dẹ'ẹ, 'woo, nóḡ
*V _{say} di	ọḡ, hǐǐd
V _{saytr}	tàà, vá', hǐǐ (answer)
*V _{stv}	kóy, píb, mbógoy
V _{tr}	nùḡ, hǐǐ, tè, gàḡ

telo	tíj, /lí/, b'á, pig
te	y'ógó, bán, ká, b'èè
lo	z'ógón, g'ój, d'áj, y'úú
*lo _{place}	Tagbùj
adv	nà'á, d'ón, náá, ná'
*adv _{ná}	'màj'ná, k'òògná
ideo	sà r, z'az'á, gug
num _{uni}	t'aj'ón
frac	ka', réétà
exp	áá'á, wí, t'òw, h'è'
rel	kan, bà, àm, àmáa, k'óó, z'ùù, d'igà, mà

B.2 PHRASE TYPES:

PNP	Kadia Matío v#
NP ₁	h'ej z'igid t'óó
NP _{ya}	ya mb'igì míí y'è ka p#
NP ₂	nà'á v#
NP ₃	bà' víí v#
NP _{gen}	h'ej s'óné Mbùù w'òò
NP _{genan}	Bàabiig nà'á
NP _{kin}	àñ f'aj v#
NP _{kinab}	dag s'áj v#
NP _{co}	d'ag kan t'oj
VNP	b'uulí nà'á
ÍP _{mod}	í t'óó
PrP	ví 'wààpád
QualP	gb'òò bà'á
VP _i	dàà d'áá d'òg
VP _{desc}	dàà tii
VP _{tr}	d'òggà bùù
VP _{lo}	ya d'í
VP _{rcp}	bàà h'ín
VP _{di}	dùù p'aj (bi) ya
VP _{dat}	mbàad(ʘ) dàà
VP _{stv}	dùù gboy
VP _{desid}	dùù s'én(nʘ)...né
VP _{inch}	bàà d'í
VP _{int}	là z'ùù
VP _{saytr}	dùù ò
VP _{saydi}	là ʘd(dʘ)
VP _{perc}	là n'ùj
VP _{vn}	d'òg s'è"é

TeP _{lí}	zágǎlé
TeP _{telo}	zágǎ sǎámé
TeP _{máa}	sèy tóólí máa
TeP _{ká}	ká bán
TeP _{gen}	zágǎ ’wààpád
TeP _{co}	yǎg kǎ’ám kan víd ’wààpád
LoP _{lí}	kǎə wòòlí
LoP _{telo}	tíj wòòlí
LoP _{dblé}	wòòlí ka’adí
RAP _{kan}	kan Kǎə áím
RAP _{yúú}	yúú wòòlí
RAP _{sim}	kó í nán yǎm vu wǎgǎ/baà la”ì
IdeoP	ǎád ǎád ǎád ǎád
NumP _{dec}	wǎhǎbó’ zùù tǎǎnó
NumP _{cent}	tèmere gúú
NumP _{mil}	ùzinèere vo’ gúú
NumP ₂	dágǎ ’néj
NumP _{ord}	tǎǎnó wòò
NumP _{dist}	tèmere kan vo’ gúú gúú
NumP _{co}	wǎhǎbó’ zùù tǎǎnó zùù ndaddú
SbP _{teloc}	sèy...ka...tée,
SbP _{rel}	k(íí)...yè,
SbP _{man}	kó née pǎn...ka...,
SbP _{sim}	kó í...ka...máa wǎgǎ/baà...zù wǎgǎ.
SbP _{hyp}	tòw...kǎ...tée,

B.3 FACTATIVE IMPERFECTIVE CLAUSE TYPES:

SIMPLE CLAUSES:

a) Intransitive	Waa vu	lúú ú.
	Mí	tá’ád yǎg kǎ’ám hím.
b) Descriptive	Hǎǎb tètè Ø	tii gǎ’ nan.
	Zum Ø	mbàà háǎdná.
c) Transitive	Mí	kó hèn lálí.
d) Object Comp	Vu	yètè Bòbózi gbanààì.
e) Equative	Mí	--- gǎ’ lòdì. (aff)
	Míí	--- pélí. (neg)
f) Locative	Gǎ’ Ø	dí váǎǎí. (aff)
	Gǎ’ tóó Ø	--- váǎǎí pélí. (neg)

g) Reciprocal	Vón	lín ám.
h) Ditransitive	V _H	kód bà'á ba'adì.
	V _H	pún gò'òy máa yè nɔ.
i) Dative	Yéé v _H	tɔɔd vó mbàà ná'.
j) Stative/passive	Zè' Ø	ma'ayú.

COMPLEX CLAUSES:

k) Desiderative	Mí	híjì ì dùù ɔn tóó.
	Mí	híjì bi làà kaalí.
	Mí	híjì yéé tóó v _H mbóggî.
l) Inchoative	Bà'á Ø	dí dòò zòlì.
	V _H	kájì ba'ad kólî.
m) Intentional	Mí	làà v _H nenèè.
n) Introducer _{tr}	V _H	ò: «Vó nòɔ púg...»
	Bà'á Ø	ò yógó bà bíń làà kaalí.
	Bà'á Ø	ò bà ù _H nàà nábbì.
o) Introducer _{di}	Gá' Ø	ɔdd _H : «Mí gá' nannè.»
	V _H	ɔd bà'á mbìgì wòò bà w _H yè nɔ.
	V _H	ɔd nán v _H ù _H nàà nábbì.
p) Perception	V _H	nùj Kpoo Ø nɔɔ sù'ú.
	Mí	hò bà'á Ø bínda hennè.

B.4 SENTENCE TYPES

Imperative $\underset{\text{AN}}{\text{Àm}}$ bè kèjì yè $\underset{\text{MI}}{\text{mó}}$ màa $\underset{\text{MI}}{\text{mó}}$ sòj 'wààpád.

Hyp Tòw kà mín nán nààì tée, kà mín yòò lig b_Hulí nà'á.

Compound Bàa yè Ø hò... 'wààpád, ámáa Kəə Ø hòn né.

Gom Ø yà ba, mam Ø 'wòd ba ám.

Pivoting I-----PM
 $\underset{\text{AN}}{\text{Àm}}$ pún sààm mí tè ú.

O--PM
 $\underset{\text{AN}}{\text{Àm}}$ túú mam à hì"ú.

Simple: Factative Imperfective Waa v_H lúú ú.

Simple: Factative Perfective Waa v_H lúú sù'ú.

Simple: Imperative (Imperfective) Waa v_H, ì lúú ú!

Interrupted	Ø ɔddu...Mbùù Ø ɔddu...	
Response	Áá'à. / Hà'!	/ Èè.
Complex:		
<u>TeLoC</u>	Sèy àh làà téé,	mín hò hẹn wòò.
<u>TeLoC</u>	Ya ùu làà wulí téé,	mín làà wulí ám.
<u>TeLoC</u>	Tòw àh làà téé,	mín hò hẹn wòò.
Con	Kóó à lúu ní sị',	mín hò hẹn wòò.
Hyp -verb	Tòw kà món nán nààì téé,	kà món kó ẹná?
+ verb	Tòw kà món làà né téé,	kà món hò ẹná?
Cause	Kaa họn ví wí' ní yẹ,	bán lá ví ẹná?
<u>TeLoC</u>	Mín hò hẹn wòò,	sèy à yaa té nɔ.
<u>TeLoC</u>	Mín hò hẹn wòò,	ya àa làà ví wulí té nɔ.
<u>TeLoC</u>	Mín hò hẹn wòò,	tòw à yaa té nɔ.
Purpose	Mín kóddu ba'adú,	moo à súun hẹn wulí.
Concessive	Hẹn nàà há'an nán wu nɔm né,	kóó à ɓùù ú sị'.
Cause	Bà'á wu kó pẹ́n	kaa nùh ví hẹn lálí nà'á yẹ nɔ.
	Mín kóddu ba'adú,	moo mí híjwọ ọ.
Manner	(Items below in parentheses are optional:)	
	Bà'á wún tú'ud waa née	wún kó ba'ada.
	Bà'á wún kó née (pẹ́n)	waa wún kó(ddu) ba'ada.
	Bà'á wún dẹh née	waa wún kó ba'ada.
Comparison	Mín kóddu ba'ad	kó í ka kón máa wɔgɔ.
Until	Mín kóddu ba'ad vìvìvìd	háj ya wún gàh.
Neg.Purpose	Mín gág duulí nà'á,	moo kà mín tìd hẹn mí ỳ.

APPENDIX C

IDIOMATIC GREETINGS, FAREWELLS, AND THANK-YOU'S

We'll discuss greetings, farewells, and thank-you's under the following headings:

- C.0 introduction
- C.1 morning greetings and responses
- C.2 general greetings and responses
- C.3 afternoon and evening greetings and responses
- C.4 greetings for visitors, travelers
- C.5 farewells

C.0 INTRODUCTION

Greetings and their responses are an important part of Dii life. They convey a much more positive meaning than do their English counterparts. They're used to show one's interest in other people and to carry a real blessing to the person greeted.

Repetition of a greeting or thank-you is often used to express sincerity. A six- or seven-fold thank-you is not uncommon in such a situation. A single greeting is regarded as a minimum, often reserved for people you meet daily.

It's necessary to note that greetings are quite stereotyped and the response given is generally not the 'correct' one if we think only in terms of the strict meaning of the words used. The responses in the lists below are kept strictly 'logical' as to content, but the actual Dii usage is more irregular and varied than these lists can possibly indicate. Variety is imperative in Dii life at this point. The lists below give only the fundamentals in their respective areas, subtle nuances not being treated.

The exact meaning of some of the greetings is sometimes difficult to determine. Many have lost their etymological meaning entirely. Only free translations will be given, and even these will usually be limited only to the initial element of a pair since the response cited generally corresponds closely to the question.

Greetings are on the left, their responses on the right of each list.

Only the second person plural and the first person singular pronouns will be used consistently. See 3.6.2 on the uses of the second person singular and plural pronouns, and on the honorific use of the third person plural pronoun.

Zám ‘in good health (Ful)’ and nán ‘in good health’ are roughly interchangeable in most of the greetings and farewells; only one or the other will be listed, therefore. Some Dii are ‘purists’ and have made an effort to weed out some Fulfulde words, so these latter persons strongly prefer nán in their greetings. It’s my impression, however, that the purists are fighting a losing battle, since I hear zám very frequently.

Only bà’ and bà’á ‘father’ (3.4.1) will be used in these responses, but nà’/nà’á ‘mother’ or waa ‘child’ may generally be substituted in the same response as occasion demands.

C.1 MORNING GREETINGS AND RESPONSES

The following are generally used between dawn and 11 AM among persons who see each other almost every day. One or more of these may be followed by one or more of the ‘general greetings and responses’ (section C.2):

Ví ním sá’áa?	Ví ním sí nánná?
Are you awake already?	Did you awaken healthy?

Ví nímmaà?
Are you awake already?

Ví ùd nánnà?	Mí ùd nánnè.
Did you sleep well?	

Ví ùd sí zámmaà?	Mí ùd sí zámmè.
Did you sleep well, then?	

One of the following is generally substituted for the above ‘logical’ responses:

Èè bà’ míf!	Yes, my father!
Èè.	Yes.
Bà’ míf!	My father!
Bà’ nàà!	Father!
Tèè bà’ nàà!	Father!
Zám(a)nii / Zám(a)nee!	In good health!

As a closing remark, úsókò 'thank you (Ful)' may be used with or without an additional bà' míí.

On occasion the response is a similar greeting in return, for example: Èè, ví níím sá'áa?

If the response èè bà' míí must be repeated several times, it may degenerate into a polite murmur where only the vowels and glottal stop remain: èèà'íí. The tones and context are sufficient to indicate what is meant.

C.2 GENERAL GREETINGS AND RESPONSES

These are appropriate at almost any time during the day:

Ví mbàà náannaà?
Are you well?

Mí mbàà nánne.

Doo víí nu!

Welcome!, hello!(‘it’s your foot’) Thank you/Welcome yourself!

Úsókò/Doo víí ám!

Ví diláa?
Are you there?

Mí dilí.

Ví ùd zámma?
Did you sleep well?

Ví mbàà là zámmaà?
Are you well?

Mí mbàà là zámme.

Ví mbàà dũũ ná'á?
Are you well?

Mí mbàà dũũ ná'á.

Ví mbàà sí dũũ ná'á?
Are you well?

Mí mbàà sí dũũ ná'á.

Ví mbàà là dũũ ná'á?
Are you well?

Mí mbàà là dũũ ná'á.

Bà' víí mbàà zámmaà?
Is your father well?

Vũ mbàà zámme.

Bà' víí mbàà là zámmaà?
Is your father well?

Vũ mbàà là zámme.

Kó nennà?
What are you doing?

Kón hẹn né.
Nothing. (do-NEG thing F-I-
NEG)

Inquiries concerning the health of parents and relatives aren't nearly as extensive in the daily greetings as they are in the greetings used with visitors and travelers.

Wòò may be added to zámmè to give added emphasis and friendliness.

C.3 AFTERNOON AND EVENING GREETINGS AND RESPONSES

These greetings are appropriate between approximately 11 AM until shortly after nightfall. One of the following may then be followed by one or more of the 'general greetings and responses' in section C.2:

Ví lan sá'áa?
Are you having a good
afternoon?

Èè, bà' míí.
Yes, my father.

Ví lan mà?

Ví lan zámmaà? Mí lan zámmè.

Ví lan sí zámmaà? Mí lan sí zámmè.

Ví lan sí nenná?
How is your afternoon? Mí lan sí zámmè.

As we saw following the morning greetings, any of the 'yes/ my father/ yes, my father' responses listed in section C.1 are appropriate also as responses.

Saying good-night may take one of several forms:

Ví dó sá'áa? Mí dó sú'ú.
Are you going to bed?

Ì ùd zámmè!
Sleep well!

Ì ùd sí zámmè!
Sleep well!

Yógó pẹ́n!
Until tomorrow!

Yag kà'ámé pẹ́n!
Until tomorrow morning!

Yógó mènèné pẹ́n!
Until tomorrow afternoon!

Ba kàn ví yógó!
We'll meet tomorrow!

C.4 GREETINGS FOR VISITORS, TRAVELERS

Doo ví nu!
Welcome! ('it's your leg/foot')

Doo ví kan yaalî!
Thanks for coming!

Doo ví kan hẹn gané!
Thanks for bringing my baggage!

Appropriate responses to any of the above are (see section C.1):

Èè, bà' míí! / Bà' míá! / Bà' nàà! / Úsókò! / Èè.

Instead of (or with) the above greetings, the following may be used:

Ví yaa sá'áa? Mí yaa sú'ú. / Èè, mí yaa sú'ú. /
Have you come? Èè, bà' míí, etc.

Ví dṛg/vé' ya/zuu sá'áa?
Have you come up/returned/come down?

An extensive inquiry into the state of health of parents and relatives soon follows, on the pattern:

Bà' ví mbàà zámmaà? Èè, vu mbàà zámme.
Is your father in good health?

C.5 FAREWELLS

Intention to depart is signalled by any one of a number of expressions:

Mí lúú/dòg/zùù/làà sù'ú.

I have left/gone up/gone down/gone already.

Àa lúú ví áa?

Shall we (inclusive) leave?

Ba lúú ví ú.

Ba lúú ví ú.

Let's leave/We're leaving.

Ba lúú ví sùm.

Ba lúú ví sùm.

Let's leave, then!

Ba lúú ví sínná.

Ba lúú ví síí.

Let's leave.

Ba lúú ví bò.

Ba lúú ví sínná!

Come on, let's leave (impatient)!

The actual farewell may take one of several forms:

Ò moo là ú!

Good-bye (say word go IMPV)

Ò moo là ú!

Ò moo là ú wòò!

Ò moo là áàa!

Ò moo là pẹ́n!

(say word go first)

Ò moo là pẹ́nnáa!

Ò moo là sínná!

Ò moo là sùm!

Good-bye until later!

Ò moo là sùmmáa!

Ì làà zámmè!

Go in good health!

Èè, bà' míí / Úsókò, etc.

Ì mbàà zámmè!
Stay in good health!

Ì mbàà sí zámmè!

Sèy tóólí pèń!
Until next time!

Tíń pèń!
Until next time!

Záḡalẹ́ pèń!
See you later (during the AM only)!

With the farewells, greetings are certain to be sent along with a traveler to several parents and/or relatives, generally in the form:

Ì vá' bà' víí vu wulí!
Greet your father!

Mín vá' vu ú/wulí!
I'll greet him!

Vún kì ú!
He'll hear (it)!

APPENDIX D

OUTLINE OF THE TAGMEMIC MODEL

It's possible that the reader might not be acquainted with the tagmemic model used in this description. This appendix won't offer a complete explanation of the model, but we'd like to outline some of its principal ideas.

We'll examine the following subjects:

- D.1 the distinction between etic and emic units
- D.2 the 3 hierarchies: phonology, grammar, lexicon
- D.3 construction and tagmeme, position and filler
- D.4 nuclear and peripheral tagmeme
- D.5 how to distinguish emic constructions

D.1 The distinction between etic and emic units

Every language must be studied from the viewpoint of its own structure (the 'emic' point of view). The words 'etic' and 'emic' come from phonetic and phonemic. The etic point of view is that of the foreigner; he/she hears sounds but doesn't understand the system of the language in question.

For example, the foreigner can hear a nasalized w [w̃] and a non-nasalized w [w] in the Dii language, but he/she doesn't know whether there are two consonants or whether there's only one consonant with the two variants found in different contexts. After having studied several examples of Dii w's, he/she concludes that there's only one consonant with two contextual variants (allophones). Our foreigner is already on the 'inside' of a part of the Dii system.

Every native speaker of a language has learned the emic structure of his/her language since childhood, but he/she may not be able to explain this structure consciously. The linguist will never impose one language's structure on another language; he/she describes each language in terms of its own (i.e. emic) structure.

D.2 THE 3 HIERARACHIES: PHONOLOGY, GRAMMAR, LEXICON

A given text is divided by the tagmemic model simultaneously in three different ways: 1) It's divided into phonological (sound) units, with phonemes as the basic units. 2) It's divided into lexical units, with morphemes as the smallest units. 3) It's also cut into grammatical divisions, with 'tagmemes' which have the length of morphemes as the basic units. See 1.0 and 3.1 for definitions of phoneme and morpheme. See appendix D.3 for a definition of 'tagmeme.'

Within each hierarchy, starting from the basic units, larger and larger units are described. The larger units within the phonological hierarchy are typically syllables, phonological words, phonological phrases, pause groups, etc.

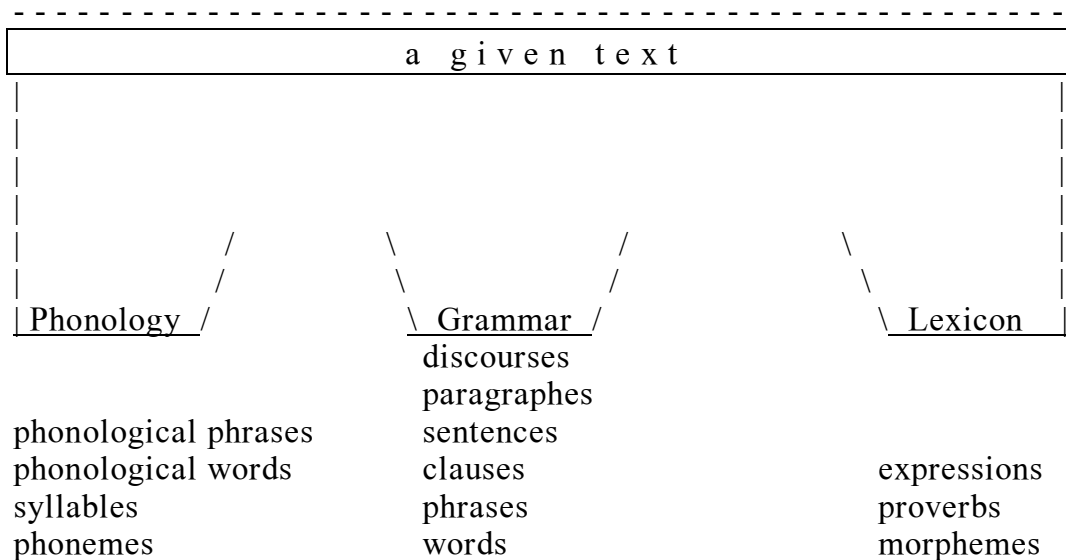


Figure D.1: The three hierarchies

The lexical hierarchy contains all the semantic units: morphemes, idioms of various lengths, proverbs, etc.

The grammatical hierarchy is more complex. There are several levels of grammatical units, for example the word level, the phrase level, the clause level, the sentence and discourse levels. As for the units in the other hierarchies, the exact number of levels in a particular language must be fixed by the analysis of that language. But before I describe the grammatical hierarchy in more detail, it may be well to summarize what we've already said by Figure D.1. A given text is divided simultaneously

in three different ways, that is, into three hierarchies. These hierarchies are not independent but semi-autonomous, because certain of the units of one hierarchy may coincide with units of another hierarchy, but others may not. For example, phonological words don't necessarily coincide with grammatical words. Nor do idioms or proverbs coincide with phrases or clauses, although this is often the case in languages.

We now return to the description of the grammatical hierarchy.

D.3 CONSTRUCTION AND TAGMEME, POSITION AND FILLER

A 'construction' is a series of 'tagmemes' which fulfill together a certain grammatical function. A construction is composed of tagmemes.

It's only by their distribution that the constructions and tagmemes of a language may be isolated and described.

A 'tagmeme' is: a) a unit that has a function, 2) a unit that contains a class of elements which is called its filler, 3) a unit whose position in a construction may be described. Each tagmeme has a function, a filler, and a position.

It's true that in this work, I've often used the word 'position' (5.0) ambiguously. I've used it to speak of both tagmemes and positions (slots) because a large number of my readers are not familiar with the concept of a tagmeme.

It's the tagmeme's function and filler that I have emphasized, since its position is only a secondary aspect of its nature. Note that the concept of a tagmeme avoids certain traditional difficulties confronting grammarians who tried to separate morphology completely from syntax. Morphology is just one level among several syntactic levels, and the same descriptive method may be applied to all levels.

An example: the following transitive clause is a construction in English: I will take the book to Garoua.

This clause contains four tagmemes: subject, predicate, direct object, and locative. If the symbols are used as explained in 5.0.4, there will be one symbol for each tagmeme:

S:pr function of subject, pronoun as filler

P_{tr}:VP_{tr} function of transitive predicate, transitive verb phrase as filler

O:NP function of direct object, noun phrase as filler

Lo:LoP locative function, locative phrase as filler

As soon as we put these in a formula, each tagmeme's position becomes clear:

S: _{pr}	P _{tr} :VP _{tr}	O:NP	Lo:LoP
I	will take	the book	to Garoua

Some languages allow some of their tagmemes a great deal of freedom as far as their position is concerned, at least on the clause level. There are, however, adequate symbols for describing these varying positions.

It was seen above that a construction is composed of tagmemes. It's also true that tagmemes typically contain constructions. These constructions ordinarily belong to one of the lower grammatical levels. For example, the locative tagmeme above contains a locative phrase, a construction from the phrase level.

It's now time to emphasize that tagmemes exist on each level of a grammar. Figure D.2 describes the relationships typically found between the constructions and the tagmemes of different levels.

It may be said that constructions are potential units of the elements that constitute them. On the other hand, tagmemes are actual units on the basis of which constructions may be discovered and described. It has already been stated that the relationships described above between constructions and tagmemes are 'typical.' There are also constructions from higher levels that are embedded in lower levels, skips from lower levels to higher levels, loopbacks, etc.

D.4 NUCLEAR AND PERIPHERAL TAGMEMES

It's not necessary to repeat here what has already been written in 5.0.2 and 5.0.3, but the importance of this distinction for the tagmemic model must be emphasized again.

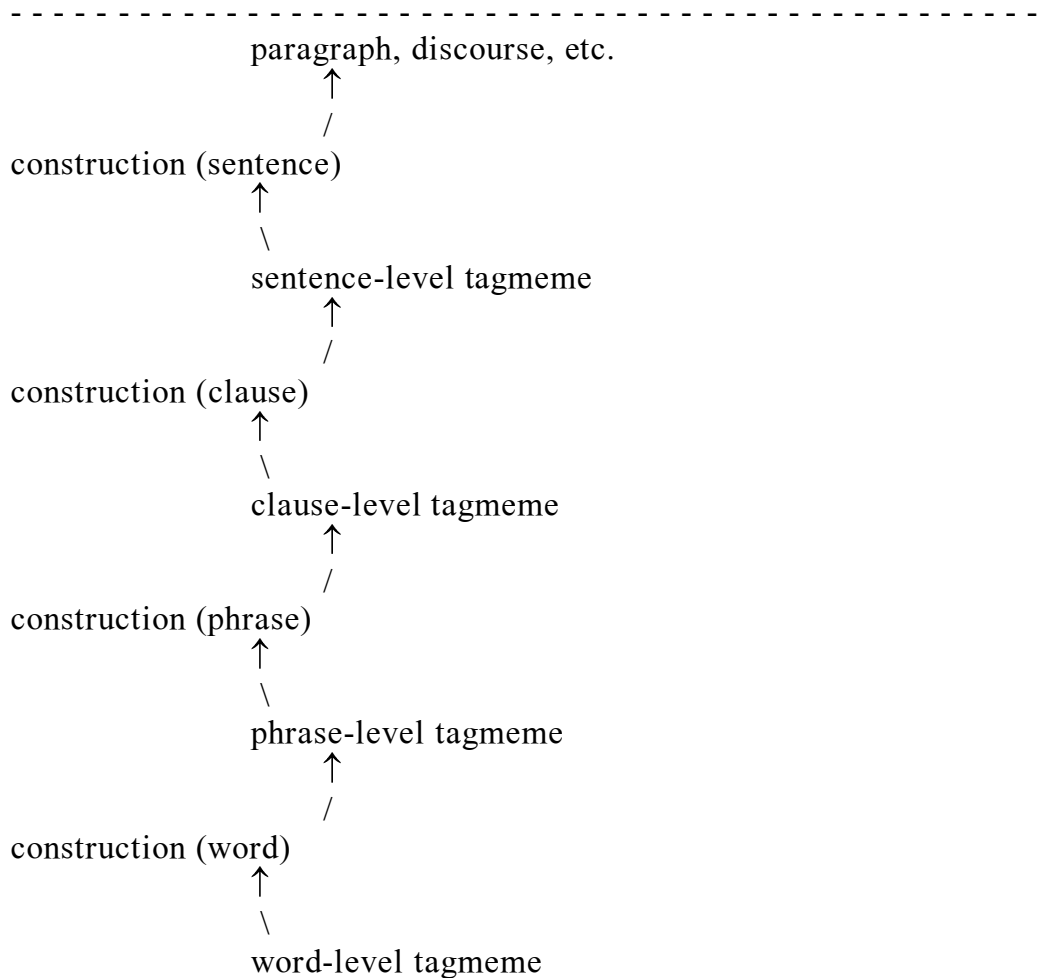


Figure D.2: Typical relationships between constructions and tagmemes

D.5 HOW TO DISTINGUISH EMIC CONSTRUCTIONS

On each level of a grammar (word, phrase, clause, sentence,...), all the constructions must be examined and those distinguished that are emic. There must be some objective criteria to help the analyst. In order to state that two constructions are emic, the tagmemic model accepts the following criteria: a) there must be at least two structural differences between them, and b) one of these differences must involve the nuclear tagmemes of the constructions under consideration (Longacre 1964:47-48).

Longacre lists five structural differences which he accepts as valid. These differences will now be illustrated with examples from the Dii clause level (5.1.2, 5.1.3, and Tables 5.2 and 7.1).

1. He accepts an obligatory difference in the ordering of similar elements, or a marked statistical preference for a different ordering of such elements. Example: the two types of Dii introductive clauses demand that the manner position precede the direct object, but all other clause types demand that it follow the direct object.

2. Longacre also accepts a difference of structure of the elements occurring in the clause tagmemes, for example a difference in the words, phrases, or subordinate clauses that occur. Example: Table 5.2 lists six types of Dii direct object tagmemes. The direct object of a transitive clause may contain a noun phrase, a cardinal number, or a personal pronoun of the mí series, but the direct object of the reciprocal clause may contain only a noun phrase, etc.

3. He accepts a difference in the emic class of elements appearing in the tagmemes. Example: the predicate tagmeme is distinct for each type of Dii clause, because the transitive predicate contains a transitive verb phrase, the intransitive predicate contains only an intransitive verb phrase, etc.

4. Longacre also accepts a difference in the number of tagmemes present, or the presence of a given tagmeme in one type contrasting with its absence in another type. Example: the Dii transitive clause may contain a direct object, but the intransitive clause cannot. In the same way, a ditransitive clause must contain an indirect object, but transitive and intransitive clauses cannot.

5. He accepts a difference of grammatical transformation possible. Example: Table 7.1 shows that the intransitive imperfective clause may be transformed into perfective and imperative clauses. On the other hand, the locative clause may only be transformed into a perfective clause.

All this is not only true for the clause level, but each type of phrase must be contrasted in the same way with all other phrase types. The same is true for each word type, each sentence type, etc. On each level the constructions must be examined, and those that can be contrasted by two structural differences are considered emic.

This appendix is only a brief outline of some of the principal ideas of the tagmemic model. For those who would like to study it in more detail, the following are recommended: Elson and Pickett 1967; Longacre 1960, 1964, 1966, and 1996; Pike 1959, 1967, and 1970; Pike and Pike 1980.