

TOPICS IN THE MORPHOLOGY AND SYNTAX OF BALANTA,
AN ATLANTIC LANGUAGE OF SENEGAL

A Dissertation

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by

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BIOGRAPHICAL SKETCH

Kirsten Anne Fudeman grew up in Princeton, Massachusetts. She received a B.A. in French with honors and a B.S. in Education from the Pennsylvania State University in 1993. In 1994 she entered the doctoral program in linguistics at Cornell University.

**For Bill,
my fellow apple picker**

ACKNOWLEDGMENTS

In the summer of 1997, I was the teaching assistant for a course taught by Mark Aronoff during the Linguistic Society of America Summer Institute. For him, an essential part of learning about morphology is familiarizing oneself as thoroughly as possible with the morphology of a particular language, and so, for part of every class we worked on doing just that. The language he chose for the course was Jóola Foñy (Diola Fogny), partially because of its complex and interesting morphology, and partially because there is a clear and thorough grammar available (Sapir 1965). By the end of the summer, I was hooked on Jóola, and in the fall I thought I would try to find a native speaker.

A friend suggested I go talk to Abdoulaye Diatta, who had just moved to Ithaca from Senegal, and who offered lessons in French, Wolof, Mandinka, and Fula. As it turned out, Abdoulaye does speak Jóola, but his native language is Balanta. Much to his surprise, I asked if he would teach me, and we have been working together ever since. I would like to thank Abdoulaye for all of the time he has spent teaching me about his language and his country. Working with him has been one of the most pleasurable aspects of writing this dissertation.

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LIST OF ABBREVIATIONS

1	first person
2	second person
3	third person
ABS	absent, not in view
ACC	accusative
AFF	affirmative
AGENT	agentive suffix
ANIM	animate
AO	applied object
APASS	antipassive
APP	applicative
ASP	aspect
AUX	auxiliary
C	consonant
CAUS	causative
Cl	clitic
CL1-7	noun classes 1-7
COMP	complementizer
CONS	consecutive marker
COP	copula
DAT	dative
DEF	definite, definite determiner
DEM	demonstrative
DETR	detransitivizing (theta role absorbing) suffix

DIR	directional morph
DIST	distal
DO	direct object
EMPH	emphatic
ERG	ergative
FEM	feminine
FOC	focus marker
FUT	future
FV	final vowel
GEN	genitive marker
HAB	habitual
HUM	human
HYPO	1. hypothetical morph (verbal mood) 2. subject marker occurring with negative and future verbs
IMPF	imperfective aspect
INAN	inanimate
INDIC	indicative
INSTR	instrumental
intr	intransitive
IO	indirect object
LINK	(genitive) linking consonant
LOC	locative preposition
MOD	modality marker
N	1. noun, 2. Numeration
NEG	negative marker
N-C	N'Diaye-Corréard 1970

NONHUM	non-human
OBJ	object
OM	object agreement marker (Bantu examples)
PAST	past tense
PCL	particle
PERF	perfect
PL	plural
POSS	possessive
POST	marker of posteriority; 'after(wards)'
PRES	present
PROG	progressive
PROX	proximal
Q	question marker
RECIP	reciprocal
REDUP	reduplicant
REFL	reflexive
REL	relative clause marker
REM	remote past
SBJC	subjunctive marker
SG	singular
SP	subject prefix (Bantu examples)
SUB	subject
SYM	symmetrical
tr	transitive
V	1. verb, 2. vowel

Chapter 1

Introduction

1.1 Goals of the Present Work

This thesis is an exploration of the morphology and syntax of the Ganja dialect of Balanta, spoken on the south bank of the Casamance River in Senegal. The bulk of the data presented here was provided by a native speaker, Abdoulaye Diatta, 36, of Ziguinchor, Senegal between September 1997 and May 1999.¹ Other sources were Sousa Bella (1946), Quintino (1951, 1961), Wilson (1961a), and N'Diaye-Corréard (1969, 1970, 1973).

The picture of grammatical structure that emerges from this study is a highly unified one, with clauses and noun phrases sharing similar structures, and verbal morphology reflecting the hierarchical organization of the syntax. It is argued, however, that while much morphology has a syntactic explanation, the match between morphology and syntactic structure is not exact. The distribution of some morphemes, including Balanta subject prefixes and adjectival agreement markers, cannot be explained in purely structural terms, and the proper characterization of the behavior and positioning of clitics must make reference to the phonological component of the grammar.

I begin this chapter by offering an introduction to Balanta and a brief phonological sketch of the Ganja dialect in section 1.2. This is followed by a

¹ My consultant has been living in Ithaca, NY since August 1997; prior to that he had spent his entire life in Senegal. His father was born in Ngindir, and his mother in Birkama, Senegal, and both are native speakers of Ganja.

description of the noun class system of Ganja in section 1.3. In section 1.4 I introduce and motivate the theoretical framework used in this dissertation.

1.2 Balanta: Introduction and Phonological Sketch

1.2.1 Classification

Balanta belongs to the Atlantic language family (also known as West Atlantic and Senegalo-Guinean), as first established in the work of Koele (1854) and Westermann (1927, 1928). The major members of the family are Fula, with several million speakers, and Wolof, with about two million speakers, as well as the Joola cluster, Serer, and Temne (Wilson 1989). Atlantic itself is a branch of Niger-Congo (Greenberg 1963, Bennett and Sterk 1977; see Williamson 1989 for an overview of their proposals).

As noted by Williamson (1989) and Wilson (1989), many basic questions about Atlantic still lack definitive answers, including how Atlantic languages are related to one another and to other African languages, and how some of their most salient grammatical features came to be. Lexical correspondences between Atlantic languages are frustratingly few, even between those languages that have traditionally been grouped together (Sapir 1971, Bennett and Sterk 1977, Wilson 1989). This led Bennett and Sterk to hypothesize that Atlantic is not a closely united genetic unity and that some language groups traditionally assigned to Atlantic "are in fact coordinate branches" (p. 248).

Within Atlantic, Balanta is most closely related to the Joola languages, spoken mainly in Senegal and Gambia, and to Manjaku, Mankanya (Bula or Brame), and Papel, spoken in Guinea Bissau and on Bissau Island.

All of these are classified as Bak languages.² Balanta also shares many characteristics with other Atlantic languages, including a Bantu-like noun class system (although the classes themselves and the extent of agreement vary across languages), noun-initial noun phrases, rich verbal derivational and inflectional morphology, and consonant mutation.³ In addition, the Ganja dialect of Balanta's lexicon is characterized by a large number of Mandinka loanwords. Below I give an outline of the membership of Atlantic, following Sapir (1971) and Wilson (1989):

TABLE 1.1. ATLANTIC LANGUAGES.

- I. Northern Branch
 - A. Senegambian languages
 - 1a. Fula (Peul, Fulani, and Toucouleur [Senegal dialect])
 - 1b. Serer (Sin, Fadiout, Nyomi)
 - 2. Wolof (Jolof, Diolof)
 - B. Cangin languages
 - 1. Lehar, Safen, Non
 - 2. Ndut, Falor
 - C. Bak languages
 - 1. Joola or Diola group
 - Joola (Foñy, Kasa, Fulup, Huluf, Buluf); related languages: Gusilay, Karon, Kwaatay, Bayot

² The name 'Bak' comes from a morpheme the languages have in common; cf. Wilson 1989: 88.

³ On consonant mutation in Balanta, see N'Diaye-Corréard (1970). The dialect represented there exhibits more consonant mutation than the one described here.

2. Manjaku, Mankanya (Bula or Brame), Papel
 3. Balanta (own name: *f-raasɛ*), Ganja (own name: *f-ca*)
- D. Eastern Senegal-Guinea languages
- 1a. Tanda or Tenda group
 - a. Basari (Tenda Boini or Tanda-Basari)
 - b. Bedik (Tenda Bande, Tendanke, or Basari du Bandemba)
 - c. Bapeɲ
 - 1b. Konyagi (also called Tenda Dunka; own name: *wèỹ*)
 - 2a. Biafada (Njol; own name: *u-joolaa*)
 - 2b. Pajade (Badiaranké or Jaad)
 - 3a. Kobiaana (Buy), Kasanga
 - 3b. Banyun (Baïnouk or Ñuñ)
- E. Nalu
1. Nalu
 2. Mbulungish (Baga 'Foré' or Baga Monson)
 3. Baga Mboteni

II. Bijago

III. Southern Branch

- A. Sua (Mansoanka; erroneously know as 'Kunant' or 'Cunante')
- B. Mel languages
 - 1a. Baga languages (with exception of Baga Foré and Baga Mboteni), Landuma
 - 1b. Temne, Banta

- 2a. Bulom languages: Mmami (Mandingi), Sherbro, Krim,
Bom
- 2b. Kisi
- 3. Gola
- C. Limba

According to Grimes (1996), there were 270,000 speakers of Balanta in Guinea Bissau as of 1991, and 78,100 in Senegal. Balanta speakers can also be found in the Cape Verde Islands and Gambia. There is much variation across Balanta dialects, so much, in fact, that northern and southern dialects are not mutually intelligible (Sapir 1971: 60). In fact, Wilson (1989) considers Balanta and Ganja to be separate languages that form a continuum. I have chosen to call Ganja a dialect of Balanta in this work because my consultant, A. Diatta, considers himself a speaker of Balanta.

1.2.2 *Previous work*

There have been five published grammatical sketches of Balanta: Sousa Bella (1946), Quintino (1951, 1961), Wilson (1961a), and N'Diaye-Corréard (1970 [1969]).⁴ Sousa Bella, Quintino, and Wilson describe dialects spoken in Guinea Bissau, while N'Diaye-Corréard describes a Ganja dialect very similar to the one of my native speaker consultant. Sousa Bella (1946), Quintino (1951), and N'Diaye-Corréard (1970) provide a wealth of lexical data in the form of Balanta-Portuguese and Balanta-French glossaries. Other sources of Balanta lexical data include Koelle (1854), Espírito

⁴ N'Diaye-Corréard (1970) is a much more extensive version of her 1969 paper.

Santo (1948), and Tastevin (1963), all of which are valuable from a comparative standpoint since Balanta words are listed along with those of other related languages. Handem (1986) and Hawthorne (1998), political and historical works on the Balanta respectively, contain examples of many lexical items from Balanta dialects spoken in Guinea Bissau, and Quintino (1947) gives limited examples of Balanta vocabulary. Of all these lexical sources, N'Diaye-Corréard is the most useful because of its extensiveness and accuracy, particularly with respect to vowel length and tone.

N'Diaye-Corréard (1970) and (1973) are the only focused, in-depth studies published about the language. N'Diaye-Corréard (1970) examines the noun classes of Ganja and the realization of noun class agreement in verbs, adjectives, numbers, pronouns, and demonstratives. N'Diaye-Corréard (1973) presents the tonology and morphological structure of the Ganja verb with numerous examples.

1.2.3 *Phonological sketch*

The Ganja dialect of Balanta has the vowel inventory in (1), which consists of 14 phonemes:

(1)	i, i:	u, u:
	e, e:	o, o:
	ɛ, ɛ:	ɔ, ɔ:
	a, a:	

In (2) I give examples, elicited in my work with A. Diatta, of the vocalic phonemes. From here on, I represent long vowels as VV:

(2)	ii	tjiif	'five'
	i	tjif	'hand'
	ee	-weet	'find'
	e	-wet	'happen'
	εε	fεεε	'ruse, plan'
	ε	fεε	'outside'
	aa	baal	'house'
	a	bala	'balafon' (musical instrument)
	ɔ	mɔɔne	'black'
	ɔ	mɔ	'today'
	oo	tfoole	'fire'
	o	tfole	'peace'
	uu	suum	'war'
	u	-sum, sum	'please (v.)', 'mouth'

The consonantal inventory of Ganja, given in (3), includes voiceless and voiced stops (including geminate /t:/), affricates, and labiovelars; voiceless fricatives; glides; liquids (including geminate /l:/); and a rich series of nasals and prenasalized stops:

(3)	p	t, t:	k	k̄p	
	b	d	g	ḡb	
	f	θ			h
			tʃ		
			dʒ		
		s			
		r			
		l, l:			
			j	w	
	m	n	ɲ		
	m̄b	ⁿ d	^ɲ g	m̄ɲḡb ⁵	
		ⁿ t			
	m̄f				
		ⁿ s			

Examples of Ganja words containing these consonantal phonemes in all attested environments are given in (4). Note that there are very few intervocalic voiceless obstruents. It is possible that these are limited to borrowings. In (4) and throughout the rest of the dissertation, I omit tiebars on complex segments, and represent prenasalized consonants as <nC>:

(4)	p	<i>pitila</i> 'dew', <i>rip</i> 'song' (none intervocalically in my corpus)
	b	<i>bɔntfu</i> 'be beautiful', <i>-hubut</i> 'open' (devoiced word-finally)
	t	<i>-to(w)</i> 'go', <i>dʒato</i> 'lion', <i>fit</i> 'attack (n.)'
	tt	<i>Diatta</i> (family name), <i>-lɔtte</i> 'cook'
	d	<i>-dasu</i> 'break (vb.)', <i>mfida</i> 'friend' (devoiced word-finally)
	k	<i>kaatu</i> 'because', <i>hakilo</i> 'memory' (< Arab.)
	g	<i>gi</i> 'be', <i>dʒoge</i> 'river', <i>ɲeg</i> 'chicken'
	kp	<i>kpɔɲa</i> 'beehive'

⁵ I have represented the prenasalized labiovelar as having both a labial and a velar nasal component because phonologically, I believe this to be the case. Phonetically, however, the prenasalized labiovelar is realized as [ɲḡb].

gb	<i>gbaale</i> 'house'
f	<i>fo</i> 'this', <i>-biifa</i> 'see', <i>tfif</i> 'hand'
θ	<i>-faθa</i> 'boy'
v	<i>vlej</i> 'day' (< /f + lej/)
h	<i>hɔ</i> 'this (cl. 1)', <i>hur</i> 'know'
tʃ	<i>tʃɔle</i> 'fire', <i>sɔtʃi</i> 'coal', <i>pɛtʃ</i> 'name (has special cultural significance)'
dʒ	<i>dʒato</i> 'lion', <i>bɔdʒa</i> 'earth, ground'
s	<i>suufi</i> 'cooked rice', <i>-wɔsɛ</i> 'wash', <i>rɛs</i> 'year'
r	<i>rum</i> 'fog', <i>mbarimuso</i> 'sister', <i>gɔlɛr</i> 'pot'
l	<i>lufi</i> 'tomorrow', <i>falas</i> 'horse', <i>wil</i> 'thing'
ll	<i>halla</i> 'how?', <i>gɔbell</i> 'calabash'
j	<i>jaabi</i> 'three', <i>dimbaja</i> 'name changing ceremony' (word common to several languages), <i>-lej</i> 'day, sun'
w	<i>wɛdɛ</i> 'water', <i>-siibow</i> 'dream'
m	<i>mɔɔnɛ</i> 'black', <i>alama</i> 'king', <i>fum</i> 'nose'
n	<i>na</i> 'Mom, Mommy', <i>anin</i> 'woman', <i>ɲanɛ</i> 'clean'
ɲ	<i>ɲɛfɛ</i> 'stomach'
ŋ	<i>ŋwɔɔde</i> 'return (vb.)', <i>ndaŋ</i> 'big, great'
mb	<i>mbuta</i> 'child'
nt	<i>ntiitil</i> 'first'
nd	<i>nduba</i> 'all', <i>ndundugi</i> 'tunic'
ŋɡ	<i>ŋɡi</i> 'with'
mŋɡb	<i>mŋɡbɔŋ</i> 'termite'
mf	<i>mfɛrɛ</i> 'outside'
ns	<i>nɛ</i> 'truth'

As can be seen by the examples to follow from N'Diaye-Corréard (1970), Balanta distinguishes three tones, high, mid, and low. These play the greatest role in verbal morphology where, for example, the first and second person plural subject prefixes are distinguished solely by tone. I have chosen not to mark tone in this work except where contrastive.

There are some systematic phonological differences between the Ganja dialect described here (right column) and the one described by N'Diaye-Corréard (left column). For example, the voiceless dental fricative /θ/ in N'Diaye-Corréard's corpus appears as the voiceless labiodental fricative /f/ intervocalically and postnasally here, and the voiceless alveolar fricative /s/ as the voiceless dental fricative /θ/. Word initial /θ/ in N'Diaye-Corréard (1970) corresponds in at least one word, 'coal', to /s-/ in Ganja (5f):

(5)			<i>gloss</i>
a.	ha-θāsa	a-faθa	'boy'
b.	luθi	lufi	'tomorrow'
c.	-laaθé	laafe	'baobab'
d.	nθēlāa	mfila	'when?'
e.	nθēdāa	mfiða	'friend'
f.	-θɔktʃi	sɔtʃi	'coal'

Another difference between the two dialects is that /e/ and /o/ vowels in the dialect studied by N'Diaye-Corréard correspond to /i/ and /u/ here. I have found only a few exceptions to this generalization:

(6)			<i>gloss</i>
a.	mbēé	mbi	'son, daughter'
b.	-rép	rip	'song'

c.	-dēénn	diin	'breast, milk'
d.	céf	tjif	'hand'
e.	wēl	wil	'thing'

(7)			<i>gloss</i>
a.	-ndogndogē	ndundugi	'tunic'
b.	-soofi	suufi	'cooked rice'
c.	-njogōb	-ndzugub	'chair'
d.	-dōm	-dum	'bite'
e.	-sōom-	-suum	'fight'

This state of affairs is perhaps foreseen by N'Diaye-Corréard, who describes /e/ and /o/ as very closed ("*fermés*"), and only with difficulty distinguishable from /i/ and /u/ (p. 46).

1.3 Ganja Noun Class Systems

In what follows, I describe the Ganja noun class system, based on N'Diaye-Corréard (1970) and my own research. While the dialect of my speaker is generally extremely similar to the one described by N'Diaye-Corréard, there are some differences with respect to noun class membership and agreement. In particular, the noun class system of my consultant appears to be much less stable than that described in N'Diaye-Corréard (1969, 1970). Certain nouns are treated as if they belong to more than one noun class; agreeing demonstratives and pronouns are used inconsistently; and adjectival agreement is much impoverished (cf. chapter 6). In Appendix 1 I have included a list of examples of nouns from both dialects of Ganja, with a brief discussion of differences regarding their noun class.

Before I begin, let me clarify how I use the terms 'noun class' and 'gender'. 'Noun class' in this work refers to sets of nouns that pattern together with respect to the type of overt agreement that they trigger on words entering into an agreement relation with them. This term basically coincides with what is called 'gender' in studies of Indo-European languages. The only difference is that Indo-Europeanists generally differentiate gender from number, while within the Atlantic tradition (as in the Bantu) noun class subsumes both gender (in the European sense) and number. Accordingly, a Balanta noun like *-nin* 'woman' belongs to separate noun classes depending on whether it is singular (class 1, *a-nin*) or plural (class 2, *bi-nin*). This way of describing the nominal system of Balanta and other languages is not meant to reflect the psycholinguistic organization of nouns. I adopt it for convenience, as it will facilitate comparison of noun classes in different Balanta dialects.

I reserve 'gender', which is often used interchangeably with 'noun class', to refer to the grammatical category. Thus, a language which has either noun classes or genders can be said to have the category gender and to show gender agreement (cf. Corbett 1991: 1). Again, since I am working within the Atlantic tradition, the category 'gender' subsumes both 'number' and 'noun class'.

1.3.1 *Ganja noun classes as presented by N'Diaye-Corréard (1970)*

N'Diaye-Corréard describes Ganja as having seven noun classes. Classes 1 and 2 consist only of non-kinship, human nouns; nouns referring to members of the immediate and extended family belong to classes 6 and 7. For the most part, membership in the other noun classes is semantically

arbitrary. N'Diaye-Corréard notes, however, that all words for trees belong to class 3, and words designating a number of tree products belong to class 5. Nominalized verbs belong to class 7. The noun class system is laid out in Table 1.2:

TABLE 1.2. GANJA NOUN CLASSES (N'Diaye-Corréard 1970: 20)

Class	Description	Nominal marker	Agr./subj. marker	Anaphoric pronoun
1	non-kinship humans, sg.	ha-	ha-	hi
2	non-kinship humans, pl.	bə-	bə-	baa
3	inanimates, sg.	b-	b-	bi
4	inanimates, sg.	gə-	gə-	gi
5	inanimates, sg.	f-	f-	fi
6	a. animates, sg.	∅	u-, ha-	hi
	b. inanimates, sg. & pl.	∅	u-	wi
7	a. animates, pl.	g-	bə-	baa
	b. inanimates, pl.	g-	g-	gi

With the exception of class 6, which contains both singular and plural nouns, a given noun class consists of either singulars or plurals, but not both. The most frequent pairings are listed below:

(8)	Singular	Plural
	1	2
	3	6

4	6
5	7
6	7

There are a few examples of a noun in class 4 making its plural in class 7, as well (N'Diaye-Corréard 1970: 20).

As pointed out to me by V. Carstens, another, more insightful way of looking at this system is to say that plural marking for classes 3 and 4 happens to be homophonous, as does plural marking for classes 5 and 7. If we adopt this type of organization, class 4 nouns that make their plural in class 7 instead of class 6 cease to be marginal, but rather form a separate gender. (Here I am using the term 'gender' instead of 'noun class' because we are dealing with singular-plural pairings):

(9)	<i>Gender</i>	<i>Corresponds to N'Diaye-Corréard's</i>		
		<i>Singular</i>	<i>Plural</i>	<i>Semantic correlate, if any</i>
	A <i>ha-/bə-</i>	1	2	non-kinship humans
	B <i>b-/∅</i>	3	6b	all tree words, inanimates
	C <i>gə-/∅</i>	4	6b	inanimates
	D <i>gə-/g-</i>	4	7b	inanimates
	E <i>f-/g-</i>	5	7b	tree products, inanimates
	F <i>∅/g-</i>	6a	7a	animals, kinship terms
	G <i>∅/g-</i>	6b	7b	inanimates
	H <i>g-/g-</i>	7b	(7b)	some deverbal nouns

This chart clarifies aspects of the system that N'Diaye-Corréard's more traditional organization obscures. Most interestingly, some of the semantic arbitrariness that falls out from her organization disappears, since the singular-plural pairings identified by capital letters are semantically more

homogenous that the numerically-identified classes. Although the way of describing the system in (9) has definite advantages, I continue to use N'Diaye-Corréard's system for the sake of consistency with other work on Atlantic. For clarity, however, I will present a chart like (9) for my consultant's dialect as well (cf. (16)).⁶

Examples of Ganja nouns belonging to each class are given in (10) (N'Diaye-Corréard 1970):

- (10) 1 *ha-fūlá* 'girl', *ha-lāantɛ* 'man', *hal* 'person', *ha-lāma* 'king'
 2 *bə-fūlá* 'girls', *bə-lāantɛ* 'men', *bə-lāma* 'kings'
 3 *b-dēen* 'milk', *b-rúm* 'fog', *p-t̄f̄éɛŋ* 'palm tree', *p-sū* 'boat'
 4 *gə-bɛlɛ* 'calabash', *gə-fúŋā* 'nose', *gə-l̄ɔ* 'ear', *gə-sērē* 'tobacco'
 5 *f-póoθɛ* 'star', *f-sēt̄f* 'tooth', *f-t̄l* 'sheath (of knife)', *v-lěj* 'day'
 6a *adākta* 'flea', *fālās* 'horse', *beligāana* 'pelican', *tella* 'husband',
 mbūtā 'child', *n̄d̄zɛd̄z̄i* 'grandchild'
 6b *deulēn* 'peanut oil', *lisa* 'palm wine', *máj̄i* 'honey', *mbánd̄z̄i*
 'knife', *j̄ɛɛga* 'chin'
 7a *gə-dākta* 'fleas', *k-fālās* 'horses', *kpeligāana* 'pelicans', *k-t̄llā*
 'husbands', *ngbuutāa* 'children', *gə-n̄d̄zɛd̄z̄i* 'grandchildren'
 7b *k-póoθɛ* 'stars', *k-sēt̄f* 'teeth', *k-t̄l* 'sheaths (of knife)', *g-lěj*
 'days', *g-deulēn* 'peanut oils', *g-lisá* 'wines', *g-máj̄i* [ɲmáj̄i]
 'honeys', *ngbánd̄z̄i* 'knives', *g-j̄ɛɛga* 'chins', *g-j̄aaθ* 'work', *k-fít*
 'attack'

⁶ This alternative approach to noun class becomes important in chapter 6. I present arguments from Carstens (1991, 1993) that nouns in Bantu languages and Balanta are specified for gender only, and that noun class prefixes are the realization of number features.

While gender is intrinsically a property of nouns, other lexemes in an utterance may enter into an agreement relation with a noun. In Ganja, morphological agreement for gender appears on adjectives (11), demonstratives (12), numerals 1-5 and 10 (13), and verbs (14). Pronouns agree for noun class, as well (15) (examples from N'Diaye-Corréard 1970: 23-28, 33-34, 38):

- | | | | | |
|------|----|----------------------|---------------|----------------------|
| (11) | a. | hal | ha-mfaná | Adjective |
| | | person(CL1) | CL1-good | |
| | | ‘a good individual’ | | |
| | b. | wēl | u-mfāná | |
| | | thing(CL6b) | CL6b-good | |
| | | ‘a good thing’ | | |
| | c. | k-tēllā | bə-mfāná | |
| | | CL7a-husband | CL7a-good | |
| | | ‘good husbands’ | | |
| (12) | a. | p- tāá | bɔmbɔ | Demonstrative |
| | | CL3-medicine | CL3.this.EMPH | |
| | | ‘this medicine here’ | | |
| | b. | ha-lāantɛ | hɔmbɔ | |
| | | CL1-man | CL1.this.EMPH | |
| | | ‘this man here’ | | |
| (13) | a. | ha- nín | ha- wōda | Numeral |
| | | CL1-woman | CL1-one | |
| | | ‘one woman’ | | |

- b. jég ú-wōda
 chicken(CL6a) CL6a-one
 ‘one chicken’
- (14) a. gə-mfer ma gə-sōw **Verb**
 CL4-peeling the CL4-finish
 ‘The peeling (of fruits) is finished’
- b. v-mbāadə fō f-sōw
 CL5-applause CL5.DEM CL5-finish
 ‘The applause is finished’
- (15) a. wamba wi gēes ma **Pronoun**
 CL6b.that.EMPH CL6b.it cure 3SG.OBJ
 ‘It’s those ones there (medicines) that cured him’
- b. fi ha-gbōi
 CL5 CL1-take
 ‘He took it (the stick)’

1.3.2 Noun classes in the Ganja dialect described here

The noun class system of the dialect of Ganja described here is very similar to the one seen in N’Diaye-Corréard (1970). What is striking, however, is that the agreement pattern here is much simplified compared to the one described by N’Diaye-Corréard. As we will see in a later chapter, only demonstratives and pronouns agree overtly with nouns for noun class, and they do so inconsistently. Adjectives also agree with a head noun, but only to a very limited extent (cf. chapter 7). In the table below, all demonstratives except 2a are ‘this’; 2a is ‘that’:

TABLE 1.3. GANJA NOUN CLASSES.

Class	Description	Nominal marker	Subj. prefix	Dem.	Pronoun
1	animates, sg.	a-	a-	hɔ	hi
2a	animates, pl.	b-, bi-, bə-	bi-	bembe	baa
2b	inanimates, pl. ⁷	b-, bi-, bə-	bi-	wɔ	fi
3	inanimates, sg.	∅	u-	bɔ	fi or gi
4	inanimates, sg.	g-, gi-, gə-	u-	gɔ	gi
5	inanimates, sg.	f-	u-	fɔ	fi
6	inanimates, sg.	∅	u-	wɔ	fi or gi

Classes 2a and 2b are differentiated on the basis of the demonstrative selected. Inanimate plural nouns take the class 6 demonstratives. I should note here that class 5 appears to be a default class: when asked to put nonsense words into the frame 'this X', 'that X', my consultant uses them with class 5 demonstratives. Furthermore, he often uses nouns that clearly belong to classes 3, 4, or 6 in N'Diaye-Corréard's work with class 5 demonstratives or pronouns. I see this as a simplification of the noun class system, with class 5 gradually assuming the roles of the other non-human classes.

As shown in section 1.3.1 for the other Ganja dialect (cf. (9)), a more insightful view of the noun class system might be as in (16):

⁷ Although many nouns (animate and inanimate) make their plural by taking the prefix *bi-*, some inanimate nouns may have zero-marking in the plural. For example, *gə-lolo* 'star' may have as its plural *lolo*, although *bi-lolo* also occurs.

(16)	<i>Gender</i>	<i>Corresponds to traditional-style classes</i>		
		<i>Singular</i>	<i>Plural</i>	<i>Semantic correlate, if any</i>
	A <i>a-/bi-</i>	1	2a	humans and animals
	B \emptyset -/ <i>bi-</i>	3	2b	inanimates
	C <i>gə-/bi-</i>	4	2b	inanimates
	D <i>f-/bi-</i>	5	2b	inanimates
	E \emptyset -/ <i>bi-</i>	6	2b	inanimates

We are basically dealing with five genders (singular-plural pairings), with plural marking being largely homophonous. This state of affairs is not unusual: for a clear discussion of this type of system, see chapter 6 of Corbett (1991).

It is virtually impossible to discuss noun classes without also discussing agreement. A noun's class can be reliably detected only by looking at those words with which the noun enters into an agreement relation (Ernout 1974 [1914]; Hockett 1958: 231; Fodor 1959: 2; Greenberg 1978: 50; Heine 1982: 190; Corbett 1991). In the dialect of Ganja explored here, noun class affiliation is fully detectable only by demonstrative and pronominal agreement (the latter in one set of pronouns only), although adjective agreement in some cases identifies class 1 nouns. Comparative evidence from other Atlantic languages indicates that agreement for noun class was once much more widespread, appearing on pronouns, adjectives, determiners, and other categories as well.

The persistence of class distinctions in the demonstratives when they have already been lost elsewhere may be reflective of a broader diachronic tendency: Marchese (1988) shows that class distinctions are more likely to be preserved in demonstratives than in adjectives in Kru lan-

guages. In Wobe, Kouya, and Kuwaa, “demonstratives retain number and class agreement, while adjective agreement is clearly decreasing” (p. 335). Klao is the only exception noted. Within Atlantic, Pajade, Mbulungish, and Sua pattern with Balanta in having demonstratives that agree in class with a head noun, but no adjectival concord (Sapir 1971).

As shown by the data in Appendix 1, the organization of nouns into classes has been somewhat simplified in the dialect of Ganja explored here. To begin, kinship terms, which belong to class 6a (CL7a pl.) in N’Diaye-Corréard (1970), have been grouped with other human nouns into class 1 (CL2 pl.) in my consultant’s dialect. Examples include *ntfiitfi* ‘grandchild’ and *mbi* ‘son, daughter’. This development is not surprising, given that in Ganja, agreement for noun class is fully differentiated only for demonstratives and pronouns, and that even in N’Diaye-Corréard (1970), class 6a/7a demonstratives and pronouns are equivalent to their class 1/2 counterparts. The only new development, in fact, is that adjectival agreement marking for kinship terms (N’Diaye-Corréard’s 6a) has been extended to non-kinship human terms (N’Diaye-Corréard’s class 1):

(17) N’Diaye-Corréard (1970)

a. *Class 1 (kinship) noun: ha- agreement*

hāl ha-mfāná (p.31)

person(CL1) CL1-good

‘a good person’

b. *Class 6a (non-kinship human) noun: u- agreement*

tēlla u-mfāná (p.31)

husband CL6a-good

‘a good husband’

(18) *Ganja dialect explored here*

All human nouns: u- agreement is standard (see chapter 7 for cases where a- marking on adjectives modifying human nouns persists)

a. hal u-mfanɔŋ

person(CL1) CL1-good

'a good person'

b. antɔ u-mfanɔŋ

husband CL1-good

'a good husband'

Animals are also being reanalyzed as class 1 nouns. As a result, we might say that the Balanta noun class system is coming closer to being organized along the animate-inanimate distinction. Support for this comes from the verb: in the dialect under investigation here, but not in the one described by N'Diaye-Corréard, subject agreement is only for animacy (cf. 2.2). This is not at all surprising, however, because animals pattern with kinship terms in N'Diaye-Corréard (1970), belonging to class 6a in the singular and 7a in the plural, and should be expected to merge along with kinship terms into class 1. In some cases, my consultant uses a class 5 demonstrative with an animal word, but never consistently for a given noun, and class 1 demonstratives with animal terms also occur.

Another point worth mentioning is that while the Ganja dialect described by N'Diaye-Corréard has two distinct plural classes, the one described here has only one, class 2, which was originally reserved for non-kinship human plurals. The tendency is therefore towards an elimination of noun class distinctions in the plural, with an original [+human] marker (*bi-*) exhibiting highest stability (19):

(19)	<i>N'Diaye-Corréard (1970)</i>	<i>Present work</i>
a.	gə- njeĩ	bi- ntʃiitʃi
	CL7a- grandchild	CL2- grandchild
	'grandchildren'	'grandchildren'
b.	k- fit	bi- fit
	CL7B- attack	CL2- attack
	'attacks'	'attacks'

1.3.3 *Morphological form classes*

The need to distinguish gender or noun class from morphological form class is well-established for a number of languages, including Arapesh, Swahili, Latvian, and Spanish (see work by Aronoff 1991, 1994; Baker 1991; Halle 1991; Harris 1991), and here I show that Balanta should also be considered in this group. A morphological form class is a set of words that share a particular morphological shape. It might include words from various lexical categories (e.g., noun, adjective, adverb, as in Spanish). Crucially, while words such as adjectives or verbs may agree with a noun in gender, they may never agree with a noun for morphological form class. I illustrate morphological form class with the schema given by Harris (1991: 65) where he identifies five form classes in Spanish. The first four are identifiable by their endings, and the last is a "catch-all bin for leftovers." Following Harris, "The words... with a single gender are nouns (m = masculine, f = feminine), those marked m/f are nouns or adjectives, and those with no indication of gender are adverbs":

(20)	I		II
	pas- <i>o</i> (m)	'step'	pas- <i>a</i> (f) 'raisin'
	man- <i>o</i> (f)	'hand'	map- <i>a</i> (m) 'map'
	re- <i>o</i> (m/f)	'culprit'	may- <i>a</i> (m/f) 'Maya'
	dentr- <i>o</i>	'inside'	cerc- <i>a</i> 'near'
	III ⁸		
	A		A'
	jef- <i>e</i> (m)	'chief'	as (m) 'ace'
	nub- <i>e</i> (f)	'cloud'	col (f) 'cabbage'
	verd- <i>e</i> (m/f)	'green'	común (m/f) 'common'
	delant- <i>e</i>	'ahead'	atrás 'behind'
	B		
	pas- <i>e</i> (m)	'pass'	
	prol- <i>e</i> (f)	'progeny'	
	inmun- <i>e</i> (m/f)	'immune'	
	adred- <i>e</i>	'on purpose'	

⁸ Harris provides an epenthesis analysis of class III. Morphologically, these nouns belong to a single class. Phonological differences between the three subclasses are predictable.

IV		V	
tórak-s (m)	'thorax'	tax-i (m)	'taxi'
dos-is (f)	'dose'	trib-u (f)	'tribe'
mochal-es (m/f)	'batty'	yet-i (m/f)	'yeti'
lej-os	'far'		
		chef (m/f)	'chef'
		esnob (m/f)	'snob'
		golf (m)	'golf'

Glossing over complications, which are discussed in full by Harris, form class I is identifiable by the *-o* ending, form class II by *-a*, form class III by no ending ([e] is epenthetic), and form class IV by *-(V)s*. We can call form class V a leftover class, following Harris; another alternative would be to analyze the class V words as roots that take a $-\emptyset$ ending (e.g., *taxi-∅*, *tribu-∅*, *chef-∅*). What is most important is that there is no agreement based on morphological form class in Spanish, or in any language.

We can identify five formal morphological classes in Balanta based on the prefix that nouns and some adjectives, which I collectively call 'substantives' following Harris (1991), take in the singular. In the plural, the prefixes in (21) are replaced by *bi-*:

(21) *Morphological form classes*

- | | | |
|-----|------|---|
| I | N: | a-nin 'woman', a-laante 'man', a-ɲire 'dancer', a-hara 'goat' |
| | Adj: | a-ndaɲ 'old', a-numale 'poor', a-tjaa 'Balanta' |
| II | N: | ∅-hal 'person', ∅-mbi 'son, daughter', ∅-solo 'panther', ∅-sis (< Fr. <i>chaise</i>) 'chair' |
| III | N: | f-taa 'tree', f-tjaa 'Balanta language', v-lej 'day' |

- IV N: gi-huul 'hair', gə-baale 'house', gə-falas 'horse'
 V N: u-nin 'woman'⁹
 Adj: u-ndaŋ 'big', u-numale 'busy'

We see that nouns with human referents, that is, class 1 nouns, generally belong to the first morphological class, which is characterized by the prefix *a-*. This morphological class also contains some words for animals, as well as some adjectives (including all those referring to ethnic group). However, a small set of class 1 nouns, including most kinship terms, bear no prefix. These are classified as belonging to the second morphological class, along with many words referring to animals and inanimates. In the third class we find a few words that retain the class 4 *f-* prefix seen in N'Diaye-Corréard (1970); it voices to [v] before voiced consonants. The fourth morphological class is characterized by the class 5 prefix *gə-* ([gi-] before /Cu/) and comprises only nouns. Finally, the fifth morphological class takes the prefix *u-* and contains both adjectives and at least one noun. Since the morphological class of a given substantive is not predictable from noun class, semantics, or phonological shape, it must be present in the lexical representation.

It is particularly interesting that adjectives may be specified for morphological class. This phenomenon is confined to adjective pairs like the following, with fossilized agreement prefixes in the singular:

⁹ Note that there are two forms for 'woman', *anin* and *unin*. I treat them as separate lexical items. *Unin* and *untfugub* 'chair' are the only nouns with the *u-* prefix that I have encountered.

- (22) *undaj* 'big', *andaj* 'old'
- | | | |
|----|-----------|------------|
| a. | hal undaj | biti undaj |
| | man big | dog big |
| | 'big man' | 'big dog' |
| b. | hal andaj | biti andaj |
| | man old | dog old |
| | 'old man' | 'old dog' |
- (23) *unumale* 'busy', *anumale* 'poor (having no money)'
- | | |
|----|--------------|
| a. | anin unumale |
| | woman busy |
| | 'busy woman' |
| b. | anin anumale |
| | woman poor |
| | 'poor woman' |
- (24) *uduulu* 'little, small', *aduulu* 'young'
- | | |
|----|---------------|
| a. | anin uduulu |
| | woman small |
| | 'small woman' |
| b. | anin aduulu |
| | woman young |
| | 'young woman' |

Both members of the pair take *bi-* in the plural.

1.3.4 Noun class simplification: some speculation

Within Atlantic, Ganja is already quite simplified in terms of its noun class system. The Bak language Jóola Foñy, for example, has nine-

teen noun classes which participate in a rich variety of inflectional and derivational formations. By changing the noun class membership, speakers are able to create singular or plural diminutives and augmentatives, personify animals, or specify small or large quantities, to take only a few examples. The differences between Ganja dialects, while not as large, are equally complex and interesting.

Why has the Ganja noun class system undergone simplification and reduction? One possibility is that the state of affairs recorded in N'Diaye-Corréard — which I believe is reflective of an earlier stage of Ganja — is somewhat unstable. Homophony within the system may have led to ambiguities: in particular, there is potentially confusion between class 2 *bə-* and classes 3 and 7 *b-*, the former marking singulars and the latter plurals, and between class 4 *gə-* and class 7 *g-*, again marking singular and plural, respectively.

However, there are many examples of homophony between morphemes, and specifically between noun class prefixes, in the world's languages. In the Bantu language KiLega, for example, there are several examples of homophonous noun class prefixes: *mu-* marks classes 1, 3, and 18; *n-* marks classes 9 and 10; and *ku-* marks classes 15 and 17 (Kinyalolo 1991: 6-7). Might there have been any other factors that influenced the evolution of the system seen in N'Diaye-Corréard (1970) into the one presented here?

I believe that one piece of the puzzle involves the reduction of CV-noun class prefixes in Atlantic to prefixes of the shape *Cə-* and *C-* in Balanta. Noun class prefixes of shape *C-* undergo and trigger various assimilatory changes in Ganja, some obscuring the underlying shape of the

noun class prefix, others leading to allomorphy among noun stems. Some singular-plural pairs are given in (25) (N'Diaye-Corréard 1970):

(25)	ɸɔɔtɔ̃	hɔɔtɔ̃	'calabash tree' (cl. 3, 6)
	hás	kás	'monkey' (cl. 6, 7)
	mbēé	míngbēé	'son, sons' (cl. 6, 7)

Although the alternations are regular and fairly straightforward, we see leveling out of such morphemic variation over and over again in the world's languages (Hock 1991: 167-71). In Romance, for example, vowel alternations induced by the differing behavior of stressed and stressless vowels were eliminated by a variety of mechanisms, including augments (e.g., Italian *-esc-*, Rhaeto-Romance *-esch-* and *-isch-*; see Rudes 1980, Burzio and DiFabio 1994). Speakers prefer stems to have a single shape. This is the case in the Ganja dialect described here, but not in the one described by N'Diaye-Corréard.

1.4 Theoretical Framework

The analysis within this dissertation is presented in the Principles and Parameters framework developed by Chomsky, and in particular, the version of the Minimalist Program elaborated in chapter 4 of Chomsky (1995). I summarize some key elements of Chomsky's Minimalist Program here; others are explained in the chapters of this dissertation that address the syntactic structure of verb phrases (chapters 2-4) and noun phrases (especially chapter 6).

To begin, Chomsky calls the initial state of the language faculty "with options specified" L . L constructs (π, λ) pairs, where π is a PF representation and λ an LF representation, that are interpreted at the articula-

tory-perceptual and conceptual-intentional interfaces. A linguistic expression must meet the condition of Full Interpretation, meaning that both π and λ must be able to be interpreted. Chomsky proposes that there are no levels of linguistic structure apart from PF and LF, i.e., the levels of D-structure and S-structure assumed in earlier work are eliminated. In chapter 8 I discuss the possibility that there is a third level of linguistic structure, Morphological Structure (MS), per Halle and Marantz (1993).

Chomsky assumes a derivational (v. representational) approach to syntax (p. 223). A derivation may either converge or crash at an interface level, depending on whether it yields a representation that satisfies Full Interpretation. It is not enough that a derivation converge. It must also satisfy certain natural economy conditions, including locality of movement and a minimum of steps. I give more detail about this below. So out of the set of derivations that converge, only one will be selected as optimal.

Languages vary, and one way in which they differ is in the position in which various elements, such as verbs or noun phrases, appear. Differences of this type are generally accounted for through movement. Chomsky suggests that all movement is morphologically motivated, and so differences between languages are reduced to morphological differences.

For Chomsky, a derivation consists of a number of steps. First is the numeration N (pp. 225-6), in which the lexical items needed for a given linguistic expression are drawn from the lexicon and, to use Marantz's (1995) metaphor, placed in a "work area." Competing derivations are those which begin with the same set of lexical resources. No new lexical objects may be added in the course of a derivation (Chomsky 1995: 228).

The computational system (C_{HL}) forms syntactic objects using the items in N , and if relevant, syntactic objects that have already been constructed. It does this through two operations, *Select* and *Merge* (p. 226). *Select* takes an object from the numeration and introduces it into the derivation. *Merge* takes a pair of syntactic objects and replaces them with a new combined syntactic object. For example, from *the* and *dog* we get the noun phrase *the dog*. Since both *Select* and *Merge* are necessary to generate a derivation, they are both considered costless and are not counted as operations for purposes of convergence and economy.

The computation must eventually split into two parts, one that forms π and the other λ . This occurs at *Spell-Out*. At *Spell-Out*, all those elements relevant to π are stripped away, leaving the residue Σ_L which will be mapped to LF (p. 229). The subsystem of the computational component that maps the derivation from *Spell-Out* to π is the *phonological component*, and the one that maps the derivation from *Spell-Out* to λ is the *covert component*. Computations that take place prior to *Spell-Out* are *overt*. According to Chomsky, the morphological module of the grammar becomes active after *Spell-Out*, constructing "word-like units that are then subjected to further phonological processes that map it finally to π ..." (p. 229).

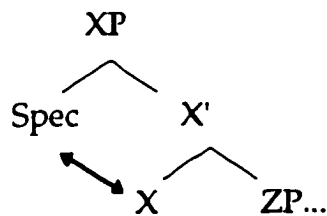
The features that are accessible in the course of the pre-*Spell-Out* derivation are called *formal features*, or ϕ -features. Formal features may be strong or weak, and feature strength may vary across languages. But Chomsky claims that only functional heads can carry strong features (p. 232):

- (26) If F is strong, then F is a feature of a nonsubstantive category and F is checked by a categorial feature.

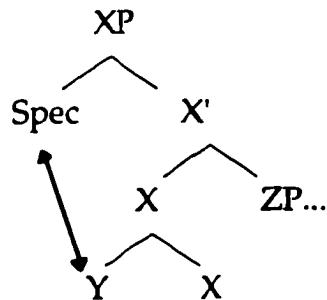
Strong formal features force overt movement. One way of explaining this, notes Chomsky, is to “simply define a strong feature as one that a derivation ‘cannot tolerate’” (p. 233). Because the derivation cannot tolerate strong features, they must be eliminated, or erased. All movement is driven by this need to check and erase features.

Feature checking takes place in an appropriate checking configuration. The canonical checking configuration is Spec-Head (27a-b). Checking may also take place between two heads, X and Y, where Y is adjoined to X (28), or between a head X and an adjunct ZP, where ZP is adjoined to XP (29). (29) can be viewed as an extension of (27):

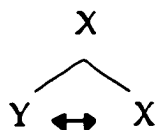
- (27) a.

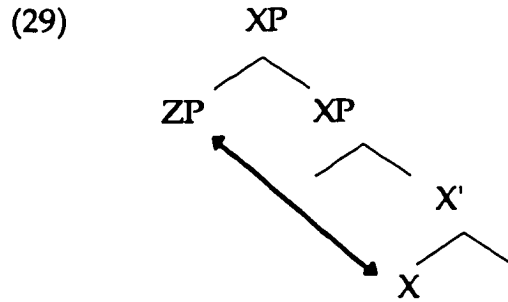


- b.



- (28)





Feature checking is symmetrical: features of both the raised item and the target are checked.

As mentioned above, Select and Merge are costless operations. Move is not. It takes place only as a last resort, i.e., if the derivation would fail otherwise (cf. (32) below).

Feature strength is not the only notion that enters into movement theory. Just as important is the distinction [\pm interpretable]. Chomsky proposes that a feature F_1 with a [-interpretable] value attracts a checking feature F_2 into its checking domain. This movement will be overt if the target's features are strong, and covert if its features are weak. The Attract Principle is given below (Chomsky 1995: 297) (K is a target for movement):

(30) K attracts F if F is the closest feature that can enter into a checking relation with a sublabel of K.

This means that movement may only take place if the target has [-interpretable] features. Note that (30) incorporates two economy principles: the Minimal Link Condition and Last Resort:

(31) *Minimal Link Condition* (Chomsky 1995: 311)

K attracts α only if there is no β , β closer to K than α , such that K attracts β .

(32) *Last Resort* (Chomsky 1995: 280)

Move F raises F to target K only if F enters into a checking relation with a sublabel of K.

There are a number of other aspects of the Minimalist Program that will enter into the discussion in this work. For clarity, however, I have chosen to introduce them in individual chapters when they arise.

Chapter 2

The Verb

This chapter explores Balanta verbal morphology, including the verb stem (2.1), subject marking (2.2), object marking (2.3), negation (2.4), mood (2.5), and tense and aspect (2.6). The beginnings of a syntactic analysis of Balanta verbs are proposed, with remaining topics to be discussed in chapters 3 and 4. N'Diaye-Corréard's (1973) article on the Balanta verb helped to lay the groundwork for the discussion here, which is meant to go beyond her description both in terms of illustration and analysis. Nonetheless, the present chapter does not replace N'Diaye-Corréard's work. The dialect she describes differs in complex and interesting ways from the one discussed here, indicating that future comparative work between Balanta dialects would be rewarding.

The Balanta verb is built around a verb stem, which if consonant final may be suffixed with *u*, and one of various grammatical-function-changing affixes — symmetrical *ndε*, directional *tε*, theta role absorbing *lu*, or applicative *Vd*. Following the stem plus grammatical-function-changing suffix are markers for hypothetical mood *mɔ* and past tense *tε*.¹ Object markers also follow the verb stem, but only in a subset of affirmative verb forms. Preceding the verb stem we find subject prefixes; markers for imperfective aspect (generally used to express future tense) *n*

¹ As alternatives to *tε* we also find *gε* and *jɔ*. These do not differ in meaning in my consultant's dialect. See section 2.5 for discussion and comparison to the dialect described by N'Diaye-Corréard (1973).

and the notions 'not yet' *tá* and 'no longer' *tà*; the negative auxiliary *ʔ* or, before certain consonants, *ta*; and the subjunctive mood auxiliary *na...ŋ*. In verb forms containing the subjunctive or negative auxiliaries, the object marker precedes the verb stem:

(1)	SUB-	IMPF-	NEG-	OBJ	VERB STEM-SYM-	OBJ-	PAST-	HYP
		NOT YET-	SBJC ...		SBJC		DIR	
		NO LONGER-					DETR	
							APP	

2.1 The Verb Stem

At the core of any Balanta verb is a consonant-initial verb stem, which may be monosyllabic (CV, CVC) or disyllabic (CVCV, CVCVC).

Verbs have corresponding nominals, as seen in (2):

(2)	<i>Verb</i>		<i>Noun</i>	
a.	biifa 'see'		gə-biifa	'(act of) seeing'
b.	de 'bear (children)'		a-de	'mother'
c.	dutur 'be ashamed'		gi-dutur	'shame'
d.	latf 'tell lies'		Ø-latf	'(act of) telling lies'
e.	tum 'put'		gi-tum	'putting'

Nouns in (2a, c, e) are prefixed with the class 4 noun class marker *gə*, which surfaces as *gi-* when the first vowel of the verb stem is /u/. The noun in (2b) is prefixed with the class 1 noun class marker *a-*, which attaches to nouns denoting humans. In (2d), the noun class marker is null.

As stated above, consonant-final verb stems may bear a /-u/ suffix, which I sometimes refer to as the 'final vowel'. This vowel appears only

on main, unsuffixed verbs. Even then, it may be omitted. The /-u/ suffixed form is also used as the positive imperative:

- | | | | | |
|-----|----|------------------|----|----------------|
| (3) | a. | diis-u | b. | fil-u |
| | | 'continue, pass' | | 'forget' |
| | c. | gob-u | d. | hubut-u |
| | | 'fall' | | 'open' |
| | e. | laf-u | f. | wus-u |
| | | 'smile' | | 'pay for, buy' |

The verb stem may also be suffixed with one of a number of grammatical-function-changing suffixes, including *-ndε* 'symmetrical', *-tε* 'directional', and *-lu* 'detransitiver', which are discussed below. The applicative suffix will be discussed in chapter 4. Wilson (1961a) and N'Diaye-Corréard (1973) give examples of an iterative suffix, *-aat*, but it is not present in my consultant's speech.

2.1.1 *Symmetrical*

The symmetrical suffix has the underlying form /-ndε/, but the initial /n/ fails to appear after nasals and obstruents, cf. *suum-dε* 'fight with each other', *daŋ-dε* 'help each other', *ɾɔg-dε* 'get married' (but *hitir-ndε* 'send each other'). Its addition to a verb stem can result in a simple reciprocal, parallel to English examples where a plural antecedent binds an inherently plural reciprocal anaphor, but I show below that the Balanta symmetrical construction is inherently different from the English reciprocal. A verb bearing the symmetrical suffix may simply imply a mutual action or relationship, without requiring a plural subject — hence the term 'symmetrical'. In this respect it behaves like the southern Bantu

symmetrical or reciprocal affix (cf. Doke 1954: 69, 1963: 144-5; Louw and Jubase 1963: 154; Mchombo 1991, 1993; Mchombo and Ngunga 1994), which according to Doke, may also attach to verbs with a singular subject. As in Balanta, a prepositional complement identifies what Doke terms the “associated subject.”

The example pairs below contrast underived verb stems with ones bearing the symmetrical suffix; the latter are shown with a plural subject prefix and a simple reciprocal meaning:

- (4) a. báa- biifa- ma
 1PL.SUB- see- 3SG.OBJ
 ‘We saw him/her’
- b. báa- biifa- nde
 1PL.SUB- see- SYM
 ‘We saw each other, we met’
- (5) a. bì- hur- ma
 3PL.SUB- know- 3SG.OBJ
 ‘They know him’
- b. bì- hur- de
 3PL.SUB- know- SYM
 ‘They know each other’
- (6) a. bì- reŋu alama
 3PL.SUB- meet king
 ‘They met the king’
- b. bì- reŋ- de
 3PL.SUB- meet- SYM
 ‘They met with each other’

The examples in (7) show the symmetrical suffix occurring on verbs with a singular subject. (7c) is from N'Diaye-Corréard (1970: 4.14):

- (7) a. Sadio jɛŋ- dɛ ŋgi Sibow
 Sadio marry-SYM with Sibow
 'Sadio married Sibow'
- b. à- rɛŋ- dɛ ŋgi alama
 3SG.SUB-meet- SYM with king
 'He met with the king'
- d. a- θɛdā- ndɛɛ- na- n ngə mangarɔŋgó
 3SG.SUB-be.friend-SYM- SBJC- COMP with Mangarongo
 'He was friends with Mangarongo'

One approach to the examples in (7) is to claim that we are dealing with discontinuous subjects: e.g., *Sadio . . . ŋgi Sibow* 'Sadio ... with Sibow'.

In (8) I provide examples of symmetrical verbs. Two of the forms listed, *gbaandɛ* 'ask for' and *bɛθdɛ* 'chase, pursue' do not have a reciprocal or symmetrical interpretation, and *rɔg-dɛ* 'marry off, get married' needs not:

(8) <i>Stem</i>	<i>Symmetrical form</i>
<i>besu</i> 'chase'	<i>bɛθ-dɛ</i> 'chase, pursue'
<i>biifa</i> 'see'	<i>biifa-ndɛ</i> 'meet'
<i>daŋ</i> 'help'	<i>daŋ-dɛ</i> 'help each other'
<i>gbaa</i> 'ask'	<i>gbaa-ndɛ</i> 'ask for'
<i>hab</i> 'kill'	<i>hab-dɛ</i> 'kill each other'
<i>hiti</i> 'hit, hurt'	<i>hiti-ndɛ</i> 'hit, hurt each other'
<i>hitir</i> 'send'	<i>hitir-ndɛ</i> 'send each other'
<i>hur</i> 'know'	<i>hur-ndɛ</i> 'know each other'
<i>jɛŋ</i> 'marry off'	<i>jɛŋ-dɛ</i> 'get married'

<i>naŋ</i>	'agree, accept'	<i>naŋ-dɛ</i>	'be in agreement'
<i>rɔg</i>	'hold a marriage ceremony'	<i>rɔg-dɛ</i>	'marry off (a child), get married'
<i>suum</i>	'fight, wage war'	<i>suum-dɛ</i>	'fight with each other'

2.1.2 Directional

The directional suffix *-tɛ* expresses the notion 'hither'. It is not always used consistently, which may suggest that its presence on some verb stems is becoming lexicalized and that its meaning is becoming bleached. Both Wilson and N'Diaye-Corréard provide examples of this affix, although in the dialect described by N'Diaye-Corréard, it is a prefix (10):

(9) *Ganja examples with directional -tɛ*

a. ma bi- jaa-ma, io, bari ŋwood-tɛ wammɔ
 CONS 3PL.SUB- say-3SG.OBJ yes but return- DIR immediately
 'And they told him, "OK, but come back right away"'

b. ma bi- tɛɛg te bala ma ma bi- jaa
 CONS 3PL.SUB- pause PAST balafon DEF CONS 3PL.SUB- tell
 bi- dzala ma sam bi- to wɔmtɛ bi- naŋ sige
 CL2-griot DEF that 3PL.SUB-go eat 3PL.SUB-SBJC drink
 sam bi- ŋwood-tɛ hatide.
 for 3PL.SUB- return- DIR again
 'They (the organizers) stopped the balafon music and told the griots to go home and eat and drink and return again'

(10) *Examples with directional -te from N'Diaye-Corréard 1970: 143, 153*

- a. mangarɔŋgɔ maa a- yāā mɔɔ a- tē- bēn
 Mangarongo the 3SG.SUB- do HYPO 3SG.SUB- DIR- come
 bɔθe- na nsɔnɔ maa
 place-GEN Nzono the
 'Sometimes Mangarongo went to Nzono's place'
- b. nde yāla nd̄zangāā, nde a- n- bēn- te mɔɔ
 when Yala Njanga when 3SG.SUB- IMPF- come- MOD HYPO
 a- tē- nā- n- gi ŋgə f- nd̄zogōb- ni
 3SG.SUB- DIR- SBJC- IMPF- COP with CL5-seat- 3SG.POSS
 maa
 the
 'When Yala Njanga, when he arrived, he was carrying his
 seat'

In (11) I provide two sentences that illustrate the contrast between a verb that is suffixed with *-te* and one that is not:

- (11) a. a- ŋwoodu a- gbaale
 3SG.SUB- return LOC- house
 'He returned home' (movement is away from speaker)
- b. a- ŋwood- tɛ a- gbaale
 3SG.SUB- return- DIR LOC- house
 'He came back home' (movement is towards speaker)

I have come across the directional affix on only a handful of verbs, most but not all of them verbs of motion (*diisu* 'pass', *diistɛ* 'pass by (in this direction)'; *bin* 'come', *bintɛ* 'come here'; *ŋwoodu* 'return', *ŋwoodtɛ* 'come

back'; *ja* 'give', *jatε* 'give here'). It is homophonous with the past tense suffix *-tε*.

2.1.3 *-lu*: A theta role absorbing suffix

The suffix *-lu* reduces the number of arguments the verb can take by one, as illustrated by the following pairs of stems:

(12) \emptyset /*-lu* pairs:

<i>dasu</i>	'break, tear (tr.)'	<i>daslu</i>	'break, tear (intr.)'
<i>de</i>	'bear children'	<i>delu</i>	'be born'
<i>fiis</i>	'tear, rip (tr.)'	<i>fiislu</i>	'tear, rip (intr.)'
<i>giti</i>	'have'	<i>gitilu</i>	'be held, happen'
<i>sow</i>	'finish (tr.)'	<i>sowlu</i>	'finish (intr.), be finished'

The examples in (12), like most examples bearing this affix, involve transitive/intransitive pairs, and I therefore call this affix a detransitivizing affix. Other pairs which cannot be characterized as transitive/intransitive, but nonetheless belong here, are *mɔɔnε* 'be black' ~ *mɔɔnlu* 'become black' and *tum* 'put' ~ *tumlu* 'put on' (e.g. clothes). In the second example, a verb that takes only a direct object is derived, via the suffixation of *-lu*, from one that requires both a direct object and prepositional complement

The data in (12) is reminiscent of the transitive-ergative alternation seen for verbs like 'sink', 'break', 'improve', or 'freeze' in languages like English or Italian (Burzio 1986). Not every verb that participates in the transitive-ergative alternation in English and Italian may appear with the *lu* suffix, however. For example, while there is a verb *lɔttε* 'to cook (tr.)', there is no verb **lɔttεlu* 'to cook (intr.)'. Similarly, I have come across one

verb with the *-lu* affix, *wuflu* 'to last (time)' that does not have an unaffixed counterpart. Historically, it is likely that an unaffixed form did exist.²

The following examples contrast verbs ending in *-lu* with their non-suffixed counterparts:

- (13) a. a- nge jantu a- tum- lu wilu
 3SG.SUB-NEG go.out 3SG.SUB- put.on- DETR clothes,jewelry
 umfanəŋ
 pretty
 'He never went out unless he had put on beautiful clothes
 and ornaments'
- b. a- tum tʃif hilli a- tʃoole
 3SG.SUB-put hand 3SG.POSS LOC- fire
 'He/she put his/her hand in the fire'
- (14) a. ma bi- jaa- ma mə u- sow- lu
 CONS 3PL.SUB-tell-3SG.OBJ today 2SG.SUB-finish-DETR
 'And they told him, "Today you are finished"'
- b. bi- sow gɪaf ma
 3PL.SUB-finish work DEF
 'They finished (the) work'

² N'Diaye-Corréard lists the form *-wūf-* in her Balanta-French lexicon, but a meaning is provided only for the derived form *wūflɛ* (*-lɛ* is an allomorph of *-lu*). It is impossible to know whether N'Diaye-Corréard actually elicited the form *wūf* or whether she backformed it on the basis of *wūflɛ*.

- (15) a. ma vlej folla paaj ma gitilu Maarungu
 CONS day one event DEF happen Maarungu
 'And one day, an event was held in Maarungu'
- b. bi- ŋ- giti gudi
 3PL.SUB-IMPF-have money
 'They will have money'

2.1.4 *The symmetrical, directional, and theta role absorbing affixes as part of the Balanta verb stem*

Following Mchombo (1991, 1993) and Mchombo and Ngunga (1994) on Chichewa and Ciyao, we can demonstrate that the three affixes presented in this section are part of the verb stem, and that their status differs from that of other elements of the verb including tense and aspect morphs and object agreement clitics.

Mchombo (1993) examines Chichewa stem extensions, demonstrating that they participate in nominalization, imperative formation, vowel harmony, and reduplication. Likewise, in Balanta, the symmetrical, directional, and detransitivizing morphemes participate in nominalization and imperative formation, and are unique among verbal affixes and clitics in always attaching directly to the verb stem, never to auxiliaries or outside object clitics. Moreover, the Balanta reciprocal — which I refer to as a symmetrical — does not behave like a syntactic anaphor. All three of these properties can be explained if, as argued by Mchombo (1991, 1993) and Mchombo and Ngunga (1994), the verb plus stem extensions counts as a single stem for the purposes of the morphology

and syntax; we might refer to it as the “extended stem,” following Steele (1995).

I begin with nominalization. Verb stems bearing the symmetrical, directional, and detransitivizing affixes may all be nominalized, like their non-affixed counterparts.³ We see this below for bare verbal stems and their symmetricalized counterparts:

- (16) a. *naŋ* (v.) ‘accept’
 b. *naŋ-dɛ* (v.) ‘be in agreement’
 c. *naŋ* (n.) ‘act of accepting, acceptance’
 d. *naŋ-dɛ* (n.) ‘agreement, concord’
- (17) a. *jɛŋ* (v.) ‘to marry’ (tr.; e.g., marry one’s child to someone else)
 b. *jɛŋ-dɛ* (v.) ‘to get married’
 c. *jɛŋ* (n.) ‘act of marrying’
 d. *jɛŋ-dɛ* (n.) ‘state of being married’
- (18) a. *rɛŋ* (v.) ‘to meet’
 b. *rɛŋ-dɛ* (v.) ‘to meet (each other)’
 c. *rɛŋ* (n.) ‘act of meeting’
 d. *rɛŋ-dɛ* (n.) ‘meeting, get-together’

In (19) I show the same for the directional affix *-tɛ*:

- (19) a. *bin* ‘come’
 b. *bin-tɛ* (v.) ‘come’ (towards speaker)

³ In various parts of this dissertation I refer to stems as ‘verbal stems’ or ‘nominal stems’, but it is likely that Balanta stems belong to no lexical category. As demonstrated in this section, they may be used as nouns or verbs. Some may also be used in adjective formation.

- c. *pin* (n.) 'act of coming'⁴
- d. *g-bintɛ* (n.) 'act of coming'

Finally, in (20-21), I show the same for the weak reflexive *-lu*:

- (20) a. *fiis* 'tear, rip' (tr.)
- b. *fiis-lu* (v.) 'to tear, rip' (intr.)
- c. *fiis* (n.)
- d. *gi-fiis-lu* (n.) 'tear, rip, fissure'
- (21) a. *tum* 'put, place'
- b. *tumlu* 'put on' (e.g., clothing)
- c. *gi-tum* 'act of putting or placing' (e.g., on a table)
- c. *gi-tum-lu* 'act of putting on, way of dressing'

These data are significant because affixes expressing notions such as subject, object, or tense — which will be argued in this dissertation to occupy distinct functional projections in the syntax — never appear on nominal stems:

- (22) a. * *tum-ma* 'act of putting it'
- b. * *a-tum* 'he-putting'
- c. * *tum-ɔ* 'act of putting in the past'

Verbs bearing the symmetrical, directional, and detransitivizing (theta role absorbing) affixes also may be made into bare imperatives, just like their non-affixed counterparts:⁵

- (23) a. (**bin* 'come!') *bin-tɛ* 'come!' (dir.)
- b. *ɲwoodu* 'return!' *ɲwood-tɛ* 'return!' (dir.)

⁴ The initial [p] results from mutation triggered by the prefixation of a class 4 noun class marker /g-/: /g + b/=[p].

⁵ Bare imperatives are found only in the 2sg. affirmative.

- c. *jeŋ* 'marry!' *jeŋ-dɛ* 'get married!' (sym.)
 d. *tum* 'put!' *tum-lu* 'put on!' (θ—>∅)

Again, other types of verbal affixes generally do not participate in imperative formation, although object clitics may attach to an imperative verb form.

Third, the Balanta symmetrical does not behave like a Principle A reciprocal anaphor (Chomsky 1981), in contrast to the Balanta reflexive, which is formed from possessed forms of the word for 'head', *kɔ*, and does adhere to Principle A of the Binding Theory. The following formulation is from Harbert (1995: 182):

- (24) *Principle A* An anaphor must be A-bound within its local domain
 D.

A Balanta symmetricalized verb does not have to bind a reciprocal anaphor as is highlighted in sentences with singular subjects:

- (25) a. *í- tiŋ jeŋ- dɛ*
 1SG.SUB- NEG.IMPF-marry-SYM
 'I will never get married'
- b. *à- rɛŋ- dɛ ŋgi alama*
 3SG.SUB- meet- SYM with king
 'He met with the king'

It is not even possible to view the symmetrical affix itself as the reciprocal anaphor; consider the ungrammaticality of **I will never marry each other* and **He met each other with the king*.

These facts demonstrate that a syntactic analysis whereby the symmetrical affix occupies the position of a reciprocal anaphor or requires the verb to take a reciprocal anaphor will not work. On the other hand, the

Balanta reflexive is conducive to just such an analysis. Examples of Balanta reflexives are given in (26):⁶

- (26) a. m- biifa kɔ finda⁷
 1SG- see head 1SG.POSS
 'I saw myself' (e.g., in the mirror)
- b. ù- dzanga hiil dange kɔ dma
 2SG- must learn help head 2SG.POSS
 'You must learn to help yourself'

One of the reflexive nominals in (26) could be used with a different subject, but the resulting sentence would not have a reflexive interpretation (grammatical or ungrammatical). Instead, it would have the meaning, 'X saw Y's head'. As predicted, however, none of these sentences would be grammatical if the reflexive nominal were to bind a pronoun or R-expression:

- (27) a. *kɔ finda biifa- ni
 head 1SG.POSS see- 1SG.OBJ
 'Myself saw me'

⁶ This construction is used less frequently than in English. Many verbs that would take a reflexive pronoun in English can be used without the reflexive construction in Balanta. For example, the verb *wos-* 'wash' may have either a reflexive or non-reflexive interpretation, depending on context.

bifaθa gaa wose 'the boys wash themselves'

bifaθa gaa wose mbuta ma 'the boys wash the child'

⁷ The usual form of the first person singular possessive pronoun is *hinda*. This is the only instance I have come across where *finda* appears instead (cf. *tfif hinda* 'my hand', *kit hinda* 'my eyes', *gbaale hinda* 'my house').

- b. *kɔ dma dzanga hiil dange- na
 head 2SG.POSS must learn help- 2SG.OBJ
 'Yourself must learn to help you'

Furthermore, it is not possible to get a reflexive interpretation if the reflexive nominal is dropped:

- (28) a. *m- biifa
 1SG- see
 'I saw myself'
- b. *ù- dzanga hiil dange
 2SG- must learn help
 'You must learn to help yourself'

Before continuing, note that it might be argued that the symmetrical affix is indeed a reciprocal anaphor, and that in examples like (25b), at least, the subject is split. This proposal might garner support from Jóola Foñy, where we find examples like the following (Sapir 1965) (underscored vowels are tense):

- (29) inje nu- m̄im̄ik di suleman
 I 1PL-chat with Souleymane
 'I was chatting with Souleymane'

Here the verb bears first person plural agreement though the subject appears to be singular 'I'. Examples like this are ungrammatical in Balanta, but unlike Jóola Foñy, Balanta has no morphological agreement between the verb and a lexical subject. A possible analysis of the Balanta symmetrical affix will be proposed in section 4.4.3.

Before turning to an explanation of how the data presented so far fits in with the facts given above on nominalization and imperative

formation, I briefly present some data from Jóola Foñy, demonstrating that it possesses Bantu-like stem-extensions, as well. Recall from section 1.1 that Balanta and Jóola Foñy are fairly closely related, both being members of the Bak group within West Atlantic. The Jóola Foñy data here were gathered by Sapir (1965, 1970).

Here are some examples of Jóola Foñy roots, or bare stems:

- (30) *-tɛy-* 'run'
-juk- 'see'
-manj- 'know'
-cɛŋ- 'ask'

There are about six stem extensions that are productive. Five are listed below, with examples:⁸

(31) *Productive stem extensions*

- a. *-ɛn* **causative**
-lɪnt- 'make a rumbling noise'
-lɪnten- 'cause something to make a rumbling noise'
- b. *-ɔ* **reflexive-descriptive**
-buŋ- 'braid someone's hair'
-buŋɔ- 'braid one's own hair'
- c. *-ɔrɔ* **strong reflexive**
-buj- 'kill'
-bujrɔ- 'kill one's self'

⁸ The sixth patterns exceptionally; see Sapir (1965: 53).

- d. **-ɔr** **reciprocal**
 -jim- ‘forget’
 -jimɔr- ‘forget each other’
- e. **-ɯm** **directive**
 -ribɛn- ‘follow’
 -ribɛnɯm- ‘follow by means of’

Evidence that both bare stems and the stems plus extensional affixes are the same type of constituent in Jóola verb morphology comes from the following observations:

- I. Both can be used as the positive imperative
- a. **pɯr** bɔ ‘Go out from there!’
 b. **pɯrɯm** bɔ ‘Go out via that way!’
- II. Both participate in full reduplication
- a. na- bɔ- bɔl e- liw- ey
 3SG.SUB- roast- REDUP CL3- meat- DEF3
 ‘He roasted the meat’
- b. na- bɔl- ɔ- bɔɔ
 3SG.SUB- roast- REFL- REDUP
 ‘He burned himself’
- III. Both may serve as nominal stems (Sapir 1965: 49)
- a. ə- jɔj ka- jɔj- ɛ n
 CL3- assemble, gather CL7- assemble- CAUS
 ‘to assemble, gather’ ‘to cause (people) to assemble’

b.	fu- jɔj	ka- jɔj -	ɛn- a
	CL5- assemble	CL7- assemble-	CAUS- AGENT
	'assembly, gathering'	'gatherer of people, leader who brings people together by force of charisma'	

IV. The addition of a stem extension to a stem used as an infinitive affects its noun class (Sapir 1965: 53)

(In general, infinitives of one syllable take the class 3 prefix ϵ -, and forms of two or more syllables take the class 7 prefix ka -; see Sapir 1965: 77).

a.	ϵ - <i>fanj</i>	'to scatter out from the center'
	ka - <i>fanj</i> - ϵn	'to push aside, to move aside'
b.	ϵ - <i>pur</i>	'to leave, to go out of'
	$kə$ - <i>pu</i> - ϵn	'to bring out, to make leave'
c.	ϵ - <i>cin</i>	'to live in a place'
	ka - <i>cin</i> - ϵr	'to live together as neighbors'
d.	ϵ - <i>ru</i> η	'to turn something around so it points in the opposite direction'
	$kə$ - <i>ru</i> η - ϵ	'to turn [oneself] around and face the opposite direction'

In addition, the Jóola Foñy reflexive and reciprocal pattern differently from object pronouns: the former are stem extensions that participate in full reduplication and nominal formation, as seen above, while the latter do not participate in either.

2.1.5 *Extended stems as X° categories*

There is cross-linguistic evidence that bare imperatives and nominalized stems are X° categories, and therefore that the Balanta extended stem is an X° category as well. I begin with bare imperatives — and more specifically, true imperatives — which, according to den Besten (1983), Rivero (1994), Rahhali and Souâli (1997), and Zanuttini (1997), must raise overtly to C°, possibly to check an imperative feature there. One result of V° to C° movement is that imperative verbs in languages like French and Spanish must precede object clitics, although conjugated verbs follow. I show this with data from French:

- (32) a. Je lui parlerai
 I to.him/her will.speak
 'I will speak to him/her'
- b. Parle-lui
 speak-to.him/her
 'Speak to him/her!'
- c. *Lui parle!

Examples of Balanta true imperatives are given below:

- (33) a. binte 'Come!
 come
- b. sant- ma 'Talk to him/her!
 talk.to- 3SG.OBJ
- c. [[[[CP [C° binte_i] TP [T° t_i] VP [V° t_i]]]]

True imperatives in Balanta are devoid of subject agreement prefixes, as well as tense, aspect, and mood morphemes. This is characteristic of imperatives in languages as diverse as English (Germanic), French

(Romance), Jóola Foñy (West Atlantic; Sapir 1965: 43), Middle Egyptian (Egyptian; Gardiner 1957: 257), Nama (Khoisan; Hagman 1977: 145), and Yidiñ (Australian; Dixon 1977: 370).⁹ The fact that object clitics may occur with true imperatives is consistent with the position pursued in this dissertation that they are clitics rather than affixes.

Evidence that true imperatives raise to C° in Balanta comes from the fact that true imperatives cannot be negated:

- (34) a. *?- binte 'Don't come!
 NEG- come
 b. *hani? binte 'Don't come!
 no come

This is what we expect if bare imperatives are required to raise to C° prior to Spell-out. A filled Neg° blocks V° from raising to C°, rendering negation of true imperatives impossible. (On the position of negation between TP and VP, see chapter 3.)

Instead, in order to form a negative imperative, Balanta speakers must use a future form of the verb and a special negation marker, *bag ~ bak*. While subject prefixes are usual, they are not obligatory. The forms in (35) can be called 'surrogate imperatives', since their morphology is not unique to the imperative paradigm:

- (35) a. (ú-) m- bak- bin 'Don't come!
 2SG.SUB- IMPF-NEG- come

⁹ In some of these languages, a subject pronoun or prefix is optional. It is possible that all are like Jóola Foñy, which strips the subject prefix or pronoun whenever possible.

- b. (ú-) m- bag- ni sant 'Don't talk to me!'
 2SG.SUB- IMPF-NEG- 1SG.OBJ talk

Zanuttini (1996: 186) suggests that the reduced morphology of true imperative forms is linked to their lacking some or all of the functional projections that other inflected verbs have. This, in turn, can be attributed to the function of imperatives and the contexts in which they are used. A bare imperative permits the speaker to convey necessary information (i.e., through the lexical verb), without including the obvious: for example, the subject of first and second person imperatives is known (in contrast to third person imperatives, which typically require subject identification, e.g., *May God bless you*), and the imperative's action is typically future, making tense marking unnecessary. In her 1997 book Zanuttini makes a related proposal, that a true imperative verb does not contain certain features (specifically mood) that would need to be checked (p. 147). At any rate, the hypothesis that true imperatives raise to C° requires that any true imperative be an X° category able to undergo head movement. Since verbs bearing grammatical-function-changing affixes may form true imperatives, this means that verb stems plus stem extensions count as X° (V°) categories.

As for nominalized verbs, it is more or less accepted by those working in Principles and Parameters theory that nouns head NPs. Derived nouns are not treated any differently than simple nouns in this respect, and so we can assume that nominalized verbs, just like underived nouns, are X° (N°) categories.

There have been a number of proposals regarding the derivation of extended stems. While the evidence here suggests, as argued by Mchombo

(1991, 1993) and Mchombo and Ngunga (1994), that the process must be a morphological (lexical) one, there are many ways to articulate that in theoretical terms. I prefer to view the derivation of extended stems from bare stems in a processual morphological model (cf. Aronoff 1976; Anderson 1992; Steele 1995), but a syntactically-oriented approach such as incorporation (Baker 1988a) or merger (Halle and Marantz 1993) is also feasible.¹⁰

2.2 Subject Pronouns

2.2.1 Subject prefixes

Pronominal subjects in Balanta are generally expressed by the prefixes given in Table 2.1. We need to distinguish three series, which differ primarily in tone. The first, or “basic,” series is used in non-future affirmative indicative verb forms and is marked by low tone on all but the first person plural. The second, or “irrealis,” series, used in negative and subjunctive verb forms, is marked by high tone on all but the second person plural, which has a LH contour tone. In addition, the first person singular subject prefix here is *i-* rather than *n-*. The third and final “future” series, is found in affirmative future indicative forms of the verb and is characterized by high tone in the first person singular and plural and the second person singular. Third person subject prefixes in this series bear low tone, and the second person plural has a LH contour tone. As in the negative series, the first person singular prefix is *i-*:

¹⁰ Such approaches have difficulty accounting for other types of phenomena like cumulative or extended exponence, subtractive morphs, templatic morphology, ablaut, and suppletion (Anderson 1992, Beard 1995 *inter alia*).

TABLE 2.1. SUBJECT PREFIXES.

		Singular	Plural
1	basic	n-	báa-, bábá- or báj-
	irrealis	í-	báa-
	future	í-	báa-
2	basic	ù-	bàa-
	irrealis	ú-	bàá-
	future	ú-	bàá-
3	basic	à- (ANIM), ù-(INAN)	bì-
	irrealis	á-, ú-	bí-
	future	à-, ù-	bì-

The system outlined here is virtually identical to the one presented by N'Diaye-Corréard (1973). The chief difference is that in the dialect of Balanta under investigation here, we must distinguish between an animate and inanimate third person singular subject prefix. In the dialect studied by N'Diaye-Corréard, the animate-inanimate distinction is accomplished through the use of several noun class agreement prefixes, which attach not only to adjectives, but also to verbs (cf. Table 1.2). Here, verbs, like adjectives, may bear only the *a-* or *u-* prefixes.¹¹

We see in Table 2.1 that tone bears a heavy functional load in the Balanta verb. The first person and second person plural, in particular, are

¹¹ For verbs, *a-* indicates an animate subject, and *u-* an inanimate subject, as indicated in Table 2.1. For adjectives, the picture is much more complicated; see the discussion and analysis in chapter 7.

distinguishable only on the basis of tone. I refer the reader to N'Diaye-Corréard (1973) for more detail.

In (36) I give examples of the subject prefixes in context. Note that an epenthetic /n/ occurs between subject prefixes and verb stems beginning with /j/, as seen in (36f):

- (36) a. n- mɛgɛsu gbaale
1SG.SUB-build house
'I built a house'
- b. í- n- saf g- lɛtar
1SG.SUB- IMPF-write CL4- letter
'I will write a letter'
- c. ù- garandi ù- sow ga?
2SG.SUB-teach 2SG.SUB-finish Q
'Did you finish teaching?'
- d. báa- garandi báa- sow
1PL.SUB- teach 1PL.SUB- finish
'We finished teaching'
- e. bàa- ŋwoode
2PL.SUB-return
'You (pl.) returned'
- f. wil ma gitilu bɔtʃi bín- jaa bo Maarungu.
thing DEF happen village 3PL.SUB- call CL3.it Maarungu
'The thing happened in a village they call Maarungu
(Mangarungu)'¹²

¹² This is probably an example of a relative clause, although there is no overt relative pronoun.

2.2.2 Accounting for the distribution of subject prefixes

In non-negative, non-subjunctive clauses, subject prefixes are in complementary distribution with non-topicalized NP subjects:

(37) *Non-negative clauses: Subject prefix cannot co-occur with non-focused lexical NP*

anin (*à-) gobu a- wɛɛ
 woman 3SG.SUB- fall LOC- water

'A woman fell in the water'

In negative and subjunctive clauses, however, subject prefixes are obligatory, even in the presence of lexical subjects:

(38) a. *Negative clauses: Subject prefix obligatory in all contexts*

anin *(á-) ?- kobu a- wɛɛ
 woman 3SG.SUB NEG- fall LOC- water

'A woman didn't fall in the water'

anin *(á-) tiŋ- gobu a- wɛɛ
 woman 3SG.SUB- NEG.IMPF- fall LOC- water

'The woman won't fall in the water'

b. *Subjunctive clauses: Subject prefix obligatory in all contexts*

bi- to a- marse sam Dʒeneba
 3PL.SUB- go LOC- market that Dieynaba
 *(a-) naŋ biifa Sadio
 3SG.SUB-SBJC see Sadio

'They came to market so that Dieynaba could see Sadio'

Why do we find such a split in the distribution of subject prefixes in Balanta?

Note that negation and subjunctive are expressed with what Matthews (1991) terms ‘extended exponence’ in Balanta. The main exponents of both are preverbal morphemes, which in some ways seem to be best described as auxiliaries (cf. sections 2.4, 2.5): ʔ (negative) and -na-n (subjunctive). But the irrealis subject agreement markers must also be seen as exponents of negative and subjunctive, since they have a different phonological realization than the “basic” and “future” subject prefixes found in simple affirmative clauses and future clauses respectively. The label ‘irrealis’ captures the fact that in both negative and subjunctive clauses, the expressed action has not yet been realized and in fact, there is some doubt as to whether it will be realized at all. Accordingly, I propose that, since subject prefixes in negative and subjunctive verbs convey not only the identity of the subject but also additional semantic information, i.e., a feature [irrealis], they cannot be omitted.¹³

This raises the question of why subject prefixes are not obligatory on future forms of the verb. Note that although first and second person future prefixes differ from their affirmative counterparts and thus convey information about tense, the third person prefixes do not. Since third person forms — the only ones that might potentially co-occur with an NP subject — happen to be homophonous with their affirmative counterparts, they are not exponents of future tense, and are therefore superfluous in the presence of a lexical subject.

¹³ There is an interesting connection between the position of the verb stem at Spell-out and the realization of subject prefixes which is highly reminiscent of *do*-support in English. This will be explored in section 3.1.

Similar data can be found in many other languages. In IsiXhosa, for example, the remote past continuous and negative remote past continuous are marked by reduplication of the subject prefix (Claughton 1983; REM stands for remote past):

- (39) a. nd- a- ndi- nga- shukum- is- a
 1SG- REM- 1SG- AUX- shake- CAUS- FV
 'I was shaking (long ago)' (transitive)
- b. nd- a- ndi- nga- bon- is- a
 1SG- REM- 1SG- AUX- show-CAUS- FV
 'I was showing (long ago)'
- (40) a. nd- a- ndi- nga- shukum- is- i
 1SG- REM- 1SG- AUX- shake- CAUS- NEG
 'I was not shaking (long ago)' (transitive)
- b. nd- a- ndi- nga- bon- is- i
 1SG- REM- 1SG- AUX- show-CAUS- NEG
 'I was not showing (long ago)'

The remote past (non-continuous) shows no such reduplication:

- (41) a. nd- aa- shukum- is- a
 1SG- REM- shake- CAUS- FV
 'I shook (long ago)' (transitive)
- b. a- ndi- shukum-is- a- nga
 NEG- 1SG- shake CAUS- NEG- AUX
 'I did not shake (long ago)' (transitive)

The simplest explanation for the observation that subject is marked no less than twice in (39-40) is that reduplication of the subject marker is itself an exponent of continuous in the remote past.¹⁴

Hebrew also has a set of facts with a similar explanation. In most contexts, Hebrew displays pro-drop, since the person, number, and gender of the subject are encoded in verbal morphology. This is shown with the past indicative paradigm of the verb *liktov* 'to write':

(42)	katav-ti	'I wrote'
	katav-ta	'you (m.sg.) wrote'
	katav-t	'you (f.sg.) wrote'
	katav	'he wrote'
	katv-a	'she wrote'
	katav-nu	'we wrote'
	katav-tem	'you (m.pl.) wrote'
	katav-ten	'you (f.pl.) wrote'
	katv-u	'they wrote'

The present tense, however, is realized by what were historically participles. They encode gender and number, but not person. Because of this, subject pronouns are required. The reason is the same as the one for the obligatory appearance of subject prefixes in Balanta negative and subjunctive clauses — they are needed for interpretation. In the Hebrew present indicative, subject pronouns are required because they express [person], and in Balanta, [irrealis], neither of which are expressed by any

¹⁴ A clause containing a lexical subject would be marked three times for subject, since subject agreement is obligatory.

other morpheme in the verb.¹⁵ The present paradigm of Hebrew *liktov* 'to write' is given below:

- | | | |
|------|--------------------------|----------------------------------|
| (43) | ani/ ata/ hu kotev | 'I (m.), you (m.), he write(s)' |
| | ani /at/ hi kotevet | 'I (f.), you (f.), she write(s)' |
| | anaxnu/ atem/ hem kotvim | 'we, you, they write (m.)' |
| | anaxnu/ aten/ hen kotvot | 'we, you, they write (f.)' |

Before moving on to object pronouns, let us consider some alternative explanations for the differences in subject marking between affirmative and negative or subjunctive clauses in Balanta. The first possibility is that 'subject' NPs that co-occur with subject prefixes in negative and subjunctive clauses are really topics in left-dislocation position. Here I present evidence from negative clauses that this cannot be true.

To begin, we know that bare quantifiers cannot be left-dislocated, as the following data from French show (cf. Rizzi 1986a):

- | | | |
|------|----|--|
| (44) | a. | Marie-line, elle a une soeur en Italie |
| | | Marie-line, she has a sister in Italy |
| | b. | * Quelqu'un, il a cassé la fenêtre |
| | | Someone, he has broken the window |

¹⁵ As pointed out by M. Aronoff, the parallel between Balanta and Hebrew is not perfect, since the Hebrew facts are pragmatically governed. Just as in English, it is possible to say 'don't know' for 'I don't know' in Hebrew, despite there being no overt marking for person. Likewise, past tense verbs, which are marked for person, can co-occur with subject pronouns.

It is possible that the Balanta facts are at least somewhat pragmatically governed as well. To learn whether this is the case, data from more speakers in various contexts would have to be considered.

- c. **Quelqu'un a cassé la fenêtre**
Someone has broken the window
- d. * **Personne, il n'est venu**
Nodody, he NEG is come
'Nobody came'
- e. **Personne n'est venu**
Nobody NEG is come
'Nobody came'

In (44a), the NP [Marie-line] is in left-dislocation position, and the sentence is acceptable. In (44b, d), bare quantifiers have been left-dislocated, and the sentences are ungrammatical. Examples (44c, e), with no left-dislocation (and hence no subject clitics), are fine.

Examples (45a-c) show that quantifiers may not be left-dislocated in Balanta, either:

- (45) a. **Dzɛnɛba, a- biifa Sadio a- marse**
Dieynaba, 3SG.SUB-see Sadio LOC- market
'Dieynaba, she saw Sadio at market'
- b. * **Hal, a- haao palanter ma**
someone 3SG.SUB-break window DEF
'Someone broke the window'
- c. **Hal haao palanter ma**
someone break window DEF
'Someone broke the window'

Crucially, bare quantifiers co-occur with subject prefixes in negative clauses:¹⁶

- (46) a. hal *(á-) tim- ba- hur
 nobody 3SG.SUB-NEG.IMPF- 2PL.OBJ- know
 'No one will know you'
- b. wil *(ú-) ?- kitilu
 nothing 3SG.SUB.INAN-NEG- happen
 'Nothing happened'

Since quantifiers cannot be left-dislocated, we know that the ones in (46) must be in the normal subject position, and that the subjects of negative clauses are therefore not in left-dislocation position.

Further evidence comes from wh-questions, wh-words being another type of quantifier and therefore not subject to left-dislocation. In negative clauses with a wh-subject, subject prefixes must appear:

- (47) a. hila *(á-) ?- womu kaldu hilli?
 who 3SG.SUB-NEG- eat caldou 3SG.POSS
 'Who didn't eat his caldou?' (regional stew)
- b. hila *(á-) ?- naŋ?
 who 3SG.SUB-NEG- accept
 'Who didn't accept?'

This is in contrast to non-negative clauses, where the co-occurrence of a subject prefix with a subject wh-word is ungrammatical:

¹⁶ The basic meaning of *hal* is 'person' and that of *wil* is 'thing'. *Hal* is also used for 'someone, somebody' (affirmative clauses) and 'no one, nobody' (negative clauses), and *wil* for 'something' (affirmative clauses) and 'nothing' (negative clauses).

- (48) hila (*à-) womu kaldu hilli
 who 3SG.SUB- eat caldou 3SG.POSS
 'Who ate his soup?'

Again, these data provide strong evidence that subjects in negative clauses have not been left-dislocated.

A second possibility is that there is a structural reason for the obligatoriness of subject prefixes in negative and subjunctive clauses. This has been claimed to be true for similar facts in Breton. Breton is a VSO language, but has both affirmative and negative subject-verb sentences. The following example shows that there is no agreement between the verb and subject in affirmative subject-verb clauses (example from Borsley and Stephens 1989: 408):

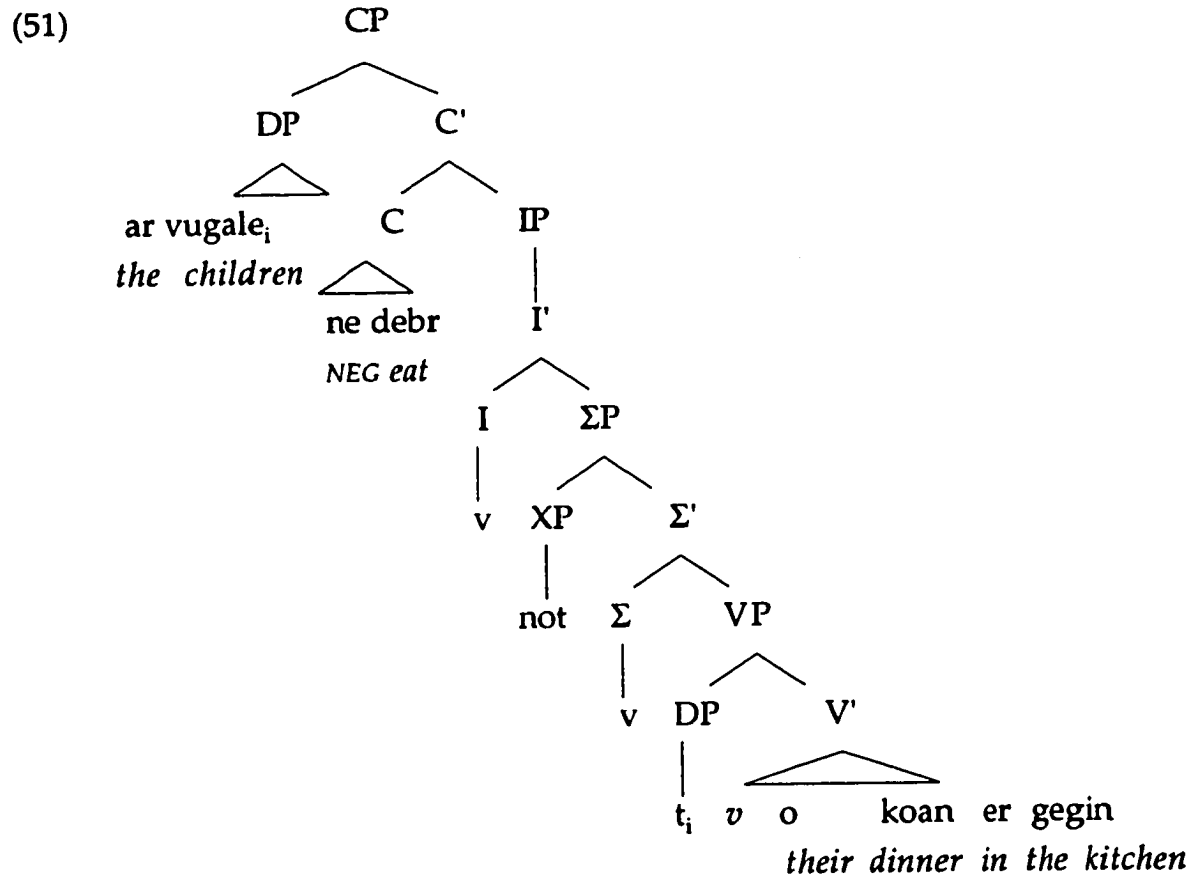
- (49) Ar vugale a lenn (*lennont) levrioù
 the children PCL read (*read.3PL) books
 'The children read books'

In contrast, verbs in negative clauses do agree with a preceding subject (example from Stump 1984):

- (50) Ar vugale ne lennont (*lenn) ket levrioù
 the children PCL read.3PL (*read) not books
 'The children do not read books'

Schafer (1995) accounts for this difference through Relativized Minimality (Rizzi 1990). She proposes that the Breton negation marker *ket* is in [Spec, Σ P] (Laka 1994), and that, following Rizzi's discussion of negation, [Spec, Σ P] is an A-bar position. Clause-initial subjects raise to [Spec, CP], heading an A-bar chain that terminates in a trace in [Spec, VP]. In negative clauses, this trace violates the ECP since the chain between it

and its antecedent does not respect relativized minimality due to the intervening filled A-bar position (Schafer 1995: 161):



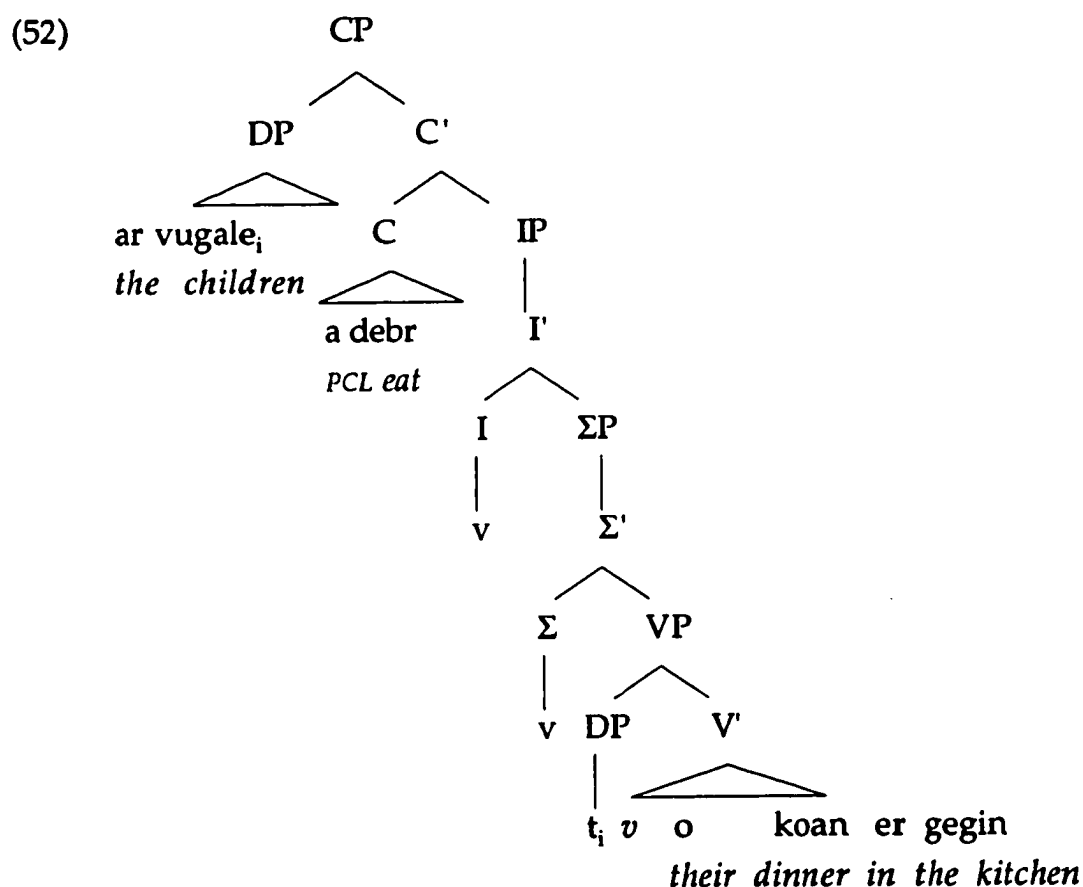
* Ar vugale ne debr ket o koan er gegin

The children don't eat their dinner in the kitchen

In order to form subject-initial negative clauses, speakers resort to a repair strategy: a null resumptive pronoun is generated in the internal subject position. Unlike the trace, it does not need to be governed, and so the ECP violation is avoided. Agreement is obligatory with null pronominals, possibly because it serves as the only evidence of their presence. (See McCloskey and Hale 1984, Rizzi 1986b on the relationship between agreement marking and *pro*.) Schafer supports her analysis by

demonstrating that the use of resumptive pronouns as a repair strategy can be found elsewhere in Breton.

In affirmative clauses, no filled A-bar specifier intervenes between the trace and its antecedent, since ΣP is empty (Schafer 1995: 163). Since there is no ECP violation, the null resumptive pronoun is not needed, and there is no agreement marking on the verb:



The problem with trying to apply Schafer's analysis to Balanta is that, as W. Harbert has pointed out (p. c.), there is a strong reason not to accept Schafer's analysis for Breton at all. Given her account, we would expect to see the same robust ECP effects in English as she proposes for Breton when we move a *wh*-argument over the negative operator. But we do not:

- (53) a. Which men didn't you see?
 b. Which men didn't (*they) see you?
 c. ? How didn't you fix the car?

Harbert (1999) has suggested an alternative account for Welsh, which can be extended to Breton, namely, that initial negative markers in Welsh occupy Force°. (Harbert uses Rizzi's [1997] 'exploded' CP.) Welsh verbs only agree with pronominal subjects. Accordingly, Harbert deduces that the position of relativized (preverbal) subjects is occupied by a trace in affirmative SV clauses, but by a null pronoun in negative ones. He hypothesizes that this is because the negative complementizer blocks verb movement to Force° as well as A-bar movement of the relative operator. Harbert's analysis cannot be applied to Balanta since there is no way to construe the negative marker as occupying C° (Force). As we will see in chapter 3, the data point to a position between TP and VP. Although it is possible that negation must be checked in C°, the Breton analysis still cannot be extended to our data, given that non-left-dislocated Balanta subjects are never in [Spec, CP].

A final — and more promising — possibility is that the realization of Balanta subject prefixes is parallel to *do*-support in English. Because this line of analysis is dependent on claims made in section 3.1, I present it there.

2.2.3 *Simple and emphatic pronouns*

In cases of contrastive emphasis, the simple and emphatic pronouns in Table 2.2 are used instead of the subject prefixes (Table 2.1). Regarding the singular forms of these pronouns, the more emphatic form is derived

from the simple form by the addition of *ma*, which I analyze as an enclitic focus marker in chapter 8.¹⁷ The first and second singular forms in parentheses were offered by my consultant as alternatives to the more usual forms *ɲi*, *hu*, and *wu*:

TABLE 2.2. SIMPLE AND EMPHATIC PRONOUNS.

	Singular	Plural
1 Simple	ɲi (ɲɔ)	báan
Emphatic	ɲima	báanba
2 Simple	hu, wu (wɔ)	bàa
Emphatic	huma, wuma	bàaba
3 Simple	hi, hidi	ba
Emphatic	hima, hidima	baama (bapa also attested)

The third person forms given in Table 2.2 are for people only. In other cases, the pronouns in Table 2.3, which I call 'class-marked pronouns', are used instead. Although animal words sometimes behave as class 1 nouns, my consultant usually refers to them using the class 5 pronouns *fi* or *fima*. As with the pronouns in Table 2.2, class-marked pronouns come in both a simple (clitic) and emphatic (freestanding) series and may be used as subject or object pronouns. The emphatic forms are derived from the simple forms by the addition of the focus marker *ma*:

¹⁷ As we will see in that chapter, *ma* attaches not only to the pronouns in Table 2.2, but also to nouns, adjectives, and question words.

TABLE 2.3. CLASS-MARKED PRONOUNS.

	Simple	Emphatic
CL1, animate sg.	hi	hima
CL2a, animate pl.	baa	baama
CL2b, inanimate pl.	fi	fima
CL3, inanimate sg.	bi	bima
CL4, inanimate sg.	gi	gima
CL5, inanimate sg.	fi	fima
CL6, inanimate sg.	wi	wima

My speaker generally uses only the forms *hi* and *fi* in the singular, with *fi* used to replace the class 3, 4 and 6 forms.

The use of the simple and emphatic pronouns as subjects is illustrated in (54):

- (54) a. a- saf- ni gletar a- sog- ni
 3SG.SUB- write- 1SG.OBJ letter 3SG.SUB- call- 1SG.OBJ
 a- telefon hatide ma **jima** fanaj saf- ma
 LOC- telephone again CONS 1SG also write- 3SG.OBJ
 'She wrote me a letter, she called me on the telephone again,
 and I also wrote her a letter'
- b. **wu** haao gabell ma
 2SG break calabash DEF
 'You broke the calabash'

- c. *mfila wu n- tobo a- gbaale?*
 when 2SG IMPF-go LOC- house
 'When are you going to go home?'¹⁸
- d. *hidi mom mbarimuso hilli*
 3SG make.preganant sister 3SG.POSS
 'HE made his sister pregnant'
- e. *fi dasu*
 CL5 break
 'It broke'

2.3 Object Pronouns

Pronominal objects are generally realized by the enclitic pronouns in Table 2.4.

TABLE 2.4. PRONOMINAL OBJECT CLITICS.

	Singular	Plural
1	-ni	-baŋ
2	-na	-ba
3	-ma	-baa

The best evidence that the morphs in Table 2.4 should be classified as clitics is that they exhibit a fairly low degree of selection with respect to their hosts (Zwicky and Pullum 1983: 503). As seen in the diagram at the beginning of

¹⁸ The subject pronoun is emphasized slightly here in comparison to the subject in the question *mfila u-n-tobo a-gbaale* 'when are you going to go home?', where there is no emphasis at all on *u-* 'you'.

this chapter, the object markers in Table 2.4 generally cliticize to the verb stem, but in the presence of the negation or subjunctive marker, they cliticize to these instead. Affixes tend to have a more rigid distribution. (For an analysis of the position of object clitics, see chapters 3 and 4.)

Other diagnostics for differentiating clitics from affixes support this conclusion. According to Zwicky and Pullum (p. 504): (i) "Arbitrary gaps in the sets of combinations are more characteristic of affixed words than of clitic groups," (ii) "Morphophonological idiosyncrasies are more characteristic of affixed words than of clitic groups," and (iii) "Semantic idiosyncrasies are more characteristic of affixed words than of clitic groups." With regard to the object clitics in Table 2.4, we find no arbitrary gaps or morphophonological or semantic idiosyncrasies. Although these three particular diagnostics are not conclusive, the facts are more consistent with an interpretation of object markers as clitics than as affixes.

In (55) I provide examples of the use of object clitics in affirmative verb forms, where they appear following the verb. Recall from (1) that object markers precede past tense and hypothetical mood markers; this is seen in (55g). We should note that if object markers are clitics, then these morphs must also be, since in the words of Zwicky and Pullum (1983: 504), "Clitics can attach to material already containing clitics, but affixes cannot."

- (55) a. à- hit- ni Dakar
 3SG.SUB-send-1SG.OBJ Dakar
 'He/she sent me to Dakar'
- b. bi- hit- na Dakar
 3PL.SUB-send-2SG.OBJ Dakar
 'They sent you (sg.) to Dakar'

- c. n- wɔsɛ- ma
1SG.SUB-wash-CL1.OBJ
'I washed him/her'
- d. bi- hur- baŋ
3PL.SUB-know-1PL.OBJ
'They know us'
- e. bi- hur- ba
3PL.SUB-know-2PL.OBJ
'They know you (pl.)'
- f. n- wɔsɛ- baa
1SG.SUB-wash-CL2.OBJ
'I washed them'
- g. dzandi n n- wun-na mɔ buk hɔmmu ...
front GEN 1SG.SUB-give- 2SG.OBJ HYP0 book this
'Before I give you this book ...'

In verb forms containing the negation (56) or subjunctive (57) markers (both to be discussed later in this chapter), object clitics precede the verb stem instead. This variation in clitic placement will be one of the main topics of investigation in the next chapter:

- (56) ú- ?- ma hur
2SG.SUB- NEG- 3SG.OBJ know
'You don't know him'
- (57) a- bin- tɛ sam a- na- ni- ŋ biifa
3SG.SUB- come- DIR that 3SG.SUB- SBJC- 1SG.OBJ SBJC see
'He came in order to see you'

According to N'Diaye-Corréard (1973), object clitics precede the verb in the negative past and the affirmative and negative hypothetical (58a-c), and follow the verb in all other forms (58d-f) (data from N'Diaye-Corréard 1973: 182-3):

- (58) a. *Negative*
 áa- mmà- bāg
 3SG.SUB.NEG- 3SG.OBJ.NEG- carry.under.arm
 'He didn't carry it under his arm'
- b. *Hypothetical affirmative*
 è- s- má- béeθā
 1SG.SUB- HYPO.AFF- 3SG.OBJ- see
 '(If) I see it'
- c. *Hypothetical negative*
 à- gé- mà- béeθā
 3SG.SUB- HYPO.NEG- 3SG.OBJ- see
 '(If) he does not see it'
- d. *Simple affirmative*
 à- bāg- mā
 3SG.SUB- carry.under.arm-3SG.OBJ
 'He carried it under his arm'
- e. *Future affirmative*
 à- n- bāg- mā
 3SG.SUB- IMPF-carry.under.arm-3SG.OBJ
 'He will carry it under his arm'

f. *Future negative*

á- ggə̀ n- bág- mā
 3SG.SUB.NEG-FUT.NEG- IMPF-carry.under.arm-3SG.OBJ

‘He will not carry it under his arm’

The situation in the dialect under investigation is simpler, since there is no *s* prefix (hypothetical affirmative) (58b), *gɛ* (hypothetical negative) (58c), or *ggə* (future negative) (58f).

Third person pronominal objects may also be realized by one of the pronouns seen earlier in Tables 2.2 or 2.3. The ones in Table 2.2 seem to be used as personal pronouns in a contrastive context. The third person class-marked pronouns in the first column of Table 2.3 refer to non-humans, but not necessarily in a contrastive context. These differ from the object clitics discussed immediately above in two ways: (i) they agree with their referent for noun class and (ii) they may be used as subject pronouns.

At first glance, it may seem that even the simple forms of the class-marked pronouns in Table 2.3 are freestanding pronouns, and not clitics at all. Isolated clitics and affixes are unable to undergo syntactic rules such as fronting (Zwicky and Pullum 1983) while words can.¹⁹ The data in (59) is therefore somewhat surprising: in (59b) it appears that a noun class marked clitic has been fronted:

- (59) a. à- ŋinu hi
 3SG.SUB-look.at CL1
 ‘She looked at him’

¹⁹ The position of Kayne (1991: 661) might be slightly more accurate. According to Kayne, “Once a clitic is adjoined to some X^0 , it cannot be detached from it. $Cl + X^0$ can subsequently move as a constituent, but Cl cannot move, leaving X^0 behind.”

- b. hi à- ŋinu
 CL1 3SG.SUB-look.at
 'She looked at HIM'

But if *hi* and the other simple forms of the class-marked pronouns were in fact freestanding pronouns, we would also expect them to be able to be conjoined. This is not the case:

- (60) a. *fi ŋgi hi
 CL5 with CL1
 b. *hi ŋgi fi
 CL1 with CL5
 c. *wi ŋgi fi
 CL6 with CL5
 d. *fi ŋgi fi
 CL5 with CL5

Conjoining emphatic pronouns is allowed, e.g. *hima ŋgi fima* 'it (CL1) and it (CL5)'.
 .

Further support for the classification of the simple forms of the pronouns in Table 2.3 as clitics comes from the fact that they are unable to stand on their own:

- (61) hila u- biifa?
 who 2SG.SUB-see
 a. *hi
 b. hima

Given this fact and the conjunction data, I maintain the position that the simple forms in Table 2.3 are clitics. How, then, to account for the data in (59)? I argue chapter 8 that in (59b), *hi* has not been fronted at all;

instead, it is base-generated in a focus head F° , whose specifier may or may not be filled with a corresponding NP. (59b) is therefore more or less analogous to English sentences like, 'That's the one I saw'. Moreover, the *hi* in (59b) differs from the one in (59a) in bearing a high tone. Thus, it is not functioning as a clitic in this context.

Prosodically speaking, postverbal noun class agreeing clitics are always pronounced as if they form a unit with the preceding verb, i.e., they are stressless:

(62) [adasu fi] 'he/she broke it'

I will argue in the next chapter that distributional differences between object clitics and class-marked pronouns can largely be derived from syntactic structure. For example, it is well known that there are constraints in many languages regarding the arguments that may be pronominalized in double object constructions. In so-called asymmetrical languages like Chichewa, a beneficiary object, but not a patient, can be expressed by an object marker on the verb:

(63) *Chichewa* (Baker 1988a: 266-7)

a. amayi a-ku-mu-umb-ir-a mtsuko mwana
 woman SP-PRES-OM-mold-for-ASP waterpot child

'The woman is molding the waterpot for the child'

b. amayi a-ku-mu-umb-ir-a mtsuko
 woman SP-PRES-OP-mold-for-ASP waterpot

'The woman is molding the waterpot for him'

- c. * amayi a-na-u-umb-ir-a mwana mtsuko
 woman SP-PAST-OP-mold-for-ASP child waterpot
 'The woman is [sic]²⁰ molding the waterpot for the child'
- d. * amayi a-na-u-umb-ir-a mwana
 woman SP-PAST-OP-mold-for-ASP child
 'The woman is [sic] molding it for the child'

In symmetrical languages like Kichaga (Bresnan and Moshi 1990), on the other hand, either object in an applicative construction can be expressed by an object marker on the verb. (Other differences between symmetrical and asymmetrical object languages will be treated in chapter 4.)

Balanta patterns with Chichewa and other asymmetrical object languages in permitting only the benefactive object to be pronominalized in the verb morphology by the object clitics:

- (64) a. í- n- sog- id- ma Sibow
 1SG.SUB- IMPF- call- APP- 3SG.OBJ Sibow
 'I will call Sibow for him/her'
 * 'I will call him/her for Sibow'
- b. í- n- sog- id- ma
 1SG.SUB- IMPF- call- APP- 3SG.OBJ
 'I will call for him/her'
 * 'I will call him/her'

As a result, when the theme or patient is pronominalized in Balanta, it is always with one of the class-marked pronouns in Table 2.3, which are more loosely attached to the verb (the pronouns in Table 2.2 are also acceptable):

²⁰ The verb in (63c-d) contains a past tense morpheme, but is glossed as present tense. This may or may not be an error.

- (65) a. à- weet- id- ma hi
 3SG.SUB- find- APP- 3SG.OBJ CL1.OBJ
 ‘He found it (the dog) for him’
- b. à- weet- id Segu hi
 3SG.SUB- find- APP Ségou CL1.OBJ
 ‘He found it (the dog) for Ségou’

Further examples of class-marked pronouns used as objects are provided in (66):

- (66) a. à- sowlu à- ngaraŋ gi
 3SG.SUB- finish 3SG.SUB- read CL4.OBJ
 ‘He/she finished reading it (the book)’
- b. oto hɔmmu,aduulu²¹ hinda wun- ma fi
 car that younger.brother 1SG.POSS give- 3SG.OBJ CL5.OBJ
 ‘That car, my brother gave it to him’

Finally, it is impossible to have two noun class agreeing clitics attached to the same verb. ‘Mariama gave it to him/her’ must be expressed as in (67c):

- (67) a. * Mariama wun hi fi
 CL1.OBJ Mariama give CL1.OBJ CL5.OBJ
 ‘Mariama gave it to him/her’
- b. * Mariama wun fi hi
- c. Mariama wun- ma fi
 Mariama give- 3SG.OBJ CL5.OBJ
 ‘Mariama gave it to him’

²¹ *aduulu* is derived from the adjective *-duulu* ‘little’ with the addition of the class 1 prefix *a-*. It can refer to a little brother or sister.

Noun class marked clitics will be analyzed in chapters 3 (section 3.2) and 4.

2.4 Negation

Negation of the verb in Balanta shows up as gemination and devoicing of the initial consonant of the object clitic, or, if there is none, of the initial consonant of the verb stem. Devoicing occurs only in the case of obstruents, as might be expected. In the examples provided by N'Diaye-Corréard (1970, 1973), negation is realized by lengthening of the vowel of the subject prefix and sometimes gemination of a following consonant (example from N'Diaye-Corréard 1973: 182):

- (68) áa- mmà- bāg
 3SG.SUB- NEG.3SG.OBJ- carry.under.arm
 ‘He did not carry it under his arm’

As we saw in Table 2.1, negation of the verb is accompanied by the use of a special series of subject prefixes, characterized by high tone on all but the first person plural (*bàa-*) and second person plural (*bàá-*). In addition, the first person singular prefix is realized as *í-* in negative verb forms, rather than *n-*. Examples of negative verb forms are provided in (69-71):

- (69) a. ù- biifa
 2SG.SUB- see
 ‘You (sg.) saw’
- b. ú- bbiifa
 2SG.SUB- see
 ‘You (sg.) didn’t see’

- (70) a. **bì- gi apaaj a- p- taa fembe**
 3PL.SUB- COP playing LOC- CL5- tree CL5.that
 ‘They are playing under that tree’
- b. **bí- kki apaaj a- p- taa fembe**
 3PL.SUB- COP playing LOC- CL5- tree CL5.that
 ‘They aren’t playing under that tree’
- (71) a. **bì- biifa- baa**
 3PL.SUB- see- 3PL.OBJ
 ‘They saw them’
- b. **bí- ppaa- biifa**
 3PL.SUB- 3PL.OBJ-see
 ‘They didn’t see them’

I believe that the best way to account for the phonological implications of negation in Balanta is to posit the existence of a negative prefix /ʔ-/ that totally assimilates to a following consonant. It will never come into contact with a vowel because object clitics and verb stems are always consonant-initial. Glottal stops are devoiced consonants, and this may explain the devoicing seen in (70-71); alternatively, we can note that voiced geminates are rare cross-linguistically, and Balanta has none. The hypothesis that the negative marker is /ʔ-/ has the added advantage of suggesting a possible historical explanation for why the negative series of subject prefixes is characterized by high tone: glottalization tends to be associated with higher pitch cross-linguistically (Hombert 1978: 92-3). In the rest of the dissertation, I will represent negation in my examples using ʔ; gemination will not be shown. This is to facilitate the breakdown of verb forms into their morphemes in the examples.

There is no gemination of /w/ or /h/, and the negative prefix /ʔ-/ is therefore replaced by /-ta-/ in cases where it would otherwise come up against one of these two consonants: *a-ta-weetu*, **a-ʔ-weetu* 'he didn't find'; *a-ta-hur*, **a-ʔ-hur* 'he didn't know'.

It was mentioned above that in negative verb forms, object clitics precede rather than follow the verb stem. The typical order of elements in a Balanta verb with object marking is shown in (72a). The object marker is cliticized to the verb. When the verb is negated, however, the object clitic must precede the verb (72b). Since it is enclitic, its host must be negation:

- (72) a. bì- biifa-ma a- saati
 3PL.SUB-see- 3SG.OBJ LOC-village
 'They saw him in the village'
- b. bí- ʔ- ma biifa a- saati
 3PL.SUB- NEG- 3SG.OBJ- see LOC- village
 'They didn't see him in village'
- c. * bí- ʔ- piifa- ma a- saati (/ʔ/ + /b/=[p])
 3PL.SUB- NEG- see- 3SG.OBJ LOC- village
 'They didn't see him in village'

Wilson (1961a) characterizes Balanta object markers as second position clitics. In Kentohe, the dialect he studies, non-emphatic object pronouns are required to appear second in the clause. In simple affirmative clauses with pronominal subjects, this results in the word order V DO, with the subject expressed by a prefix on the verb (73). In negative clauses, however, the negative marker behaves as a full word for purposes of calculating second position. As in Ganja, the resulting word order is Neg DO V (74):

- (73) bə- beek nyi
 3PL- see me
 'They saw me'
- (74) a. bə- wɛt nyi beek
 3PL- NEG me see
 'They did not see me'
- b. bə- wɛt nyi mada beeka
 3PL- NEG me can see
 'They cannot see me'

Further support for the characterization of object markers as second position clitics comes from clauses containing the subjunctive marker *na-ŋ* in the Ganja dialect (no data is available on the Kentohe dialect). Here, again, object markers are required to precede the verb stem:

- (75) u- na- ma- ŋ sant hila mom- na
 2SG.SUB- SBJC- 3SG.OBJ-SBJC tell who make.pregnant-2SG.OBJ
 'You will tell him who made you pregnant'

In the next chapter I argue that despite appearances, Balanta object clitics — at least in the Ganja dialect — are not second position clitics. Another explanation is proposed.

Under the rubric of negation, we can discuss two other prefixes, high-toned *tá-* 'not yet' and low-toned *tâ-* 'no longer'. These appear only in negative forms. They precede the negative prefix, as evidenced by gemination of a following consonant in relevant verb forms, e.g., *á-tá-mma-biifa* 'he didn't see her (yet)', and are perhaps best analyzed as portmanteaux expressing negation and aspect:

- (76) bí- tà- ʔ- ma- biifa a- saati
 3PL.SUB- NO.LONGER- NEG- 3SG.OBJ- see LOC- village
 ‘They no longer saw him in the village’

Note that the morphemes denoting ‘not yet’ and ‘no longer’ cannot co-occur with the imperfective morph *n-*. Instead, we find a portmanteau, *-tiN*. (Examples can be found in section 2.6.) This is what we would expect if these morphemes express both negation and aspect.

A final issue is the status of the negative marker in Balanta. There is evidence that it is a verbal element. As we will see in section 3.1, negation appears to occupy a functional projection between the lexical VP and a higher VP shell, which may be headed by an object clitic. (It is to the specifier of this VP shell that direct objects raise, checking object agreement features.) This suggests that NegP itself is a verbal projection. On a more descriptive level, we tend to find clitics attached to the highest verbal element of a clause cross-linguistically. French, discussed by Sportiche (1996), is a straightforward example of this. Negation in Balanta hosts object clitics, and thus appears to be a verbal element, i.e., an auxiliary.²²

²² Although the basic marker of negation is simply a glottal stop — something that *a priori* resembles an affix more than an auxiliary verb — there are two other negative markers that we must take into consideration. The first is *bak ~ bag*, found in negative imperatives: *u-m-bag bin!* (2SG.SUB-IMP-NEG come) ‘Don’t come!’. The second, *ngɛ*, is found in present tense constructions, such as *bi-ngɛ naŋ tumlu samte a-misir* (3PL.SUB-NEG accept wearing shoes LOC-mosque) ‘Wearing shoes in the mosque is not allowed’ (see also (78a) below).

2.5 Mood

In this section I describe three types of mood encountered in the Balanta clause: subjunctive, hypothetical, and imperative.

2.5.1 Subjunctive

The subjunctive is expressed by the discontinuous morph *-na-ŋ*, which is perhaps best characterized as a modal auxiliary, since it functions as an independent word in hosting object clitics, as we will see below in (82-83). In this context, the first element of the subjunctive auxiliary occurs after the subject prefix and before the object marker(s), and the second element after the object marker(s) and before the verb stem.²³ The final nasal assimilates to a following consonant for place.

N'Diaye-Corréard (1973) considers *-na-ŋ* to be a conjunction of sorts. But in fact, its distribution is very consistent with that of the Romance subjunctive.

We see first that *-na-ŋ* is used after expressions of emotion. Note that while the verb *ɲome* in (77a) is translated as 'dare', a more appropriate translation would be 'not be afraid', with the negated form meaning 'be afraid':

- (77) a. a- ?- ɲome a- naŋ mɛɛsu a- gbaale
 3SG.SUB-NEG- dare 3SG.SUB-SBJC remain LOC- house
 'He is afraid to stay in the house'

²³ I believe that the discontinuous nature of the subjunctive morpheme is due to it being etymologically two morphemes. The second may derive historically from the imperfective morph *n-*.

- b. n- kontanu u- naŋ umatire waabo
 1SG.SUB-be.happy 2SG.SUB-SBJC healthy now
 'I am glad that you are feeling better now'

The morph *-na-ŋ* also appears after expressions of volition and influence (*ŋgɛ* in (78a) is a negative auxiliary that is used in the present tense):

- (78) a. bi- ŋgɛ naŋ u- nan jaatu a- misir ŋgi
 3PL.SUB- NEG accept 2SG.SUB-SBJC enter LOC- mosque with
 samte
 shoes
 'Wearing shoes in the mosque is not allowed', lit. 'They do not accept that you enter the mosque wearing shoes'
- b. a- low sam a- naŋ to
 3SG.SUB- refuse that 3SG.SUB-SBJC go
 lit. 'He refused that she go', 'He did not permit her to go'

Likewise, we find it after the complementizer *sam*, which expresses purpose:

- (79) bi- to a- marse sam a- naŋ wus sɛɛ
 3PL.SUB- go LOC- market that 3SG.SUB-SBJC buy fish
 'They (all) went to market so that she could buy fish'

A sense of purpose can be implied by using the subjunctive without the complementizer *sam*:

- (80) ni bàa- mada to birkama ŋgi dzattakunda
 if 2PL.SUB- can go Birkama with Diattacounda
 bàa- naŋ gbaande hedma
 2PL.SUB- SBJC ask there

‘Why don’t you go to Birkama and Diattacounda to ask there?’

Finally, we find *-na-ŋ* after impersonal expressions that express emotion, opinion, possibility, uncertainty, and so on — in short, anything but truth or certainty:

- (81) a. wil raa- ni i- naŋ biifa gobu n lej
 thing please- 1SG.SUB 1SG.SUB-SBJC see fall GEN sun
 ‘I would like to see a sunset’
- b. wil madawo a- naŋ tub mɔ
 thing be.possible 3SG.SUB-SBJC rain today
 ‘It is possible that it will rain today’
- c. wil ubontʃe sam bi- naŋ to
 thing nice that 3PL.SUB-SBJC go
 ‘It is good that they are going’/ ‘It is important that they go’
- d. wil ubontʃe sam bi- naŋ hiil
 thing nice that 3PL.SUB-SBJC learn
 ‘It is good that they are learning’/ ‘It is important that they learn’

Another canonical environment of the subjunctive is in clauses introduced by conjunctions such as ‘unless’, ‘before’, or ‘without’.²⁴ All of these are used with the hypothetical enclitic *mɔ* instead, as shown below.

²⁴ But this is a different kind of subjunctive, used in counterfactual situations.

A striking fact about the subjunctive is that in its presence, object markers must precede the verb. Recall that the same was true of object markers in the presence of negation:

- (82) à- bin- tɛ sam a- na- fi- m biifa
 3SG.SUB- come- DIR that 3SG.SUB-SBJC- CL5- SBJC see
 'He came in order to see it' (e.g., the dog)

- (83) à- bin- tɛ ŋgi gudi sam
 3SG.SUB- come- DIR with money that
 a- na- ma- gi- ŋ wun
 3SG.SUB-SBJC- 3SG.OBJ-CL2- SBJC give
 'He came with money in order to give it to him'

Given these examples, we might expect the subjunctive to behave like negation in other ways. We have seen that in negated verbs, subject agreement is obligatory:

- (84) Sadio *(a-) ?- ŋwood- tɛ a- ntfigne
 Sadio 3SG.SUB- NEG- return- PAST LOC- fields
 'Sadio returned to the fields'

We therefore might expect subject agreement to be obligatory with the subjunctive as well. We saw earlier that this is indeed the case:

- (85) bi- to a- marse sam *(a-) naŋ wus sɛɛ
 3PL.SUB- go LOC- market that 3SG.SUB-SBJC buy fish
 'They went to market in order for her to buy fish'

We have also seen that the first person singular pronoun in negative verbs is *í-*. This is the form we find in the subjunctive, as well:

- (86) n- ɲwood- tɛ a- gbaale sam í- naŋ wom
 1SG.SUB- return- DIR LOC- house that 1SG.SUB-SBJC eat
 sam í- naŋ sige
 that 1SG.SUB-SBJC drink
 'I returned home in order to eat and drink'

2.5.2 *Hypothetical*

The distribution of the hypothetical marker *mɔ* overlaps with that of both the Romance subjunctive and conditional. It indicates that the action of the verb is hypothetical or contingent on a particular event or state, and always occurs in adverbial clauses introduced by certain conjunctions. While the subjunctive marker *-na-ŋ* establishes a dependency with a matrix clause, as seen by the contexts in which it is found (cf. 2.5.1), the hypothetical marker *mɔ* does not. Instead, the triggers for its appearance are certain conjunctions, which are always located within the same clause. The basic rule is that *mɔ* appears as long as the action of the subordinate clause has not taken place by the time indicated by the main verb. For example, stopping by the house in (87) occurs prior to the action of the embedded clause, going back.

- (87) dzandi n- tfigɛ mɔ í- n- diisɛ a- gbaale
 before 1SG.SUB- go.back HYPO 1SG.SUB- IMPF-pass LOC- house
 'Before I go back, I am going to stop by the house.'
- (88) ɲi tin- to ni u- ?- pinte mɔ
 1SG NEG. IMPF-go if 2SG.SUB- NEG- come HYPO
 'I won't go unless you come too'

- (89) wil raa- ni í- n- to Senegal
 thing please- 1SG.OBJ 1SG.SUB-IMPF-go Senegal
 ni ŋ- giti mɔ̃ gudi
 if 1SG.SUB- have HYPO money
 'I would like to go to Senegal when I have the money'

The hypothetical morph also occurs once in my data set in a 'when' clause that describes an event that has already taken place. (*Bini* is a relative marker, and is different from the wh-word *mfila* 'when'):

- (90) bini à- gaf mɔ̃ ma bi- jaa- ma meesu
 when 3SG.SUB-arrive HYPO CONS 3PL.SUB-tell- 3SG.OBJ sit
 'When he arrived, they told him, "sit down."'

The hypothetical marker *mɔ̃* is the rightmost element in verbal morphology, following object clitics and markers for past tense (example (91a) from N'Diaye-Corréard 1970: 2.43):

- (91) a. nde a- n- nūm- ma- te mɔ̃,
 if 3SG.SUB-IMPF-bring- 3SG.OBJ- PAST HYPO
 bə- n- gi- ma yāatii a hodī u- ndán
 3PL.SUB-IMPF-COP- 3SG.OBJ enter LOC hut CL6B- big
 njāl- ne b- rōgde
 moment- GEN CL3- marriage.with.virgin
 'When he brought her, they made her enter into the big hut
 for the marriage'

- b. dzandi n n- wun-na mə buk hɔmmu,
 front GEN 1SG.SUB- give- 2SG.OBJ HYPØ book this
 i- n- sag-na sam wu simli- ni fɔb
 1SG.SUB- IMPF-ask-2SG.OBJ COMP 2SG listen-1SG.OBJ first

Before I give you this book, I will ask you to listen to me first'

Since it follows clitics, it would be difficult to justify classifying it as an affix. I therefore consider it to be a clitic.

There are three types of evidence that the hypothetical mood marker needs a different structural treatment than that of the subjunctive. First, as seen in the preceding examples, it follows the verb stem while the subjunctive marker precedes it. Second, the subjunctive marker requires the verb to take a special series — the “irrealis” series — of subject prefixes, while the hypothetical marker does not. Finally, object clitics attach to the subjunctive marker, but never to the hypothetical marker. An analysis of clausal structure that takes this into account will be proposed in chapter 3.

2.5.3 Imperative

The positive second singular imperative is a bare imperative, formed with the verb stem or verb stem plus grammatical-function-changing affixes (92):

- | | | | |
|------|----|------------------------|------------------------------|
| (92) | a. | maŋ | 'Take!' |
| | b. | sow | 'Finish!' |
| | c. | bin- te | 'Come!' |
| | | come- DIR | |
| | d. | tum tɔm a- suufi | 'Put salt in the rice dish!' |
| | | put salt LOC-rice.meal | |

- e. tum- lu samte 'Put on some shoes!'
 put- DETR shoes
- f. haai faal ma 'Break the stick!'
 break stick DEF
- g. ja suf ma (bi- jaŋ) bigele
 give food DEF CL2-people those.over.there
 'Give the food to those people over there!'

For those verbs that have a *-u* suffixed form, this is the stem that is used

(93):

- (93) a. naŋu 'Accept!'
 b. jiru 'Dance!'
 c. reŋu 'Meet!'
 d. ŋwoodu 'Return!'
 e. loŋtu 'Cook!'
 f. jeŋu 'Marry!'

Imperative verbs may also take an object clitic:

- (94) a. sant- ma 'Talk to him/her!'
 talk.to-3SG.OBJ
- b. jin- ma 'Look at him/her!'
 look.at-3SG.OBJ
- c. jantɛ- ni gə- basəŋ a- fɛrɛ
 take.out-1SG.OBJ CL4- mat LOC- outside
 'Take the mat outside for me!'
- d. ja- ti- ni bi- beɛ bɛmbɛ
 give- DIR-1SG.OBJ CL2-calabash CL2.those
 'Give me those calabashes over there!'

- e. ja- baa wom
 give- 3PL.OBJ food
 'Give them (e.g., dogs) food!'

The second person plural positive imperative has no simple form. The future tense (i.e., imperfective aspect), with an obligatory subject pronoun, is used instead:

- (95) bàa- ŋ- garandi- baa lɔtɛ
 2PL.SUB- IMPF-teach- 3PL.OBJ cook
 'Teach them to cook!'

The same is true of the first person plural imperative, the equivalent of English 'let's ...!':

- (96) baŋ- hiil- baa lɔtɛ
 1PL.SUB- teach- 3PL.OBJ cook
 'Let's teach them to cook!'

In the negative, putting the verb in the future (i.e., imperfective) is the only option. The negative prefix is replaced with a negative auxiliary *bak ~ bag* that occurs only in imperatives (cf. N'Diaye-Corréard 1973: 183, 185). Subject marking in negative imperatives is usual in my consultant's speech, though he accepts forms without it. Note that object markers precede the lexical verb in negative imperatives, just as they do in negative clauses:

- (97) a. ú- m- bak- bin 'Don't come!' (sg.)
 2SG.SUB- IMPF-NEG- come
 b. báa- m- bak- bin 'Don't come!' (pl.)
 2PL.SUB- IMPF-NEG- come

- c. ú- m- bag- ni sant 'Don't talk to me!'
 2SG.SUB- IMPF-NEG- 1SG.OBJ talk

These facts are quite interesting when placed within a cross-linguistic context. We find various strategies around the world for forming negative imperatives. One way is to use a surrogate form, as we see here, but with the same negation marker as is used in non-imperatives. A language of this type is French (*ne partez pas!* 'don't leave (2pl.)') We also find languages that use a bare imperative, but with a special negation marker. A language of this type is Welsh (W. Harbert, p.c.). In Balanta we see a combination of the two strategies: simultaneous use of a surrogate imperative and a special negative marker.

2.6 Tense and Aspect

2.6.1 *Synthetic forms*

Past is the unmarked tense in Balanta, in the literal sense of the word. As seen in the following examples, a bare verb stem or one bearing a final /u/ is interpreted as being past tense. This final /u/ should not be seen as the morphological realization of past tense since it also appears in the imperative. One possibility is that it marks an aorist, or punctual, form of the verb. In support of this hypothesis, we can note that the final /u/ does not occur in future forms of the verb, which are really imperfective forms, or on progressive stems:

- (98) a. gbaal ma gob- u a- dzoge
 house DEF fall- FV LOC- river
 'The house fell in the river'

- b. à- hit- ni dakar
 3SG.SUB- send- 1SG.OBJ Dakar
 'She sent me to Dakar'

The past tense is the unmarked tense in some other Atlantic languages, as well, including Jóola Foñy (Sapir 1965: 131, the "aorist").

The Balanta future tense is expressed via the imperfective prefix *N-*, a placeless nasal, in conjunction with the subject prefixes given in Table 2.1. In the case of the first person singular, *i-* is used in place of the standard prefix *n-*:

- (99) a. í- n- tobo
 1SG.HYPO-IMPF-go
 'I am going' (lit. 'I will go')
- b. ú- m- bin- te
 2SG.SUB-IMPF-come- DIR
 'You (sg.) will come'
- c. gilla ú- n- riŋe mo?
 where 2SG.SUB-IMPF-go.to.bed today
 'Where will you sleep tonight?'

The negative imperfective is formed via a portmanteau morph *-tiŋ*.

The nasal assimilates in place to the following consonant:

- (100) a. á- tiŋ- hap dzato
 3SG.SUB- NEG.IMPF-kill lion
 'He won't kill the lion'
- b. hal á- tim- ba- hur
 person 3SG.SUB- NEG.IMPF- 2PL.OBJ- know
 'No one will know you'

To express past tense, Balanta speakers generally use an unaffixed verb, as seen above. They may also use one of three morphemes, *gɛ*, *jɔ*, or *tɛ*, which usually, but not always, form a past perfect. In my consultant's speech, the last one is by far the most frequent. According to 'N'Diaye-Corréard (1973), the three affixes mark near, remote, and indeterminate past, respectively. In the dialect of my speaker, however, there seems to be no difference. From this I conjecture that these three affixes have fallen together semantically in the history of my consultant's dialect and /tɛ/ has come to be used in contexts where only /gɛ/ or /jɔ/ were used previously:

(101) *gɛ*

- a. à- to gɛ jiri- ŋ bala.
 3SG.SUB-go PAST dance- GEN balafon
 'She had gone to dance the balafon-dance'
- b. ma bɛb jaa- baa hala hondi binti gɛ ando
 CONS 3PL tell- 3PL.OBJ personCL1.DEM come PAST here
 'Then they told them, "That man there came here."'

(102) *jɔ*

- a. à- jaa- ni jɔ
 3SG.SUB-say- 1SG.OBJ PAST
 'He/she had told me'
- b. à- tub jɔ sɔ
 3SG.SUB-rain PAST yesterday
 'It rained yesterday'

- (103) *tɛ*
- a. ndeeme ù- wus tɛ paj fɔmmu?
 how.much 2SG.SUB-buy PAST cloth this
 'How much did you pay for this piece of cloth?'
- b. bɪ- gop tɛ²⁵ alama
 3PL.SUB-fall PAST king
 'They had made the king fall'

These markers follow all other elements of the Balanta verb. Since they even follow object clitics, we must consider them to be clitics as well.

In the dialect described by N'Diaye-Corréard, the past marker *jɔ* patterns with object markers in occurring before the verb stem in the presence of negation ((104c); examples from N'Diaye-Corréard 1973: 190):²⁶

- (104) a. n-gáθ-yó? wé wéti-mà-yó? · à-g-yāaθ
 1SG.SUB-arrive-PAST it.CL6 find-3SG.OBJ-PAST LOC-CL4-work
 'When I arrived, he was working'
 (lit. 'I arrived, that found him at work')
- b. báa-n-θéd-yɔ? bɔgɔ n bédé
 2PL.SUB-IMPF-grill-PAST ear GEN corn
 'We would grill ears of corn (a long time ago)'
- c. áa-yyɔ-mādā
 3SG.SUB-PAST-be.able
 'He was not able to a long time ago'

²⁵ Note the absence of causative morphology.

²⁶ Recall from chapter 1 that I retain N'Diaye-Corréard's orthography in her examples. Her <y> is equivalent to IPA <j>.

2.6.2 Analytic forms

The progressive is generally formed with the auxiliary verb *gaa* plus a bare or extended verb stem. Note that the participle may bear a grammatical-function-changing suffix (105c):

- (105) a. bi- ful ma gaa saun a- dzoge
 CL2- girl DEF PROG jumping LOC- river
 'The girls are jumping in the river'
- b. a- gaa toi
 3SG.SUB- PROG going
 'He is leaving'
- c. bi- mbuta gaa day- de
 CL2- child PROG helping-SYM
 'The children are helping each other'

Object clitics may appear on the verb stem or the auxiliary:

- (106) a. ŋ- gaa k- saf ma
 1SG.SUB- PROG CL4- writing 3SG.OBJ
 'I am writing it'
- b. Sadio gaa- ma riŋe
 Sadio PROG-3SG.OBJ go.to.bed.with
 'Sadio is sleeping with her'

We also find an alternate construction in which the progressive is followed by an /a-/ prefixed form of the verb. I believe that this /a-/ is the locative prefix, and have glossed it as such, making this construction parallel to the dialectal 'to be on/at V-ing' of English:

- (107) a. bi- mbuta b- lɔrɛ gaa a- paaj
 CL2- child CL2-dirty PRES.PROG LOC- playing
 a- p- taa
 LOC- CL5-tree
 'The dirty children are playing under the tree'
- b. ŋ- gaa a- ŋgarandi
 1SG.SUB- PRES.PROG LOC- teaching
 'I am teaching'

To form the negative present progressive, the copula *gi* is used instead of *gaa*, but it is devoiced by the preceding glottal stop, the negative marker.²⁷ A subject marker is obligatory, even in the presence of an NP subject.

- (108) a. bi- mbuta ma bí- ʔ- ki apaaj a- p- taa
 CL2-child DEF 3PL.SUB- NEG- COP playing LOC- CL5- tree
 'The children aren't playing under the tree'
- b. nani ma á- ʔ- ki ritʃ
 baby DEF 3SG.SUB- NEG- COP crying
 'The baby isn't crying'

The past progressive is formed in the same way as the present progressive, using either a bare or extended verb stem (109a) or locative-prefixed form of the verb (109b-c). Here the auxiliary is *gio*, the past tense of the copula:

²⁷ *gi* is occasionally used in my consultant's dialect as the auxiliary in the present progressive, as well. This use seems to be much more common in the dialect described by N'Diaye-Corréard; cf. texts in her 1970 work.

- (109) a. bi- gio ritf
3PL-COP.PAST crying
'They were crying'
- b. hal ma gio afɔmte
person DEF COP.PAST eating
'The person was eating'
- c. bi- mbuta b- lore gio apaaj a- p- taa
CL2- child CL2-dirty COP.PAST playing LOC- CL5- tree
'The dirty children were playing under the tree'
- d. biti ma gio akpu
dog DEF COP.PAST sleeping
'The dog was sleeping.'

The negative of the past progressive is formed by negating the auxiliary:

- (110) a. bi- ta gio ritf
3PL.SUB- NEG COP.PAST cry
'They were not crying'
- b. biti ma ta gio akpu
dog DEF NEG COP.PAST sleeping
'The dog was not sleeping.'

A habitual is formed with the aspectual auxiliary *gimɔ*, as in the following examples:

- (111) a. resores fafa ndilli gimɔ hab- ad
every.year father 2SG.POSS HAB kill- APP
hara hilli
goat 3SG.POSS
'Every year, your father would kill his goat for him'

- b. vlej vlej i- ŋ- gimɔ to gɪaf
 day day 1SG.SUB- IMPF-HAB go CL4.work
 'Every day I go to work'

Example (111b) clearly shows that the prefix /N-/ must be analyzed as marking imperfective aspect rather than future tense, as one might surmise from other examples of /N-/ given above.

Under the rubric of aspect I will also mention the verb *-sow* 'finish'.

This verb sometimes occurs followed by a nominalized verb:

- (112) n- sow k- saf
 1SG.SUB- finish CL4- writing
 'I finished writing'

But interestingly, it also participates in a serial verb construction, shown in both an active and passive construction:²⁸

- (113) a. báa- garandi báa- sow
 1PL.SUB- teach 1PL.SUB- finish
 'We finished teaching'
- b. gbaal ma meɣesu sow
 house DEF build finish
 'The house is already built'

²⁸ I have found one other serial verb construction in Balanta. To express motion along something (such as walking along a road), Balanta speakers use the applicative. But to express motion towards something, they use a serial verb construction: V_{MOTION} + 'go':
 Djanke detɛ to a-dzoge
 Djanke run go LOC-river
 'Djanke runs towards the river'

2.7 Conclusion

In this chapter we have seen how the Balanta verb is structured. Like many Atlantic and Bantu languages, it has a rich system of grammatical-function-changing affixes which were argued here to be stem extensions, following Mchombo (1991, 1993) and Mchombo and Ngunga (1994). The Balanta system of subject prefixes was examined, and it was concluded that subject prefixes are obligatory in negative and subjunctive verb forms but not in others because they express not only subject features, but also the feature [irrealis]. We also saw that a number of categories, such as object, tense, and mood, are expressed by clitics in Balanta. In the next chapter, I focus on these clitics, arguing that they are of two different types. The position of object clitics is set in the syntax, but the position of tense and mood clitics is adjusted at PF to satisfy a lexical requirement on their host.

Chapter 3

Verbal Clitics

In this chapter I examine Balanta verbal clitics: object clitics, tense clitics, and the hypothetical mood clitic. Given the assumption that some version of Baker's (1985) Mirror Principle is true and that the hierarchical organization of the syntax reflects or is reflected in the order of morphemes, one set of clitics — object clitics — has a straightforward syntactic analysis, as I demonstrate in sections 3.1 and 3.2. Two other types of clitics, those expressing tense and mood, prove more difficult to characterize in syntactic terms, as discussed in section 3.3. After showing why several syntactic accounts fail, I propose an integrated syntax-PF account that takes into consideration work on cliticization in other languages.

The analysis in this chapter supports previous proposals that purely phonological or syntactic approaches to cliticization are insufficient: clitics essentially lead a "double life" (Klavans 1982, 1985, 1995; Anderson 1992, 1993, 1996; Halpern 1995; Bošković 1995 *inter alia*). I argue that Balanta mood and tense clitics have syntactic positions that leave them without licit hosts at the level of PF. Accordingly, their position is adjusted in the phonology. More specifically, I propose that the Balanta clause has the following structure, with mood and tense clitics heading Mod1P and TP (Mod2P is an auxiliary projection whose head must be checked against features in Mod1° at LF, following Lopez (1996) on English negation, cf. 3.3.3); Mod2P and NegP are headed by auxiliary verbs that express mood

and negation, respectively, and are dominated by the projection in which object agreement features are checked:

- (1) CP > Mod1P > TP > AspP > *v*P > Mod2P > NegP > PredP > VP

Mood and tense markers are verbal clitics and require the verb stem as host. Because T° has weak verb features, however, the verb does not raise to T° (and thus not to Mod1°) by Spell-out, and cannot provide the clitics with an appropriate host. The clitics attach to the verb stem at PF, instead, as a “last resort”-type strategy for satisfying their attachment requirements. The Balanta data suggest that even PF cliticization is governed by the Mirror Principle, with proximity to the phonological host reflecting the hierarchical structure of the syntax, as long as other, phonological factors, do not intervene.

3.1 Object Clitics

Object markers follow the verb stem in what I consider to be the default case, affirmative indicative clauses, but precede the verb stem in negative and subjunctive clauses. In both cases object markers behave as enclitics, forming a prosodic word with the element on their left:

- (2) *Default position of object marker: following verb stem*

í- n- sant- **na** hila mom- **ni**
 1SG.SUB-IMPF-tell- 2SG.OBJ who make.pregnant-1SG.OBJ
 ‘I will tell you who made me pregnant’

- (3) a. *Negative verbs: object marker precedes verb stem*

hal á- tim- ba- hur
 person 3SG.SUB-NEG.IMPF-2PL.OBJ- know
 ‘No one will know you’

á- ?- paa- biifa a- saati
 3SG.SUB-NEG-3PL.OBJ- see LOC- village
 'He didn't see them in the village'

b. *Subjunctive verbs: object marker precedes verb stem*

u- na- ma- ŋ sant hila
 2SG.SUB-SBJC-3SG.OBJ- SBJC tell who
 mom- na
 make.pregnant-2SG.OBJ
 'You will tell him who made you pregnant'

These facts are the same for noun class marked clitics and person/number clitics, which will be addressed in section 3.2.

3.1.1 *Object clitics as functional heads*

I follow Zwart (1993), Sportiche (1996), and Dornisch (1998) in considering object clitics to be base-generated as the head of a functional projection — Agr_{OP}, according to Zwart; CIP according to Sportiche; or TrP according to Dornisch. Contra Dornisch, however, I do not wish to claim that the projection headed by the clitic is the one in which the external argument receives its theta-role. In a language that allows multiple object agreement clitics (e.g., Kinyarwanda), we would need to posit multiple functional heads where the clitics would be base generated. But this would lead to an unwarranted multiplication of potential specifier positions where the single external argument would receive its theta role.

Here the projection headed by base-generated object agreement clitics is considered to be *v*P. Its primary function is to check object agreement features, regardless of whether it is headed by an overt clitic (cf. Chomsky

1995: 352-3). Selectionally, it is restricted to dominating verbal projections, which in Balanta include VP, NegP, and Mod2P (recall from 2.4 and 2.5 that the negative and subjunctive markers are considered here to be auxiliary verbs). The present characterization of *v*P differs from some previous characterizations only in that the head of *v*P does not assign the external theta-role, as explained immediately above, as is claimed or assumed by, *inter alia*, Chomsky (1995: 352), and for TrP, by Collins (1997: 15) and Dornisch (1998).

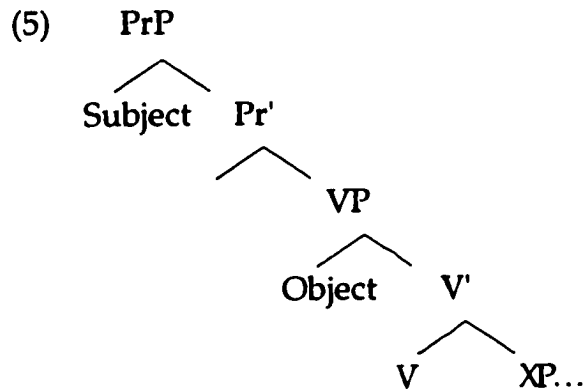
Before continuing, let us consider the base position of NP objects. Bowers (1993: 598) lists a number of formal syntactic similarities between subjects and objects:

(4) *Parallels between subjects and objects*

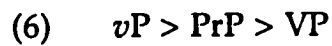
- a. The subject c-commands everything else in the clause; the object c-commands everything but the subject (Barss and Lasnik 1986).
- b. Both subject and object are assigned structural Case (Chomsky 1981).
- c. Both subject and object can agree with the verb.
- d. Both subject and object control PRO subject of infinitive and small clause complements.
- e. Both subject and object are possible theta-positions (Postal and Pullum 1988).

A logical next step, and one that accounts for (4a) straightforwardly, is to propose that objects, like subjects, are generated in specifier position, and specifically [Spec, VP]. (Bowers provides strong evidence that subjects are base-generated in [Spec, PrP], and I therefore place them there as well.) Such a position had already been taken in work preceding Bowers (1993);

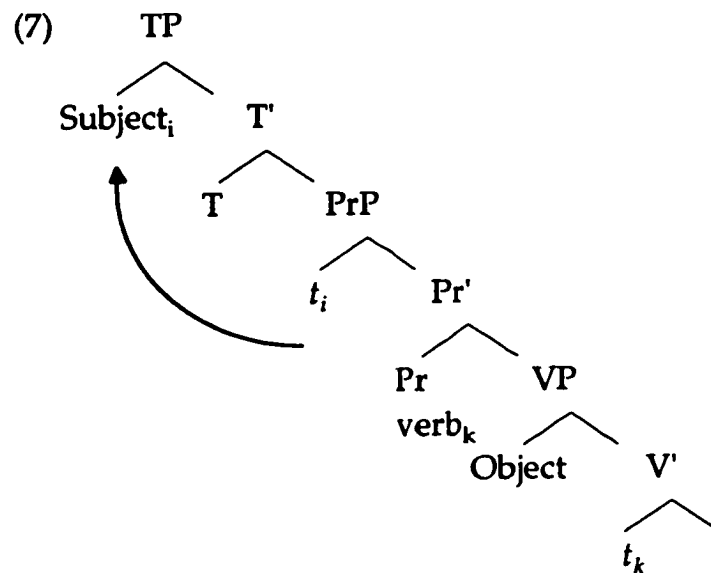
see references there. The universal structure of a simple transitive clause is therefore as follows:



In line with current work (Zwart 1993, Sportiche 1996, Dornisch 1998), we can further assume that the functional projection headed by the object clitic dominates PrP:



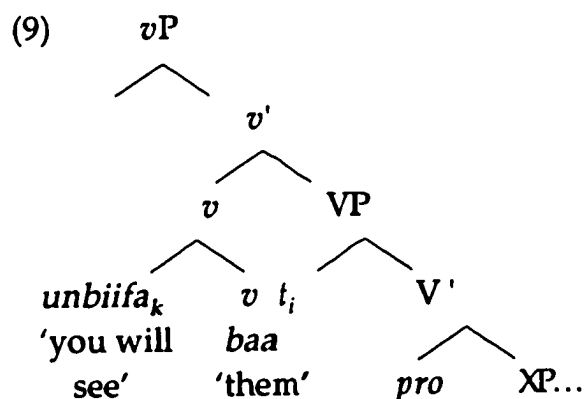
In Balanta, word order is SVO. We obtain this if we posit that subjects raise out of the verb phrase to [Spec, TP] to check subject agreement features (Chomsky 1995), and if V° raises out of the VP, at least to Pr° :



Now take a simple example with an object clitic:

- (8) u- n- biifa- baa
 2SG.SUB- IMPF- see- 3PL.OBJ
 'You will see them'

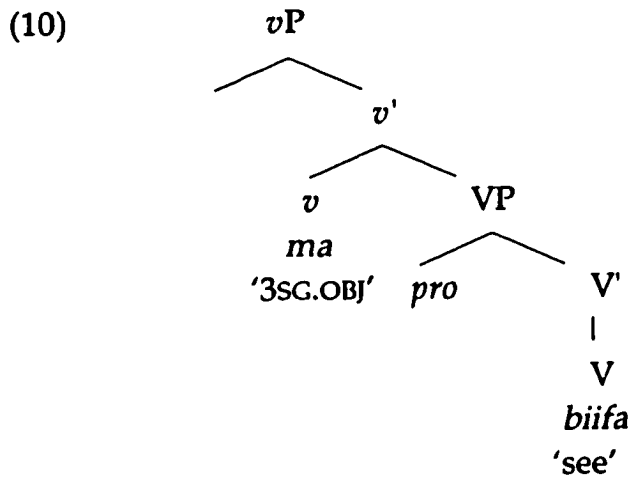
According to the proposal made so far, we can claim that the object marker *baa* 'them' is base-generated in v° . Following Sportiche (1996) and Dornisch (1998), I propose that it is coindexed with a null third person plural object in [Spec, VP] and is therefore an agreement marker in the strict sense (see also McCloskey and Hale 1984); consequences of this assumption will play a role in the analysis of pronominalization in applicative constructions in chapter 4.¹ The verb raises and left-adjoins to the clitic on its way to Asp° , which has strong verb features, yielding the order V-obj:



¹ Following Bowers (1993) I restrict A-movement to specifier-to-specifier movement, making it structure-preserving in a strong sense. Since agreement involves raising of *pro* to [Spec, vP], it will only be possible with objects in [Spec, VP], and never with verb complements. This will enable us to account for a split seen in double object constructions in Balanta and other so-called "asymmetrical object languages," where what I claim are NP complements to *V* are never able to be realized as agreement morphology on the verb.

The next question is how the clitic in v° is coindexed with the null object in [Spec, VP]. Spec-head agreement, coupled with movement and feature-checking theory, yields the proper generalizations.

Consider the following structure:



v° has [-interpretable] phi-features, and therefore attracts the direct object (*pro* in this case) to its specifier (Chomsky 1995). Through Spec-head agreement, the features (e.g., person and number) of v° are checked.

In Balanta, no object agreement clitic is generated in v° when the direct object is overt, and therefore the direct object is not required to raise before Spell-out in those cases. The lack of an overt object clitic in this context can be attributed to an “avoid phonetics” constraint in the grammar, which applies since object identity is completely recoverable from context. *Pro*, on the other hand, is covert and must be coindexed with an object agreement clitic in order to be interpretable. Something like this must hold in other languages, including French, which do not typically have clitic doubling.

3.1.2 Object clitics and negation

We now turn to the data in (2-3), repeated in (11-12):

- (11) *Default position of object marker: following verb stem*

í- n- sant- na hila mom- ni
 1SG.SUB- IMPF-tell- 2SG.OBJ who make.pregnant-1SG.OBJ
 'I will tell you who made me pregnant'

- (12) a. *Negative verbs: object marker precedes verb stem*

hal á- tim- ba- hur
 person 3SG.SUB- NEG.IMPF-2PL.OBJ- know
 'No one will know you'

á- ?- paa- biifa a- saati
 3SG.SUB- NEG- 3PL.OBJ- see LOC- village
 'He didn't see them in the village'

- b. *Subjunctive verbs: object marker precedes verb stem*

u- na- ma- ŋ sant hila
 2SG.SUB- SBJC- 3SG.OBJ- SBJC tell who
 mom- na
 make.pregnant-2SG.OBJ
 'You will tell him who made you pregnant'

One hypothesis is that this variation in object clitic position results when the verb raises to different positions within the complex of functional categories. In (11), where the verb stem appears before the object clitic, it is reasonable to assume that it has raised to a position higher than that of the object clitic.² In (12), on the other hand, it would seem that the

² The alternative, that the object clitic has raised to different positions, is addressed — and dismissed — in section 3.3.

verb has either remained *in situ*, or has raised to a position lower than the object clitic. It is prevented from raising any higher because it is blocked from doing so by either negation or the subjunctive marker. This hypothesis garners support from analyses for many other languages (Kayne 1989b on Romance languages; Pollock 1989 on English; Benmamoun 1992 and Ouhalla 1994 on Arabic; Mitchell 1993 on Finnish), where Neg° also serves as a blocker to verb movement. This analysis presupposes that in the base configuration, *v*P dominates NegP. Before going on to a full discussion of examples like (11-12), I give evidence for such an assumption.

Given Universal Grammar, our null hypothesis is that languages are the same with respect to the functional categories they instantiate and the order of these functional categories. There is evidence, however, for variation among languages, at least for some functional categories, among them negation (Mitchell 1993, Laka 1994). In French and English, we find the order TP > NegP (Σ P) (Pollock 1989, Laka 1994), but in Finnish Arabic, and Basque, we find NegP (Σ P) > TP (Mitchell 1993: 37-39, Rahhali and Souâli 1997, Laka 1994). Finally, as mentioned in section 2.2.2, there is evidence that negation in Celtic occupies C°: it is in complementary distribution with the relativizer *a*.³

³ Thráinsson (1996) argues for the "Limited Diversity Hypothesis," according to which (i) not all functional categories are present in all languages, (ii) not all functional categories instantiated in a given language are necessarily present in all clause types of that language, and (iii) the hierarchical organization of "those functional categories... that are directly related to morphological distinctions may vary from language to language, consistent with the Mirror Principle." A related idea is that of semantic variation, addressed in recent work by Chierchia (1998). Thráinsson points out that some version of the Limited Diversity Hypothesis is assumed in

Santelmann (1994) argues that negation in German is dominated by Agr_OP, which I assume here to be equivalent to *v*P. We might reason that if *v*P dominates NegP in German, then it is plausible that the same ordering holds in some other languages, including Balanta. Santelmann's evidence comes from the ordering of negation in relation to other elements in the clause, namely NP objects. As seen in Santelmann's following example, NP objects precede sentential negation:

- (13) Weil er [meinen Vater] nicht besucht hat
 Because he [my father] not visited has
 S Obj Neg V

'Because he hasn't visited my father'

According to Santelmann, this word order results because objects in German are required by case considerations to undergo movement to a phrase above NegP, which she identifies as Agr_OP. This analysis predicts that elements that do not need to receive Case, such as prepositional phrases, should follow negation. This is indeed true.

- (14) Weil ich den Mann nicht [zu Hause] treffen konnte
 Because I the man not at home meet could
 S Obj Neg PP V

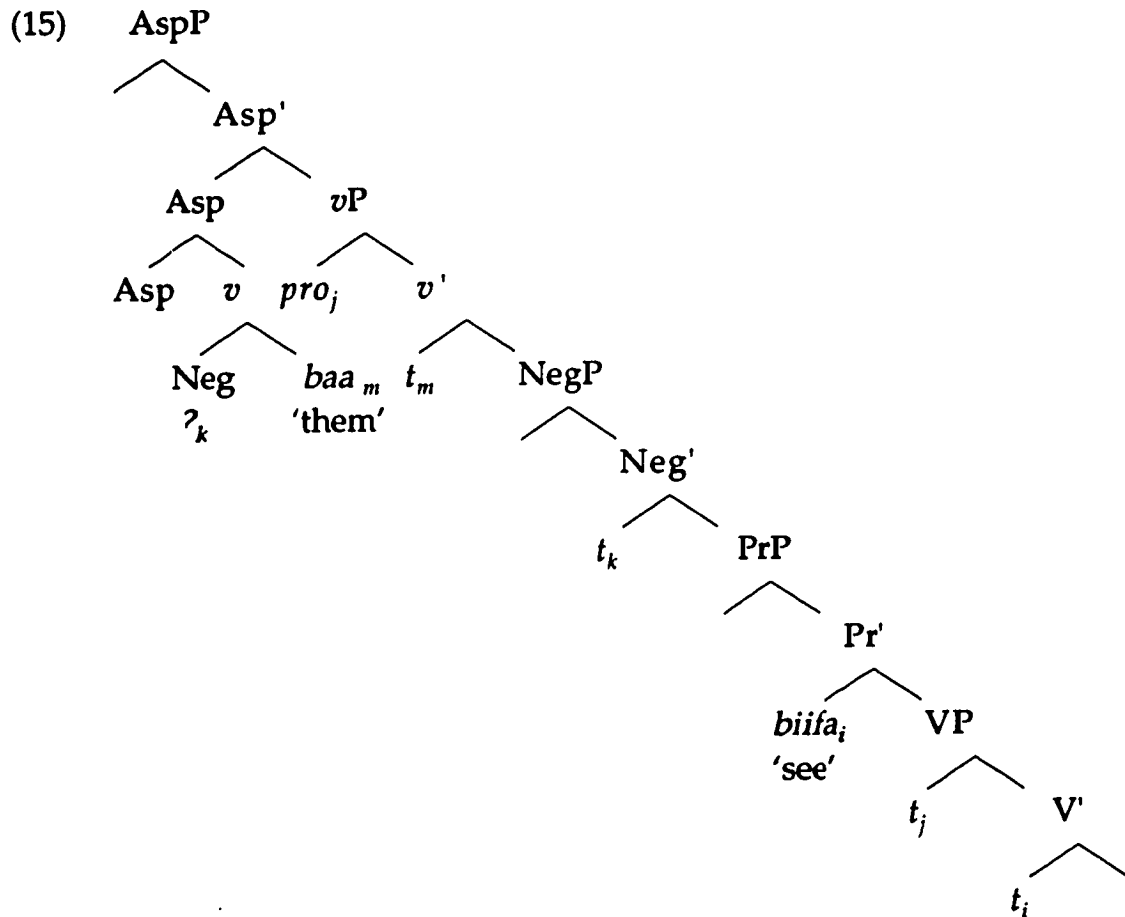
'Because I couldn't meet the man at home'

These facts suggest that Agr_OP in German dominates NegP.

Returning to Balanta, I propose that the negative marker ? - in Neg^o blocks raising of the verb out of Pr^o. Instead, the negation marker, which is a verbal element, and therefore enters the derivation already bearing the

much work on syntax, often implicitly rather than explicitly (see Thráinsson 1996 for a review of the literature).

imperfective prefix *n-*, raises and adjoins to the object clitic; this complex then raises to Asp° to check Asp° 's strong verb features.⁴ As explained in 2.2.2, the subject agreement prefix is obligatory, because it expresses a feature [irrealis] that is not realized anywhere else in the verbal complex:⁵



⁴ Movement to T° is covert, cf. 3.3.3.

⁵ This structure brings to mind Finnish where the negative stem *e-* bears subject agreement affixes, just as the negative head *?* does in Balanta (Mitchell 1993: 16):

e-	n	puhu-nut
NEG-	1SG	speak-PAST
'I did not speak'		

3.1.3 Object agreement and the subjunctive marker

The subjunctive marker *-na-ŋ* behaves like negation with respect to object clitics, requiring them to occur in preverbal position:

- (16) a. ...sam a- na- ma- m biifa
 ...that 3SG.SUB-SBJC- 3SG.OBJ-SBJC see
 ‘...in order for her to see him’
- b. * ...sam a- nam biifa- ma
 ...that 3SG.SUB-SBJC see- 3SG.OBJ
 ‘...in order for her to see him’

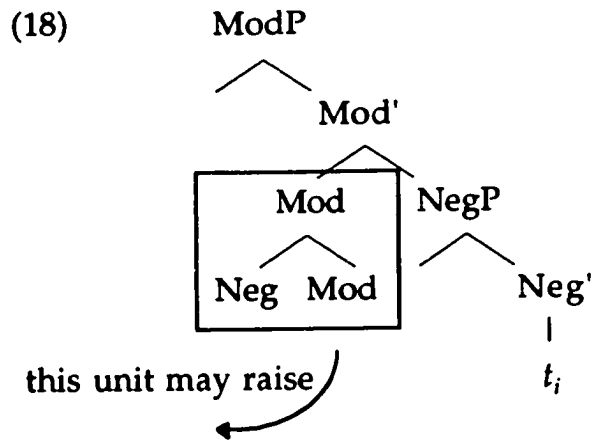
As with negation, subject clitics are obligatory (cf. section 2.2.2).

The subjunctive marker follows negation, as seen by the gemination of its initial consonant in the following example. Recall from section 2.4 that gemination occurs when the negative morpheme */ʔ/* precedes a consonant:

- (17) bi- ŋwoodu a- gbaale bi- nnaŋ biifa- nde ŋgi
 3PL.SUB- return LOC- house 3PL.SUB- NEG.SBJC see- SYM with
 Sadio
 Sadio

‘They returned home so that they would not meet up with Sadio’

I propose that the subjunctive marker heads the maximal projection ModP, and that it directly dominates negation. When the two co-occur, negation raises and adjoins to the subjunctive marker and, if present, *v*^o. This complex then raises to Asp^o and T^o, the latter covertly:

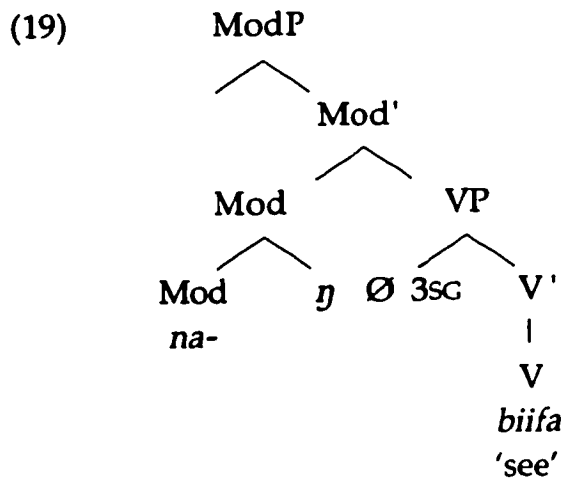


The derivation of an example like (16a) proceeds much like that of a similar example with the negative marker. There is one additional complication: the subjunctive marker comes in two pieces, one that precedes object clitics, and one that follows.

Johnson (1991: 592), who discusses particle verbs (e.g., *call up*, *turn on*, *look up*) in Germanic, acknowledges two ways in which a syntactic theory might be enriched in order to account for their special behavior — behavior that is reminiscent in some ways of the Balanta subjunctive morph. On the one hand, we could argue that bimorphemic words project to different syntactic positions (cf. Kayne 1984). On the other, we can maintain the one-to-one mapping between lexical items and syntactic positions, but claim that words may be broken up prior to Spell-out (after D-structure in the framework Johnson uses). Johnson argues that the latter is superior for Germanic, and as I show here, it also works for Balanta.

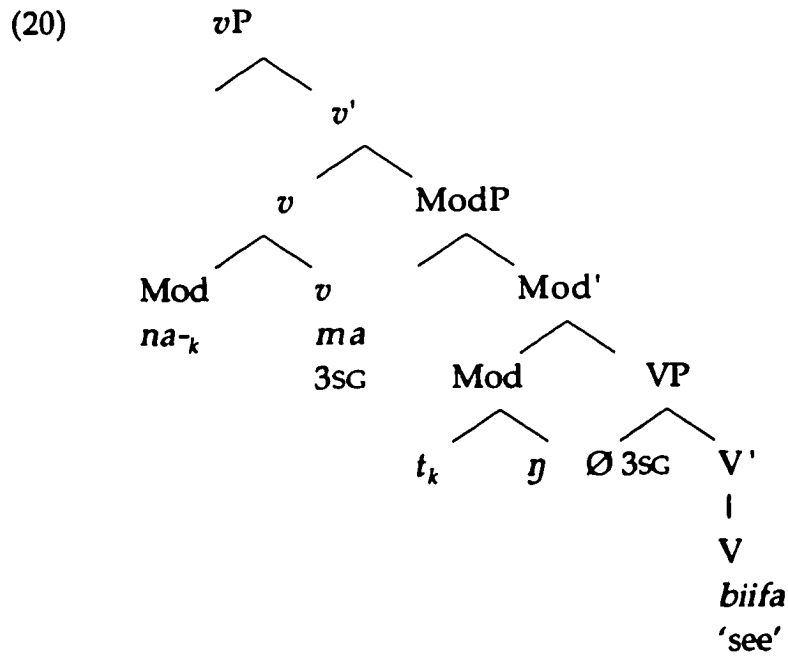
Recall from above that object clitics are preverbal when Neg° blocks verb-raising to v° . It is Neg° that raises to v° , and on to Asp° , instead. Following Johnson on Germanic, we might propose that the subjunctive morph behaves like negation in raising, but that only the first portion, *-na-*, is able to undergo head movement. The second portion, *-ŋ-*, remains *in*

situ. The following tree shows a point in the derivation by which the subjunctive morph has been selected and merged, but no higher projections have been built as of yet:



'...in order for her to see him'

As seen in (20), the first portion of the subjunctive morph raises to v° and left-adjoins to the object clitic, leaving the second portion of the subjunctive morph *in situ*; in the next stage of the derivation, Mod° further raises with v° to Asp° :



'...in order for her to see him'

The analysis proposed here for the subjunctive marker is supported by cross-linguistic evidence from particle verbs. It should be noted that such an analysis would not work if negation in Balanta were to dominate the object clitic position, garnering further support for the position argued for earlier in this section that negation is dominated by *vP*.

3.1.4 Subject prefixes revisited

In section 2.2.2 it was proposed that subject clitics are obligatory in negative and subjunctive clauses because in addition to expressing subject features, they express a feature [irrealis]. If subject prefixes were omitted, this feature would have no phonological realization.

In sections 3.1.2 and 3.1.3, we encountered another characteristic of negative and subjunctive clauses. This is that object markers precede the verb, rather than follow, as they do in other types of clauses. Ideally, we would like to be able to tie the subject prefix and object clitic facts together.

There is an interesting parallel between *do*-support in English and the realization of subject prefixes in Balanta.⁶ *Do* appears when negation blocks verb-raising to T°. Similarly, subject prefixes appear when the negative or subjunctive auxiliaries block raising of the Balanta verb stem to Asp° (by Spell-out) and T° (at LF). There is good reason to maintain the analysis of the distribution of subject prefixes proposed in 2.2.2, but should we supplement it with the hypothesis that subject agreement features are supported — and therefore, subject prefixes are suppressed — only if the verb stem is able to raise all of the way to T°, even though movement from Asp° to T° occurs at LF? In other words, if the verb stem is blocked from raising, then subject agreement features are not supported, and subject prefixes are inserted to save the derivation. The empirical similarity between English *do*-support and Balanta subject prefixes obligates us to consider an analysis of this sort, but I reject it for the following reasons: First, negative and subjunctive auxiliaries should be able to support subject agreement features in the way that lexical verb stems do, but under this hypothesis they do not. Second, subject agreement features are [-interpretable] and therefore should not need supporting at LF.

3.2 Noun Class Marked Object Clitics and Simple Clitics

In the preceding section, I argued that pronominal object clitics are base-generated as the head of *v*P, and that variation in their position depends on whether the verb is blocked from raising and adjoining to *v*° by negation or the subjunctive marker. If the verb is able to raise and adjoin

⁶ W. Harbert and V. Carstens provided crucial input on this hypothesis.

to v° , it surfaces to the left of object clitics. If blocked by filled Mod° or Neg° , it surfaces to the right of object clitics. Note, however, that I dealt only with the series of pronominal object clitics introduced in Table 2.4 of the preceding chapter: *ni, na, ma, ban, ba, baa*. Balanta has a second series of object clitics, provided in Table 2.3, which I refer to as noun class marked clitics: *hi, baa, bi, gi, fi, wi*, which should be grouped with the simple clitics of Table 2.2 *ni, wu, hi(di), baan, baà, ba*. These share some of the distributional properties of pronominal object clitics, as seen below:

(21) *Default position of object marker: following verb stem*

a. Sadio biifa fi
 Sadio see CL5
 ‘Sadio saw it’

b. Sadio wun- ma fi
 Sadio give- 3SG.OBJ CL5
 ‘Sadio gave it to him’

(22) a. *Negative verbs: object marker precedes verb stem*

i. Sadio á- ?- fi biifa
 Sadio 3SG.SUB- NEG- CL5 see
 ‘Sadio didn’t see it’

ii. Sadio á- ?- ma- fi wun
 Sadio 3SG.SUB- NEG- 3SG.OBJ- CL5 give
 ‘Sadio didn’t give it to him’

b. *Subjunctive verbs: object marker precedes verb stem*

i. ...sam a- na- fi- m biifa
 ...that 3SG.SUB-SBJC- CL5- SBJC see
 ‘...in order that he might see it (e.g., the dog)’

- ii. ...sam a- na- ma- fi- ŋ wun
 ...that 3SG.SUB-SBJC- 3SG.OBJ- CL5- SBJC give
 '...in order that he might give it (e.g., the dog) to him'

In (21b), (22aii), and (22bii) we see that noun class marked clitics occur outside of pronominal object clitics. The same is true of the simple clitics.

The question we need to ask is whether noun class marked clitics and simple clitics have the same analysis as pronominal object clitics. There is an important difference between the two series: pronominal object clitics generally express the *primary object*, an idea that is at the core of the next chapter. In short, the primary object is the patient or theme of a transitive verb, and the beneficiary or goal of a ditransitive verb. While noun class marked clitics and simple clitics may also be used to realize the patient or theme of a transitive verb, in ditransitive constructions, they are used only for the patient or theme, not the beneficiary or goal:

- (23) a. Segu num- ud fi Mariama
 Ségou bring- APP CL5.PRON Mariama
 'Ségou brought it (e.g., water) for Mariama'
- b. Segu num- ud- ma fi
 Ségou bring- APP- 3SG.OBJ CL5.PRON
 'Ségou brought it (e.g., water) for her'

In fact, it is impossible for the pronominal object clitic and noun class marked clitic in (23b), or in any other sentence, to switch roles. The pronominal object clitic *must* be interpreted as the beneficiary or goal.

As discussed in great detail in the next chapter, Balanta patterns with a set of languages referred to as *asymmetrical object languages* by Bresnan and Moshi (1990) with respect to a number of criteria. In asymmetrical

object languages, there can be agreement with primary objects, but never with secondary, or subsidiary objects (patient/theme of a ditransitive verb). This suggests that while the pronominal object clitics in Balanta can be viewed as agreement clitics, the noun class marked clitics and simple clitics cannot. Otherwise their appearance in examples like (23a-b) would be inexplicable in light of evidence from a large number of other languages.⁷ In other words, it would seem that noun class marked clitics and simple clitics are not functional heads that agree with a null pronominal.

There are other differences between noun class marked clitics and simple clitics, on the one hand, and pronominal object clitics on the other that suggest that they should be treated differently. First, only the former show inflection for noun class. Pronominal object clitics inflect for person and number only. Second, noun class marked clitics may surface with stress when they head Focus Phrase (FP) (cf. chapter 8; in this role they are technically not clitics); pronominal object clitics may never be stressed. Third, pronominal object clitics always attach to the right edge of either the verb stem or the negative or subjunctive markers. Noun class marked and simple clitics, on the other hand, may also precede the entire clause (in their focus role). Finally, noun class marked and simple clitics, but not pronominal object clitics, may appear with the definite article *ma*.

I suggest that noun class marked clitics and simple clitics in Balanta are incorporated pronouns, and following Ritter (1995), that they have a more complex structure than pronominal object clitics. Pronominal object clitics are heads (v^o) specified for person and number. Noun class marked

⁷ A list of such languages is provided in the first paragraph of chapter 4.

clitics and simple clitics, on the other hand, consist of a NumP (cf. Carstens 1991, Ritter 1991) dominated by a DP. D° is specified for person and Num° for number and gender.⁸ They are base-generated in the same position as object NPs.

Ritter (1995) reports that studies of a number of unrelated languages “suggest that there exists a fundamental difference between first and second person pronouns on the one hand, and third person pronouns on the other” (p. 418). She relates this to the fact that the referents of first and second person pronouns are fixed (speaker and hearer), while third person pronouns can refer to any other individual in the domain of the discourse.

In Hebrew, there is evidence that the two sets of pronouns are differentiated structurally. First and second person pronouns in Hebrew (as in English) cannot co-occur with a definite determiner or words like *this*, *which*, *every*, which Jackendoff (1977) considers to be of the same category as determiners, for distributional reasons. This is accounted for if first and second person pronouns are heads of DPs: since the definite determiner is also D°, the two should never be able to co-occur (examples from Ritter 1995: 420):

- (24) a. *ha-ani *ha-anaxnu
 *the-I *the-we
- b. *ha-ata *ha-at *ha-atem *ha-aten
 *the-you.M.SG *the-you.F.SG *the-you.M.PL *the-you.F.PL

They therefore have the structure in (25):

⁸ Ritter builds on Postal (1966), where it was first suggested that first and second person pronouns are determiners.

(25) *Hebrew first and second person pronouns*

DP

|

D

[person]

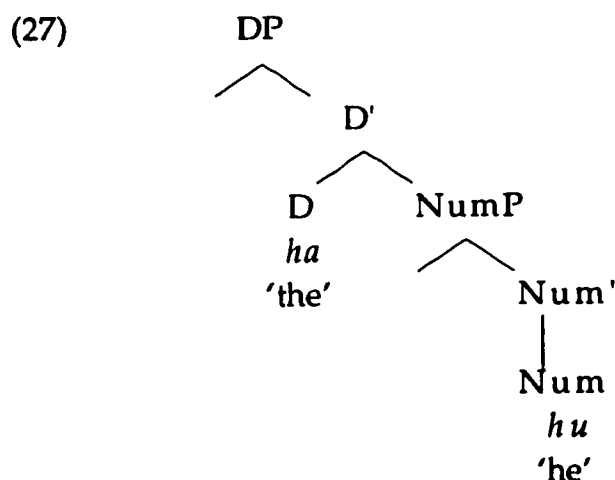
[number]

[gender]

In English, the fact that third person pronouns may not occur with the definite article may suggest that they are also D^o's. In Hebrew, however, third person pronouns do co-occur with the definite article. This is how demonstratives are formed:

- (26) a. ha-hu ha-hi ha-hem ha-hen
 the-he the-she the-they.M the-they.F
 'that (m.)' 'that (f.)' 'those (m.)' 'those (f.)'
- b. ha-ze ha-zot ha-ele
 the-it.M the-it.F the-they
 'this (m.)' 'this (f.)' 'these'

From these data, Ritter infers that third person pronouns are Num^o's dominated by DP. The definite article, if present, is D^o:



Balanta has similar facts, but they do not suggest a split between first and second person pronouns on the one hand and third person pronouns on the other. Instead, they suggest a split between the pronominal object clitics *ni, na, ma, ban, ba, baa* (cf. Table 2.4) and the noun class marked clitics *hi, baa, bi, gi, fi, wi* (cf. Table 2.3). The simple and emphatic pronouns in Table 2.2, *ni* 'me', *wu* 'you', *hi* 'him, her, it', and so on, pattern with noun class marked clitics in this respect, and should therefore be given the same analysis. As we see below, pronominal object clitics may not appear with the definite article *ma*:

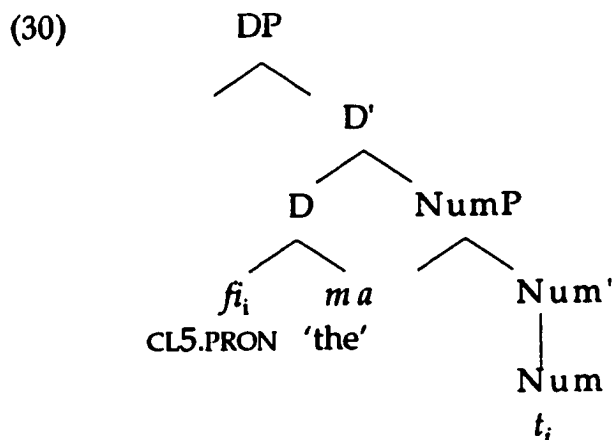
(28)	*-ni	ma	*-na	ma	*ma	ma
	me	the	you	the	him, her, it	the

Noun class marked clitics (29a) and simple clitics (29b), on the other hand, can. The forms in (29) are emphatic:

(29)	a.	i.	hi	ma	'him, her'
			CL1.PRON	DEF	
		ii.	gi	ma	'it (cl. 4)'
			CL4.PRON	DEF	

	iii.	fi	ma	'it (cl. 5)'
		CL5.PRON	DEF	
b.	i.	ni	ma	'me'
		me	DEF	
	ii.	wu	ma	'you'
		you	DEF	
	iii.	hidi	ma	'him, her'
		him, her	DEF	
	iv.	báan	ma	'us'
		us	DEF	

This suggests that these pronouns have the same structure as Hebrew third person pronouns. The only difference is that, in Balanta, pronoun-determiner word order must be obtained via raising of Num° to adjoin to D°. This can be explained if D° has strong [-interpretable] features that must be checked prior to Spell-out (cf. section 1.4), a hypothesis which will be confirmed in chapter 6:



This structure, paired with the observation that noun class marked clitics, but not pronominal object clitics, inflect for noun class, suggests that the

feature [gender] is never associated with D° in Balanta. In Hebrew, this is not the case (cf. (25)).⁹

The analysis laid out so far in this section suggests that there is variation in the typology of pronouns. The Balanta data support Ritter's claim that there are two types of pronouns: D° 's and Num° 's. But they suggest that we need to revise Ritter's claim that the two types are represented by first and second person pronouns on the one hand, and third person pronouns on the other. In Balanta, we see that the two types can correspond to two different series of pronouns, *both* containing first, second, and third person forms. The observation that pronouns in English can never co-occur with a determiner or determiner-like element suggests that there all pronouns are D° 's. The Balanta data suggest another parameter of variation: the featural content of functional heads in pronominal projections. The fact that pronominal object clitics inflect for person and number, but not noun class suggests that pronominal D° has [person] and [number] features, but not [gender]. The fact that noun class marked clitics inflect for person, number, and gender suggests that [gender] features are contributed by Num° .

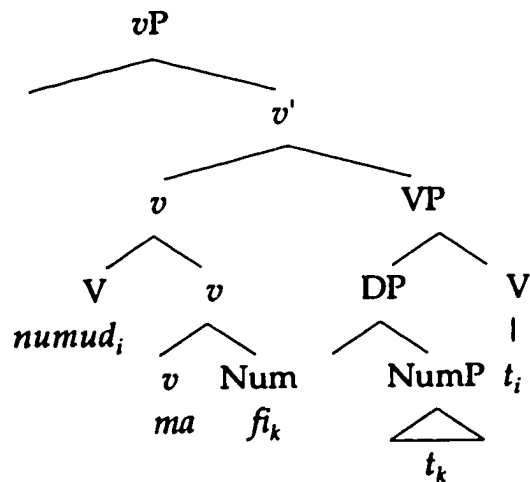
We can explain the distribution of noun class marked clitics and simple clitics by hypothesizing that, in their objective use, they are base-generated in canonical object position. In other words, they occupy the

⁹ It has been claimed by Ritter (1995) and Carstens (to appear) that in noun phrases, D° is associated with [definiteness], Num° with [number], and N° with [gender]. Ritter observes that the same featural distribution cannot hold for pronouns, since these have been argued (Abney 1987) to have no NP projection. Since all Hebrew pronouns agree for gender, we can infer that D° may be associated with gender.

same position in the clause as do NP objects. In chapter 4 I argue that this is [Spec, VP] for the patient or theme in transitive clauses and beneficiary or goal of ditransitive clauses, and complement to V for the patient or theme in ditransitive clauses. When D° is realized by the definite article, Num° raises and adjoins to D° to check its features, and the DP remains in situ. This captures the generalization that noun class marked clitics and simple clitics modified by the determiner, in their objective use, have the same distribution as NP objects.

When noun class marked clitics and simple clitics are not modified by a definite determiner, they display the same distributional properties as pronominal object clitics, suggesting that they raise. There are a couple of possibilities. One is that Num° is required to raise and adjoin to v° prior to Spell-out. This adjunction would have to be right adjunction, contra Kayne (1994), because noun class marked clitics and simple clitics occur to the right of pronominal object clitics, which are v° heads (see Bošković 1995 and Baker 1996 for data that suggest the existence of right adjunction in Serbo-Croatian and Mohawk, too). It is possible that this right-adjunction is forced by the fact that these clitics are enclitics: if they were to left-adjoin, they would surface as proclitics on the verb:

(31)



Segu num- ud- ma fi
 Ségou bring- APP- 3SG.OBJ CL5.PRON
 'Ségou brought it (e.g., water) for her'

Another possibility is that raising of the Num° clitics occurs in the phonological component of the grammar. This approach encounters some problems given the analysis detailed here, since we would have to stipulate that they sometimes attach to the leftmost element of the clause (the verb or negation when the subject is affixal), and sometimes to the second element of the clause (the verb or negation when the subject is phrasal). Such a pattern would be highly unusual, and so, for now, I accept the first hypothesis (raising and adjunction to v° prior to Spell-out) as the most attractive.

In the preceding sections I accounted for apparent variation in the position of object markers. I argued that pronominal object clitics do not vary in their position; rather, the verb can or cannot raise and adjoin to v° , depending on whether it is blocked by negation or the subjunctive marker. Noun class marked clitics and simple clitics, on the other hand, raise from

canonical object position to an adjoined position. In the last two sections of this chapter I address the position of tense and mood clitics.

3.3 Tense and Mood Clitics

In the previous two sections, I motivated the dominance hierarchy $\text{AspP} > vP > \text{ModP} > \text{NegP} > \text{VP}$ for Balanta, arguing in part that the sequence of functional categories in a language reflects the order of its morphological markers (cf. Baker's [1985: 13] Mirror Principle). The position of ModP and NegP between vP and VP was further supported by evidence that they block raising of V° to Asp° .

Up until now, I have assumed that TP dominates AspP and that V° raises out of Asp° to T° at LF, but have given no evidence. Likewise, the reader may have noticed that the discussion of mood has so far centered on the subjunctive auxiliary *na-ŋ* but has not involved the hypothetical clitic *mɔ*. Recall that the basic difference between the two types of morphs is that in the case of the subjunctive, the primary dependency is that between the verbs of the matrix and subordinate clauses, while in the case of the hypothetical, the dependency is between the conjunction that introduces the subordinate clause (e.g., 'unless', 'before', 'when') and the verb of the subordinate clause.

The past tense clitics, represented here by the most common, *-tɛ*, and the hypothetical mood clitic *mɔ* seem to have a special status in the grammar of Balanta. They always occur last in the verbal morphology, cliticized to the verb stem:

(32) bini à- gaf mɔ ma bì- jaa- ma mɛɛsu
 when 3SG.SUB- arrive HYPO CONS 3PL.SUB- tell-3SG.OBJ sit
 'When he arrived, they told him, "sit down."'

(33) Sadio a- ʔ- ŋwood tɛ a- ntʃignɛ
 Sadio 3SG.SUB- NEG- return PAST LOC- fields
 'Sadio did not return to the fields'

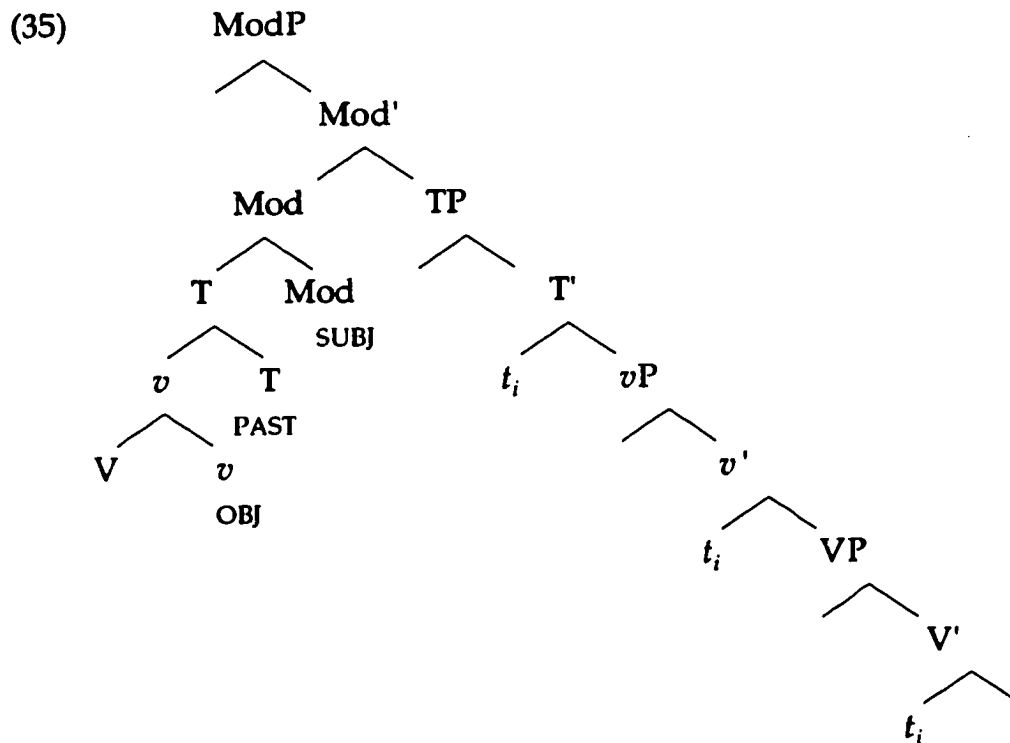
If object markers are present, they occur to the right of tense and mood clitics. Example (34a) is from N'Diaye-Corréard (1970):

- (34) a. nde a- n- nūm- ma- tɛ mɔɔ,
 if 3SG.SUB- IMPF-bring- 3SG.OBJ- PAST HYPO
 bə- n- gi- ma yāatii a hodī u- ndáj
 3PL.SUB- IMPF-COP- 3SG.OBJ enter LOC hut CL6B- big
 njāl- ne b- rōgde
 moment- GEN CL3- marriage.with.virgin
 'When he brought her, they made her enter into the big hut
 for the marriage'
- b. dzandi n n- wun- na mɔ buk hɔmmu,
 front GEN 1SG.SUB- give- 2SG.OBJ HYPO book this
 i- n- sag- na sam wu simli- ni fɔɔ
 1SG.SUB- IMPF-ask-2SG.OBJ COMP 2SG listen-1SG.OBJ first
 Before I give you this book, I will ask you to listen to me first'

3.3.1 *Purely syntactic approaches*

A priori, we expect the surface position of these clitics to be related to their syntactic position. But it is surprisingly difficult to locate them in the syntax. One possibility is that they head Tense and Mood projections above

AspP (not shown in (35)) and vP , and that the verb adjoins to them after adjoining to the object marker and passing through Asp° to check strong verb features there. As seen below, this works for affirmative verbs:



Verb-Obj-T-Mod

This structure shows the verb raising and adjoining to the object clitic in v° . The Verb-Cl complex, in turn, raises and adjoins to T° . Finally, the Verb-Cl-T complex raises and adjoins to Mod° .

But this analysis predicts that tense and mood clitics will precede the verb stem in negative verbs, where the verb is blocked from raising to v° by Neg° . This is not what we find. Even in negative verbs, tense and modal clitics follow the verb stem:

- (36) á- ?- habə tɛ daal
 3SG.SUB-NEG- kill PAST cat
 ‘He had not killed the cat’

- (37) ji tin- to ni u- ?- pintɛ mɔ
 1SG NEG.IMPF-go when 2SG.SUB-NEG- come HYPO
 ‘I won’t go unless you come too’

A second possibility would be to keep ModP and TP high in the tree, but to make them right-headed:

- (38)
-
- ```

graph TD
 ModP --- B1[]
 B1 --- ModPrime[Mod']
 ModPrime --- TP
 ModPrime --- Mod
 TP --- B2[]
 B2 --- TPrime[T']
 TPrime --- XP[XP...]
 TPrime --- T

```

This approach also makes a false prediction. Modal and tense clitics should occur outside of not only verbal morphology, but of VP complements as well. But they do not:<sup>10</sup>

- (39) a.    à-        hab    tɛ    daal  
           3SG.SUB- kill    PAST    cat  
           ‘He had killed the cat’

<sup>10</sup> The same false prediction would be made in an analysis whereby AspP (and everything it dominates) were to raise and adjoin to TP, and then TP were to raise to adjoin to ModP, following Duffield (1996) on the clause-final position of Gallic and Irish object clitics.

- b. \* à- hab(u) daal tɛ  
 3SG.SUB-kill cat PAST
- (40) a. wil raa- ni í- n- to Senegal  
 thing please-1SG.OBJ 1SG.SUB-IMPF- go Senegal  
 ni ŋ- giti mɔ̃ gudi  
 when 1SG.SUB-have HYPO money  
 'I would like to go to Senegal when I have the money'
- b. \* wil raa- ni í- n- to Senegal  
 thing please-1SG.OBJ 1SG.SUB-IMPF- go Senegal  
 ni ŋ- giti gudi mɔ̃  
 when 1SG.SUB-have money HYPO  
 'I would like to go to Senegal when I have the money'

An alternative that yields proper word and morpheme order in both affirmative and negative clauses is to generate TP and ModP below the VP:

- (41) [<sub>VP</sub> [<sub>VP</sub>] [<sub>TP</sub> [<sub>T</sub> tɛ] <sub>ModP</sub> [<sub>Mod</sub> mɔ̃]

But this is unattractive for other reasons: we expect functional projections to dominate lexical projections, not the other way around.

### 3.3.2 Motivation for an integrated syntactic-phonological account

It is not altogether unexpected that the Balanta tense and mood clitics are so difficult to characterize in syntactic terms. Clitics have long been a special puzzle for linguists because their distribution differs systematically from that of other lexical items. Approaches to cliticization sometimes treat it as an essentially pure phenomenon, either phonological (Hock 1996) or, more commonly, syntactic (Kayne 1975, 1994; Progovac 1993; Rivero 1994; Roberts and Shlonsky 1996; Sportiche 1996 *inter alia*). But

cases like the Balanta tense and mood clitics show that it is not sufficient, and suggest instead that a proper characterization of cliticization must admit both phonological and syntactic factors (Klavans 1982, 1985, 1995; Anderson 1992, 1993, 1996; Halpern 1995; Bošković 1995 *inter alia*). In the following pages I present some of the reasons why purely syntactic approaches to cliticization fail in some instances, then address the syntactic position and PF cliticization of Balanta tense and mood clitics in detail.

The greatest challenge for a purely syntactic approach to cliticization, as noted by Anderson (1996), is accounting for second position phenomena, both true second position (second from left) and penultimate position (second from right). The first is undoubtedly more common (Klavans 1982, 1995) and so it is what I focus on here.<sup>11</sup>

The syntactic approach to second position cliticization generally takes one of two forms (Anderson 1996):

- (42) a. Clitic is generated in or moved to initial position, e.g., C°.  
Exactly one element moves (e.g., to [Spec, CP]) or adjoins to its left.
- b. Clitic is generated or moved to a given position X.  
Exactly one element is generated to its left [Spec, XP].

Both of these make two predictions. The first, and most straightforward, is that the element to the left of a second position clitic will be a syntactic object that is capable of being moved, adjoined, or base-generated. The second is that a given clitic will always occupy the same structural slot.

---

<sup>11</sup> Accounting for penultimate position clitics presents an even greater challenge for syntactic approaches. C° is an oft-cited possibility for a syntactic second position, but it is much more difficult to find a plausible syntactic penultimate position.

Both of these predictions have been shown to be false, in at least some cases.

To begin, the constituent that may occur to the left of a second position clitic cannot always be defined in syntactic terms. In Serbo-Croatian, the constituent that appears to the left of second position clitics can be either an XP or an X°, as seen in the following example (Browne 1974):

- (43) a. Moja mladja sestra c'e doc'i u utorak  
 my younger sister FUT come on Tuesday  
 'My younger sister will come on Tuesday'
- b. Moja c'e mladja sestra doc'i u utorak  
 My FUT younger sister come on Tuesday  
 'My younger sister will come on Tuesday'

Though it is syntactically odd in (43b) that a genitive pronoun should be separated from its noun, it is still possible to characterize the elements to the left of the future auxiliary second position clitic in both examples in (43) in syntactic terms. One is an XP, and the other an X°.

But Browne (1975) provides some data that is not possible to characterize in syntactic terms. It is possible in Serbo-Croatian to break up two-part proper names with a second position clitic (44). This is unexpected under a syntactic approach to cliticization, since the two parts of a proper name are not separate constituents, and it is not even possible to scramble them separately:

- (44) a. Lav Tolstoi je veliki ruski pisac  
 Leo Tolstoi is great Russian writer  
 'Leo Tolstoi is a great Russian writer'



- b. Lav je Tolstoi veliki ruski pisac  
 Leo is Tolstoi great Russian writer  
 'Leo Tolstoi is a great Russian writer'

These data strongly suggest that second position clitics in Serbo-Croatian are not fully characterizable in syntactic terms. Analyses that take into account PF cliticization can be found in Halpern (1995) and Anderson (1993, 1996).

The point made here needs to be extended to non-second position clitics. As discussed in Inkelas (1989) and Zec and Inkelas (1991), Hausa has an emphatic particle *fa* which, on the surface, has a complicated distribution. Examples (45a-b) are acceptable, while (45c-d) are not:

- (45) a. Ya sayi fa babban tebur  
 he bought EMPH big table  
 'He bought a big table'
- b. Ya sayi fa teburin  
 he bought EMPH table-DEF  
 'He bought the table'
- c. \*Ya sayi fa teburin  
 he bought EMPH table-DEF  
 'He bought the table'
- d. \*Ya sayi fa teburin jiya  
 he bought EMPH table-DEF yesterday  
 'He bought the table yesterday'

We see that *fa* can precede a noun phrase that contains both a noun and an adjective or a single, phonetically emphasized noun. But it cannot precede an unemphasized single noun or one followed by only an adverb. We

cannot define the host of *fa* syntactically, for example as NP. Instead, the complex distribution of *fa* reduces, according to Inkelas (1989), to the requirement that it attach to the right edge of a phonological phrase — a phonological constituent. Kivunjo Chaga (Inkelas 1989) and Tzotzil (Aissen 1992) are other examples of languages in which clitics may select a phonological host (the phonological phrase and the intonational phrase, respectively). One implication of these facts is that cliticization, in at least some cases, must take place at a level of the grammar in which phonological constituents have been formed, namely, PF.

Now let us turn to the second false prediction made by syntactic approaches to cliticization, and particularly second position phenomena: if second position phenomena are due to one of the two syntactic mechanisms in (42), then it should be possible to prove that a given second position clitic always surfaces in the same syntactic position. This is an assumption made, for example, by Wilder and Cavar (1994). Bošković (1995) demonstrates, on the basis of Serbo-Croatian participles, adverbs, and second position auxiliaries, that this is not the case, and deduces from this that second position is a PF effect.

First, Bošković (pp. 246-7) shows that in Serbo-Croatian sentences with participles and auxiliaries, the participles can occur to the left of VP adverbs like *potpuno* 'completely', but must follow subject-oriented sentence adverbs like *nesumnjivo* 'undoubtedly':

- (46) a. Jovan je potpuno zaboravio Petra  
 Jovan is completely forgotten Petar  
 'Jovan completely forgot Petar'

- b. Jovan je zaboravio<sub>i</sub> potpuno t<sub>i</sub> Petra  
 Jovan is forgotten completely Petar  
 'Jovan forgot Petar completely'
- (47) a. Jovan je nesumnjivo istukao Petra  
 Jovan is undoubtedly beaten Petar  
 'Jovan undoubtedly beat Petar'
- b. \*Jovan je istukao nesumnjivo Petra  
 Jovan is beaten undoubtedly Petar

Bošković supports the conclusion that participles precede VP adverbs but follow subject-oriented sentence adverbs by looking at adverbs such as *mudro* 'wisely', which are ambiguous between the manner and subject-oriented adverb readings. Their interpretation depends on their position: participles may move across these ambiguous adverbs only on the manner reading, not on the subject-oriented one:

- (48) a. Jovan je mudro prodao svoju kuću  
 Jovan is wisely sold his house  
 'It was wise of Jovan to sell his house' or  
 'Jovan sold his house in a wise manner'
- b. Jovan je prodao<sub>i</sub> mudro t<sub>i</sub> svoju kuću  
 Jovan is sold wisely his house  
 'Jovan sold his house in a wise manner'  
 NOT: 'It was wise of Jovan to sell his house'

Note that, under standard assumptions, the auxiliary clitic *je* must be higher than that of the sentence adverb *nesumnjivo* 'undoubtedly'. But now consider sentences with no adverbs:

- (49) a. Jovan je istukao Petra  
 Jovan is beaten Petar  
 'Jovan beat Petar'
- b. Istukao je Petra  
 beaten is Petar  
 'He beat Petar'

If we operate under the assumption that clitics always appear in the same structural position, then these examples are puzzling. Participles are able to appear in a position higher than clitic auxiliaries (49b), and given the data in (47-48), this means that they can also appear in a position higher than sentence adverbs. But this is impossible: participles can be located above VP adverbs, but not sentence adverbs. We see this again in example (50) for the speaker-oriented adverb *nesumnjivo*:

- (50) a. Jovan je nesumnjivo istukao Petra  
 Jovan is undoubtedly beaten Petar  
 'Jovan undoubtedly beat Petar'
- b. \*Istukao je nesumnjivo Petra  
 beaten is undoubtedly Petar  
 'He undoubtedly beat Petar'

From these data, and parallel data concerning clitic clusters, Bošković deduces that the clitic auxiliary *je* does not have the same structural position in all cases. He notes that we need "a constraint on linear ordering that pays no attention to either structural position of relevant elements or their syntactic status (whether they are X<sup>0</sup>s or XPs), which suggests that we are dealing with a PF rather than a syntactic requirement" (p. 262).

By now it is clear that syntax alone is not sufficient to account for all cliticization phenomena. As a final note, let me point out that a purely syntactic approach to cliticization does not make clitics' special distribution in any way dependent on their most enduring property — their stresslessness. On the other hand, an account which integrates both syntax and phonology is capable of tying together clitics' phonological and syntactic properties.

### 3.3.3 *Balanta tense and mood clitics: syntax feeds PF cliticization*

In this section, I apply the conclusion reached in 3.3.2 that while clitics have a syntactic position, cliticization itself occurs at PF to the two Balanta clitics that have resisted analysis so far: mood and past tense. I begin by addressing the syntactic position of the functional projections Mod(1)P and TP.

Research on mood suggests that mood heads an independent functional projection (MP or ModP) that has scope over most other elements in the clause (Bahloul 1994; Rivero 1991, 1994; Bosque 1996; Rahhali and Souâli 1997). The head of Mod<sup>o</sup> can be overt, as in the languages of the Balkans (Rivero 1994), or the features of Mod<sup>o</sup> can trigger the realization of mood morphology on the verb. Such must be the case for English, where verbs do not raise overtly (Pollock 1989), and yet nevertheless we find mood morphology on the verb (see Portner 1997 for discussion).

An important question, therefore, is how we can reconcile this research with the proposal of section 3.1 (supported by morpheme order and blocking evidence) that the subjunctive auxiliary *na-ŋ* heads a modal

projection below AspP and above NegP (cf. (1)). After all, we expect the ordering CP > ModP > TP ... This type of question is not without precedent. Lopez (1996), who assumes that children are born with a given syntactic hierarchy in place, rather than discovering the proper hierarchy on the basis of what they hear around them, challenges Laka's (1994) claim that certain differences between English and Basque are the result of different positions for  $\Sigma$ P (above TP in Basque but below TP in English). Lopez ultimately claims that *n't* is generated on T° in English and raises to  $\Sigma^\circ$  at LF to check its [neg] feature. Similarly, we can claim for Balanta that while ModP is high up in clausal structure, directly below CP, mood features can be realized on an auxiliary lower down in the structure, and simply checked against Mod° at LF. For convenience I will label the lower projection Mod2P, but it need not be specified for mood at all. We could, for example, call it AuxP.

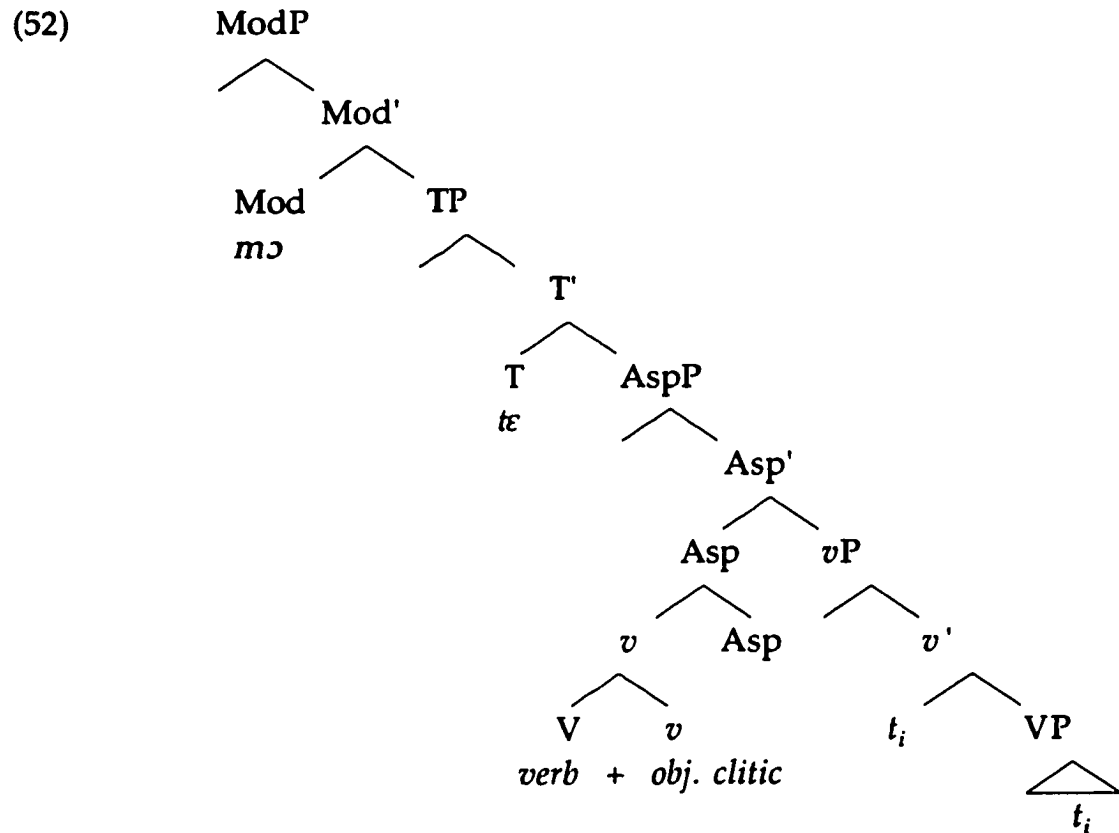
So Mod1P is very high in the clause. TP, as well, would seem to be quite high in the clause, given previous research beginning with Pollock (1989). We can also note that, more generally, tense seems to have scope over aspect, and therefore TP would be expected to dominate AspP.

This suggests the following structure:

(51) CP > Mod1P > TP > Mod2P > VP

As seen at the beginning of section 3.3.1 (cf. (35)), this structure does not work if we limit clitic placement to the syntax. But the data presented in the previous section suggest that clitic positioning can take place at PF. Accordingly, I propose the following. As seen in (52), verbs raise overtly to  $v^\circ$  and then to Asp°, where they check Asp°'s verb features. This yields the order *verb + object clitic*. Although we might expect the order *verb + object*

*clitic + aspect marker*, we in fact find *aspect + verb + object clitic*, and this is because aspect morphology is lexically generated on the verb stem and only checked — i.e., not concatenated — in the syntax (Chomsky 1995):



At PF, the hierarchical structure of the syntax is converted to a linear phonological string (Kayne 1994: 6). This string has been argued to be devoid of syntactic labels, although evidence does suggest that maximal projection edges (either right or left) are visible (Clements 1978; Chen 1987; Selkirk 1986). The following is what I hypothesize the syntactic input to PF to look like; it corresponds to the tree in (52):

(53) PF Input: [mɔ (*mood*) [tɛ (*tense*) [verb + obj. clitic] ] ]

This is where the question of licit hosts for mood and tense clitics arises. Klavans (1982, 1995) acknowledges that there are some types of

clitics which, regardless of how we analyze their placement, need to attach to a lexical item of a given category. The category of the lexical item selected for by the clitic corresponds to the clitic's function. For example, Romance object clitics are verbal clitics. Let us say the same for Balanta tense and mood clitics. They care nothing about syntactic structure: they attach to the verb stem regardless of whether it raises or remains *in situ*. All that matters to them is that their host be a lexical [+V, -N].<sup>12</sup>

Not only does the clitic's host have to be specified in the grammar, but its direction of cliticization is lexically specified, too (Klavans 1982, 1985, 1995; Inkelas 1989; Anderson 1992). Here we are dealing with enclitics. This means that Balanta tense and mood clitics attach phonologically to an element on their left. This places them to the right of the verb and, if present, object clitics. The derivation that began with the tree in (52) (Spell-out representation) ends with the structure in (54). As with (53), this is not a word-internal representation. It is what I hypothesize the PF output to look like, with the edges of syntactic maximal projections, but not their labels, potentially visible.

(54) PF Output: [ [ [verb + obj. clitic] = tɛ (*tense*)] = mɔ (*mood*)

The phonological ordering of the clitics is the inverse of the syntactic order of the clitics (cf. (52)). This suggests that, in the absence of other types of phonological constraints, phonological cliticization proceeds in order of syntactic proximity to the host, with the closest clitic attaching first, followed by one(s) farther away. This is a very interesting result, showing that the Mirror Principle is extendible to PF phenomena. We also have an

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<sup>12</sup> The word 'lexical' is important here: they do not attach to auxiliaries, including the subjunctive, negative, progressive, habitual, and so on.



explanation for an otherwise curious fact about Balanta verbal morphology: object clitics appear inside tense and mood clitics, instead of the perhaps more expected other way around. The explanation comes down to the mechanisms by which the two sets of clitics are attached. Object clitics are placed in the syntax, while tense and mood clitics are placed at PF.<sup>13</sup> This suggests the following generalization:

- (55) Syntactically placed clitics always occur inside phonologically placed clitics.

This generalization falls out naturally from a derivational model in which syntax feeds phonology. If it turns out to be true universally, it would seem to throw non-derivational models into question.

Before concluding, we must address one residual question. Does the PF analysis of cliticization proposed for Balanta tense and mood clitics throw the syntactic analysis proposed above for object clitics into question? If some cliticization phenomena are best accounted for at the level of PF, shouldn't we consider the possibility that all of them are? The answer to the first question has to be no since, as I briefly demonstrate, the syntactic account of Balanta object cliticization is simpler and adheres better to general assumptions than a PF account.

As mentioned previously, a descriptive generalization we can make about Balanta object clitics is that they are in some way second position clitics, if we consider the negative and subjunctive markers as counting for determining second position (cf. Wilson 1961a):

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<sup>13</sup> Phonological cliticization of both occurs at PF.

(56) *Default position of object marker: following verb stem*

a-        biifa- n i  
 3SG.SUB- see- 1SG.OBJ  
 'He saw me'

(57) a. *Negative verbs: object marker precedes verb stem*

á-        ?-    paa-    biifa    a-    saati  
 3SG.SUB- NEG- 3PL.OBJ- see    LOC- village  
 'He didn't see them in the village'

b. *Subjunctive verbs: object marker precedes verb stem*

u-        na-    ma-    ŋ        sant  
 2SG.SUB- SBJC- 3SG.OBJ- SBJC    tell  
 'You will tell him'

If we could establish that object clitics are indeed second position clitics, then we could potentially eliminate the syntactic account of their position altogether, replacing it with a PF analysis along the lines of Anderson (1992, 1996). I demonstrate here, however, that this is impossible. Balanta object clitics are not true second position clitics, making them unamenable to standard phonological accounts.

The first problem with the characterization 'second position clitics' is that object clitics do not attach to NP subjects which, as I demonstrate in 2.2.2, are in canonical subject position [Spec, TP], i.e., they are not left-dislocated:

(58) *Object clitics do not attach to subject*

- a. Sadio biifa ni  
 Sadio see 1SG.OBJ  
 'Sadio saw me'
- b. \*Sadio ni biifa  
 Sadio 1SG.OBJ see

This would be unexpected under a purely phonological account in which clitics are blind to syntactic structure and attach to the right edge of the first element in a clause.

More problematic is the fact that in a negative subjunctive verb, the clitic does not attach to the leftmost element (the negative marker), but rather to the subjunctive marker:

- (59) a. ... sam a- ?- na- ma- ŋ biifa  
 so.that 3SG.SUB- NEG- SBJC- 3SG.OBJ- SBJC see  
 '... so that he would not see her'
- b. \*... sam a- ?- ma- naŋ biifa  
 so.that 3SG.SUB- NEG- 3SG.OBJ SBJC see

A PF, second position account would not be able to explain why we find (59a) instead of (59b), because in this example the object clitic surfaces in *third* position.

I conclude that the syntax provides the phonology with syntactically well-formed structural inputs, but that some of these structures violate certain lexical or phonological requirements, such as on a cliticization host. PF possesses its own repair strategies that it can then implement, but only as a "last resort."

### 3.4 Conclusion

This chapter began with two sets of data involving Balanta verbal clitics. First we saw that object clitics precede the verb in negative and subjunctive clauses, but follow in affirmative ones. This was attributed to the failure of the verb stem to raise past a filled  $\text{Neg}^\circ$  or  $\text{Mod}^\circ$ . I next turned to noun class marked clitics and simple clitics, and showed that they differ from pronominal object clitics both in behavior and in structure. I argued that while pronominal object clitics are agreement markers base-generated as the head of a functional projection ( $vP$ ), noun class marked clitics and simple clitics are  $\text{Num}^\circ$ 's that project a  $\text{NumP}$  which is in turn dominated by  $\text{DP}$ . They start off in the same position as  $\text{NP}$  objects and reach their surface position via pre-Spell-out raising and adjunction. In the final section, I addressed tense and mood clitics, arguing that the best account puts them in the syntactic input to PF, where they are given their final position.

## Chapter 4

### Balanta and the Symmetrical ~ Asymmetrical Object Parameter

Languages have been assigned to two basic groups, symmetrical vs. asymmetrical, based on the syntactic behavior of objects in double object constructions.<sup>1</sup> In a symmetrical object language (or “true double accusative language,” in the terminology of Baker 1988a: 174), more than one postverbal NP exhibits certain properties associated with direct objects such as passivizability and ability to trigger object agreement. Examples include the Bantu languages Kichaga (Bresnan and Moshi 1990), Kimeru (Hodges 1977), Kinyarwanda (Gary and Keenan 1977, Kimenyi 1980, Dryer 1983), Kitharaka (Harford 1991), Setswana (Cole 1955), and Tshiluba (Cocchi 1992), as well as Bajau, an Austronesian language (Donahue 1996). In an asymmetrical object language, only one NP has these properties. Examples include the Bantu languages Chichewa (Baker 1988a, 1988b, Alsina and Mchombo 1990, 1993), Chimwiini (Kisseberth and Abasheikh 1977), Hibena (Hodges and Stucky 1979), Kiswahili (Loogman 1965: 329-31), Lamba (Doke 1927), and Zulu (Doke 1963: 303 [1927]). Fula (Sylla 1979; Marantz 1982, 1984) and Balanta, Atlantic languages, are also of this type.

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<sup>1</sup> The terminology symmetrical ~ asymmetrical comes from Bresnan and Moshi (1990), but the idea for the classification has been around at least since Gary and Keenan (1977). Early on, Doke (1927, 1963 [1927]) observed that in asymmetrical object languages, one object behaves as if it were primary.

A number of explanations have been put forward for some or all of the asymmetries witnessed in ditransitive constructions (Gary and Keenan 1977; Marantz 1982, 1984, 1993; Baker 1988a, 1988b, 1990; Bresnan and Moshi 1990; Alsina and Mchombo 1993). I will argue that while some of these analyses generate insights that bring us closer to the proper characterization of the parameter, none of them accounts for the full range of facts in a constrained and simple fashion. I propose that the explanation for the asymmetrical-symmetrical object parameter turns on the nature of the applicative affix itself. In symmetrical object languages, the applicative affix is a verbal head, as first argued by Marantz (1993), which generates a second direct object position in [Spec, VP]. In asymmetrical object languages, on the other hand, the applicative affix is simply part of the verb stem, and while it adds a beneficiary/goal theta-role, it does not change the syntactic argument structure of the verb. The sole available direct object position ([Spec, VP]) is occupied by the applied object, forcing the patient or theme to surface as a complement. Two possible explanations for the primacy of the applied object will be presented.

The Balanta applicative is the focus of the analysis presented here, but I argue that the claims of this chapter can and should be extended to other languages. Building on Bowers (1993), who proposes that all A-movement is specifier-to-specifier movement, I argue that languages can be divided into two groups based on the structure of their ditransitive constructions: those that employ a stacked VP structure like the one proposed by Marantz (1993), and those that employ a structure like the one proposed by Larson (1988). Differences between English and Balanta, both

asymmetrical object languages under the analysis developed here, boil down to differences in their verbal morphology. I view the naturalness with which the present analysis captures covarying differences between applicative types cross-linguistically as strong evidence for Bowers' claim.

I begin by laying out the characteristics of the Balanta applicative construction in 4.1. In 4.2 I discuss the types of asymmetries we find between objects in applicative constructions cross-linguistically, and in 4.3, address some of the analyses that have been put forward to account for them. I turn next to my own analysis in 4.4, providing additional support for it from the behavior of applicative types cross-linguistically and differences in the behavior of non-applicative ditransitive constructions in English in 4.5. Finally, I briefly address parallels between locative inversion in English and locative applicatives in Balanta in 4.6, showing how they can be accounted for within the analysis presented here. I conclude in 4.7.

#### 4.1 The Applicative

In the Balanta applicative construction, the addition of a derivational suffix *-id* to the verb enables it to take an additional object, the so-called 'applied object'. There is optional harmony between the vowel of the applicative suffix and a preceding vowel, as seen in some of the examples below.<sup>2</sup> The applicative construction is exemplified in (1). In (1a), *-sog* 'call' takes a single object, but in (1b), it also takes an applied object:

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<sup>2</sup> The vowel of the applicative suffix was always determined by harmony in my speaker's utterances, but when I created examples without the harmony, he accepted them. When questioned more closely, he said that

- (1) a. i- n- sog- ma  
 1SG.SUB- IMPF- call- 3SG.OBJ  
 'I will call him/her'
- b. i- n- sog- id- ma Sibow  
 1SG.SUB- IMPF- call- APP- 3SG.OBJ Sibow  
 'I will call Sibow for him/her'  
 (\* 'I will call him/her for Sibow')

Note that 'for Sibow' cannot be expressed with a prepositional phrase.

There are a number of applicative types cross-linguistically, distinguished by the interpretation of the applied object as beneficiary, maleficiary, goal, instrument, location, or motive (Baker 1988a: 233-45, Bresnan and Moshi 1990: 149). Balanta has only benefactive and locative applicatives. The locative applicative construction is seen in (2). The addition of the applicative affix to a motion verb requires that a locative complement be interpreted as the place in which the action occurs. Example (2a) is grammatical because running can take place on a road, but (2b) is ungrammatical, since running takes place *to* the river rather than *in* the river:

- (2) a. mbuta ma det- ed a- sin *Applicative*  
 child DEF run-APP LOC- road  
 'The child ran along the road'

---

there are Balanta speakers who would pronounce the examples without harmony.



- b. mbuta ma detɛ(\*-ed) a- dzogɛ *Non-applicative*  
 child DEF run(\*-APP) LOC- river  
 'The child runs to the river'

Harford (1993) reports a different type of locative applicative in ChiShona, where an unaffixed motion verb with a locative complement implies motion out of, while an applicativized verb implies motion into.

It is not possible for a transitive verb to form an applicative construction with a locative object in Balanta, though it is in some other languages:

- (3) a. bi- nin ma mɛgɛs ɲoom ma a- sin  
 CL2- woman DEF make loincloth DEF LOC- road  
 'The women are weaving loincloths on the road'
- b. \*bi- nin ma mɛgɛs-ɛd ɲoom ma a- sin  
 CL2- woman DEF make- APP loincloth DEF LOC- road

In Balanta this seems to be due to a more general restriction of the locative applicative affix to verbs of motion. Note that it is equally impossible to say the following:

- (4) \*bi- lama n- santɛ- d a- dzogɛ  
 CL2- king IMPF-talk- APP LOC- river  
 'The kings will talk at the river'

In fact, the class of verbs that takes the locative applicative affix in Balanta appears to be the same as the class of verbs that allows locative inversion in English, compare *Along the road ran Jane* or *Into the car jumped a kangaroo*, which are acceptable in certain contexts, with ??*Beside the road*

*sang Jane* or \**On the savanna saw the men the lion.*<sup>3</sup> I believe that we should relate the grammaticality of these examples and of the Balanta examples to the degree to which speakers consider a locative expression to be an argument. For a more detailed comparison of English locative inversion and Balanta locative applicatives, see section 4.6.

Word order in applicative clauses is V AO DO, where AO is the applied object. Among the ungrammatical examples, those where the theme/patient is inanimate are judged to be better than those where the theme/patient is animate:<sup>4</sup>

- (5) a. a- weet-id Segu biti ma V A O D O  
 3SG.SUB- find- APP Ségou dog DEF  
 'She found the dog for Ségou'
- b. \* a- weet- id biti ma Segu V D O A O  
 3SG.SUB- find- APP dog DEF Ségou
- (6) a. Segu wus- ud bi- mfid hilli liisa V A O D O  
 Ségou buy- APP CL2- friend his wine  
 'Ségou bought wine for his friends'

<sup>3</sup> I thank W. Harbert for pointing this out to me.

<sup>4</sup> This may be because examples where the theme/patient is inanimate are more easily interpreted than those where the theme/patient is animate. Animacy interacts with object position in many languages of the world. In Jóola Foñy, the order of postverbal complements is free unless they both are animate, in which case the indirect object precedes the direct object (Sapir 1965). In Sesotho, constraints on subjectivization and cliticization depend, in part, on whether a given object is animate or inanimate (Morolong and Hyman 1977).

- b. ?Segu wus- ud liisa bi- mfid hilli V DO AO  
 Ségou buy- APP wine CL2- friend his  
 'Ségou bought wine for his friends'

These data are consistent with the oft-cited observation (see, *inter alia*, Marantz 1982, 1984; Baker 1988a, 1988b; Bresnan and Moshi 1990; Alsina and Mchombo 1993) that benefactive applied object NPs precede direct objects in double object constructions cross-linguistically.

In non-applicative double object constructions, word order is also V IO DO. As in applicatives, if the patient/theme is inanimate, my consultant accepts V DO IO sentences from me, though he has not produced them spontaneously in our sessions:

- (7) a. Djanke wun Sibow oto hɔmmu V IO DO  
 Djanke give Sibow car that  
 'Djanke gave Sibow that car'
- b. ? Djanke wun oto hɔmmu Sibow V DO IO  
 Djanke give car that Sibow  
 'Djanke gave that car to Sibow'

#### 4.2 Object Symmetries and Asymmetries

According to Bresnan and Moshi (1990), symmetrical and asymmetrical object languages differ systematically with respect to the following:



- b. N-ã-ĩ-kì-lyí-í-à                      m̃-kà  
 FOC-1SUB-PRES-7OBJ-eat-APP-FV    CL1-wife  
 'He/she is eating it for/on the wife'
- c. N-ã-ĩ-kì-m̃-lyì-ĩ-à  
 FOC-1SUB-PRES-7OBJ-1OBJ-eat-APP-FV  
 'He/she is eating it for/on him/her'

In asymmetrical object languages like Balanta, on the other hand, only the applied or indirect object in a double object construction can be expressed by an object clitic:

- (9) a. Segu num- ud Mariama ma wede  
 Ségou bring- APP Mariama DEF water  
 'Ségou brought Mariama water'
- b. \*Segu num- ud- ma Mariama  
 Ségou bring- APP- 3SG.OBJ Mariama  
 'Ségou brought it for Mariama'
- c. Segu num- ud- ma wede  
 Ségou bring- APP- 3SG.OBJ water  
 'Ségou brought water to her'
- (10) a. anin ma wus- ud ndundugi anto hilli  
 woman DEF buy- APP tunic husband 3SG.POSS  
 'The woman bought a tunic for her husband'
- b. \* anin ma wus- ud- ma anto hilli  
 woman DEF buy- APP- 3SG.OBJ husband 3SG.POSS  
 'The woman bought it for her husband'

- c. anin ma wus- ud- ma ndundugi  
 womanDEF buy- APP- 3SG.OBJ tunic  
 'The woman bought a tunic for him'

Noun class marked clitics may be used to pronominalize the patient or theme in Balanta, as in (11-12). But these clitics appear to have a looser relation to the verb than *ma* '3sg.obj' or *baa* '3pl.obj', as shown by the observations that they occur outside of object clitics and may surface with stress (cf. 3.2 and 8.1):

- (11) a. Segu num- ud fi Mariama  
 Ségou bring- APP CL5.PRON Mariama  
 'Ségou brought it (e.g., water) for Mariama'
- b. Segu num- ud- ma fi  
 Ségou bring- APP- 3SG.OBJ CL5.PRON  
 'Ségou brought it (e.g., water) for her'
- (12) a. alaante ma hiti gi mbi hilli  
 man DEF send CL4.PRON son 3SG.POSS  
 'The man sent it (e.g., money) to his son'
- b. alaante ma hiti- ma gi  
 man DEF send-3SG.OBJ CL4.PRON  
 'The man sent it (e.g., money) to him/her'

The true difference between the two sets of object pronouns, I claimed in section 3.2, is that the primary object clitics (e.g., *ni* '1sg', *na* '2sg', *ma* '3sg') are base-generated as functional heads that agree in features with a *pro* in [Spec, VP] (they are therefore technically agreement clitics) unlike the

secondary object clitics (e.g., *fi*, *gi*), which are in fact incorporated pronouns that are positioned via raising.

#### 4.2.2 *Reciprocalization*

Symmetrical and asymmetrical object languages also differ in how object marking interacts with reciprocalization, which, in the languages in question, involves the addition of what I call a symmetrical affix. In a symmetrical object language like Kichaga, a patient can be reciprocalized in the presence of an applied object (data from Bresnan and Moshi 1990: 153):

- (13) Wà-chàkà wá-í-w'ágh-ì-àn-à m̀àngì  
 CL2-Chaga 2SUB-PRES-kill-APP-RECIP-FV CL1.chief

'The Chagas are killing each other for the chief'

In asymmetrical object languages, like Balanta, this is impossible (Bresnan and Moshi 1990: 153), regardless of the order of the applicative and symmetrical affixes:

- (14) a. \*bi- mbuta ma daŋ(a)- (n)d- ad(ε) Dʒɛɛba  
 CL2- child DEF help- SYM- APP Dieynaba  
 'The children help each other for Dieynaba'
- b. \*bi- mbuta ma daŋ- ad- dɛ Dʒɛɛba  
 CL2- child DEF help- APP- SYM Dieynaba  
 'The children help each other for Dieynaba'

Compare the grammatical *bi-mbuta ma daŋ-dɛ* 'the children help each other'.

Note that it is possible for the indirect object to be reciprocalized:

- (15) Sibow ŋgi Sadio gi numu- nde- dɛ untʃugub  
 Sibow with Sadio COP bring- SYM- APP chair  
 'Sibow and Sadio are bringing chairs for each other'

These facts are particularly puzzling. As speakers of English, we tend to think of reciprocals as Principle A anaphors whose grammaticality in a given context depends on whether they are c-commanded by an appropriate antecedent and whether certain locality restrictions are met. Examples (16a), where the reciprocal is a direct object, (16b), where it is an indirect object, and (16c), where it is part of a prepositional complement, are all grammatical:

- (16) a. The swimmers congratulated each other  
 b. The swimmers showed each other their medals  
 c. The swimmers threw goggles at each other

Why, then, might the Balanta examples in (14) be ungrammatical? The answer provided below in section 4.4.3 takes into account the special nature and behavior of the reciprocal or symmetrical affix in Balanta and the other languages in which interaction between reciprocalization and applicativization has been reported, namely that it is an affix that displays non-anaphoric properties.

#### 4.2.3 *Unspecified theme deletion*

A third difference between symmetrical and asymmetrical object languages involves unspecified theme deletion. Although some Balanta verbs permit unspecified object deletion of the theme/patient in simple transitive constructions (e.g. *a-wom* 'he is eating'), unspecified object



deletion of the theme/patient is always prohibited in the presence of another object:

- (17) a. \* Abdul wus- ud mbi hilli  
 Abdul buy- APP son 3SG.POSS  
 'Abdul gave something to his son'
- b. \* Segu wom- ud Mariama  
 Ségou eat- APP Mariama  
 'Ségou ate something for Mariama'

Likewise, the indirect or applied object cannot be deleted:

- (18) \*Segu wus- ud liisa  
 Ségou buy- APP wine  
 'Ségou bought wine for him/her'

The examples in (17), where the patient has been deleted in the presence of an applied object, would be grammatical in a symmetrical language like Kichaga. The following example is from Bresnan and Moshi (1990: 152):

- (19) n-ǎ-í-lyí-í-à m-kà  
 FOC-1SUB-PRES-eat-AP-FV CL1-wife  
 'He/she is eating for/on the wife'

#### 4.2.4 *Passives*

The final difference between symmetrical and asymmetrical object languages discussed here is that in the former, either object in a double object construction may be the subject of a passive. In asymmetrical object languages, on the other hand, only the applied or indirect object may be passivized. What is somewhat surprising about Balanta is that while the

language seems to have a passive (albeit a morphologically unmarked one), neither object in a double object construction may be passivized.<sup>5</sup>

(20) *Balanta passives*

a. sel ma lotte tɛ  
 fish DEF cook PAST  
 'Fish was cooked'

b. gudi hit tɛ  
 money send PAST  
 'Money was sent'

(21) *Passive not possible in double object constructions*

a. \* ndundugi wus- ud antɔ hilli  
 tunic buy- APP husband 3SG.POSS  
 'A tunic was bought for her husband'

b. \* antɔ hilli wus- ud ndundugi  
 husband 3SG.POSS buy- APP tunic  
 'Her husband was bought a tunic for'

c. \* sel ma lotte tɛ anin ma<sup>6</sup>  
 fish DEF cook PAST woman DEF  
 'Fish was cooked for the woman'

(Nonsense reading 'The fish cooked the woman' is OK)

---

<sup>5</sup> I have found the construction 'they X' to be much more common than the passive. For example *gi bi-hiti* may mean 'they sent it (e.g., *gi-gudi* the money)' or 'it was sent'. In other words, the third person plural pronoun may have an arbitrary reading. On this construction in English and Spanish, see Jaeggli (1986).

<sup>6</sup> The verb *lotte* 'cook' can be used ditransitively without an applicative affix.

- d. \*anin ma lotte te sel  
 woman DEF cook PAST fish

'The woman was cooked fish'

(Reading 'The woman cooked fish' is OK)

No data are available on other dialects of Balanta.<sup>7</sup>

One possibility is that we are not dealing with a passive construction at all. First, note that it is impossible to have a 'by' phrase in Balanta. There is no means of asking 'By whom?' in reaction to the sentences in (20), and it is equally impossible to translate 'by the woman' or 'by Burama'.

Secondly, an animate being may never serve as the subject for a 'passive' verb:

- (22) a. \*daal ma habu  
 cat DEF kill

'The cat was killed'

- b. \*mbuta ma hiti te  
 child DEF send PAST

'The child was sent'

---

<sup>7</sup> No passive construction has ever been reported for Balanta, despite several existing descriptions of Balanta verbal morphology, cf. Sousa-Bella 1946; Quintino 1951; Wilson 1961a; N'Diaye-Corréard 1973. The only exception is Quintino (1951: 23-4), who claims that Balanta has a passive construction in which the agent appears between the passive subject and the verb:

ñe Joana nāgk                      'I am loved by Joana'  
 I Joana love

It appears, however, that we are dealing here instead with a focused, fronted object. 'Joana' is the subject, not a by-phrase. The verb itself bears no special morphology.

- c. \* alaante ma biifa  
 man DEF see  
 'The man was seen'

All of the English glosses in (22) would be translated using a third person plural pronoun with an arbitrary reading, as in (23):

- (23) alaante ma, hi bi- biifa  
 man DEF CL1.PRON 3PL.SUB- see  
 'The man, they saw him'

The facts in the related language Jóola Foñy are similar: 'as in Balanta, the passive is generally used only with inanimate subjects (Sapir 1965: 33). Animate subjects are sometimes possible, but only with a limited number of verb stems.

Finally, if the construction in (20) is a passive construction, it is surprising that there is no passive morphology, which we expect given past accounts of the passive. For example, taking English as a case study, Baker *et al.* (1989) argue that the passive morpheme *-en* is an argument. They demonstrate that various characteristics of the passive can be derived from this hypothesis in conjunction with other well-formedness conditions such as the Theta-criterion, the Visibility Condition, the Projection Principle, and binding conditions.

None of these diagnostics is definitive. Agent phrases are commonly disallowed across languages. Keenan (1985: 249) lists Latvian, Sonrai (W. African), Classical Arabic, Tamazight (Berber), Nandi (Nilo-Saharan), Cupeño (Uto-Aztecan), and Ute as having none. In addition, Perlmutter and Postal (1983) note that most Turkish speakers prefer

agentless passives in which the agent is not present in the surface string. The impossibility of animate subjects with so-called passive verbs in Balanta also has a perfectly good explanation: such clauses are completely ambiguous given the absence of any passive morphology and because the active reading is the unmarked, and therefore the default interpretation (an alternative theoretic explanation is proposed below). Finally, regarding the apparent lack of passive morphology, we could claim that it is null in Balanta, but present nonetheless,<sup>8</sup> or that passive morphemes are not necessary in passive constructions, despite the analysis in Baker *et al.* (1989). Keenan (1985: 255) notes that there do exist passives with no morphology. He cites Swahili and Kinyarwanda as having some verbs that are identical in the active and passive. He does not, however, mention any languages which, like Balanta, lack passive morphology altogether.

It has been suggested to me that the Balanta facts are suggestive of middle — and we might add ergative — constructions. But there is evidence against both of these. Ergative verbs usually belong to a limited set that are found again and again cross-linguistically (Burzio 1986), but to which not all the verbs that form the construction in (20) belong (*\*The money sent*). Furthermore, it was argued in chapter 2 that Balanta has a set of ergative verbs, but they all bear a special morpheme, *-lu*. If the verbs in (20) were ergative, we would expect to find this morpheme there, as well. As for the hypothesis that the examples in (20) contain middle verbs, it is unlikely given that middle verbs are noneventive, and generally appear

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<sup>8</sup> This is only a suggestion. I believe that it would be poor methodology to posit a null morpheme without evidence.

only in the present tense (Keyser and Roeper 1984, Fagan 1988). They cannot describe specific events in time, as the examples in (20) do, and as the following examples further illustrate:

- (24) a.    sɛl    ma    n-   lotte    a-   jɪrɛ  
           fish DEF IMPF-cook    LOC- dance  
           ‘Fish will be cooked at the dance’
- b.    gudi   hit   tɛ   sɔ  
           money send PAST yesterday  
           ‘Money was sent yesterday’

Finally, middles typically require an adverbial modifier (examples adapted from Fagan 1988):

- (25) a.    This book reads \*(easily)  
       b.    This pickup handles \*(well)

All of the preceding Balanta examples show that this requirement does not hold there, either.

What are we to conclude then about the Balanta data in (20-21)? For present purposes, I believe that the evidence is inconclusive, and that the question of whether Balanta has a passive construction is best left to future research.

Let us note in passing, however, that if (20) is a true passive construction, then the ungrammaticality of (21) and (22) can be analyzed as resulting from an interplay between the lack of passive morphology and general markedness considerations. Since it involves no morphological marking, passivization of either object in a double object construction would result in a string which is indistinguishable from a simple transitive

construction, and simple transitive constructions are indisputably less marked than passive ones (cf. (21c-d)). Passive constructions derived from transitive verbs with animate objects are likewise ungrammatical in Balanta because the default interpretation of a string like *daal ma habu* 'the cat killed' is one where 'the cat' is an agent. Only passive constructions with inanimate subjects are possible, and this is because an inanimate object like *gudi* 'money' has the default interpretation of theme (or, in some contexts, instrument), not agent. Finally, the absence of agent phrases can also be attributed to a lack of passive morphology. Baker *et al.* (1989) regard agent phrases as NPs that form a chain with the passive argument, i.e., *-en* in English. In languages with no passive morphology — and therefore no passive argument — we thereby predict agent phrases to be impossible.<sup>9</sup> This clustering of properties might suggest that while passive is generally considered to be inflectional, Balanta may be somewhat unique in having a *derivational* passive.

Furthermore, if Balanta does indeed have a passive construction, illustrated in (20), then the hypothesis that the special properties of Balanta passives derive from their lack of passive morphology could potentially be extended to account for properties of middles. If middles have no 'middle argument' then we predict (a) the lack of middle morphology in many languages; (b) the absence of agents, understood or expressed, in middles; (c) the sensitivity to theta roles often witnessed in middle constructions (e.g., *this truck handles well* but *\*this dog handles well*), and (d) the absence

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<sup>9</sup> This was suggested to me by W. Harbert. It may be, however, that agent phrases are marked cross-linguistically (M. Aronoff, p.c.), in which case we do not need to look for a special explanation for the case of Balanta.

of middles derived from ditransitive verbs (*\*These types of books give well to libraries*).

We may be able to come closer to a proper synchronic analysis of the construction in (20) if, through comparative evidence, we are able to discover its history. One hypothesis, as yet untested, is that an earlier passive suffix was lost through normal sound change. The Jóola languages are very closely related to Balanta, and there the passive morpheme is the suffix /-i/. Not only is this morpheme a likely candidate for an earlier Balanta passive morpheme, but it is also precisely the kind of affix one might expect would be vulnerable to syncope or apocope. A morpheme containing a vowel like /a/ instead (cf. Rickard 1974: 23 on French) or one containing both a vowel and a consonant would potentially be more resistant.

While the question of whether Balanta has a passive construction is left unresolved here, what is important is that there appears to be a universal that in asymmetrical object languages, only the applied object may become the subject of a passive. Balanta cannot be used to support this universal, but it does not contradict it in any way, as its idiosyncrasies certainly have an explanation outside the scope of the parameter. In the remainder of this chapter, I will continue to consider the non-passivizability of the patient/theme in applicative constructions to be a key element of the parameter.



#### 4.2.5 *Summary*

In this section, I have shown that Balanta patterns with asymmetrical object languages with respect to object marking, reciprocalization, and unidentified theme deletion. The fact that it is more restrictive than other asymmetrical object languages regarding the passive should be accounted for outside of the object parameter, and does not constitute any evidence against it.

#### 4.3 **Theoretical Treatments of the Parameter**

The syntactic structure of applicative constructions has been the subject of much discussion, cf. Gary and Keenan (1977), Marantz (1982, 1984, 1993), Perlmutter and Postal (1983), Baker (1988a, 1988b, 1990), Bresnan and Moshi (1990), Alsina and Mchombo (1990, 1993). A generalization we can make about most of these proposals is that they have grown out of one central insight: that symmetrical object languages allow more than one NP to act as a direct object, while asymmetrical object languages do not. Bresnan and Moshi point out weaknesses of some early proposals, and for the most part I will not repeat their arguments here. A word about more recent proposals, however, is in order.

I begin with Baker (1988a, 1990), who proposes that differences between symmetrical and asymmetrical object languages derive from the ability of the applied affix in the former to assign structural Case. As a result, the applied verb in these languages can govern, theta-mark, and

assign structural Case to more than one NP.<sup>10</sup> His primary example is Kinyarwanda, where either or both postverbal NPs can trigger object agreement on the verb or become the subject of a passivized verb.

Baker is able to explain certain characteristics of symmetrical object languages quite elegantly, such as the ability of either or both NPs to control object agreement or serve as the subject of a passivized verb. But his approach has some flaws. Most importantly, his ternary branching structure is not capable of capturing attested binding facts or, in symmetrical object languages, word order facts: in benefactive applicative constructions cross-linguistically, the applied object precedes the direct object, and, as demonstrated by Marantz (1993), binds it. Furthermore, in Baker's view, both benefactive and locative applicatives result from Preposition Incorporation. This predicts that they should share the same properties. But as Bresnan and Moshi point out, we find differences with respect to word order and long distance extractions. Regarding the passive form of instrumentals, Alsina and Mchombo (1993) note that while "all of the structures ruled out by the theory are ungrammatical, not all of the structures predicted to be well-formed are grammatical" (p. 23), a problem that Baker himself (1988b: 386) acknowledges. While I do not go into details here, the proposal that applicative-formation involves Preposition Incorporation is in itself problematic, as demonstrated by Alsina and Mchombo (1990).

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<sup>10</sup> Baker does not use the terminology 'symmetrical' vs. 'asymmetrical', and does not consider all of the ways in which the two language types covary.

Bresnan and Moshi (1990) and Alsina (1993) propose an LFG analysis of the symmetrical ~ asymmetrical object parameter. It rests on a system of primitive features held by subjects and objects, [ $\pm$  restricted] and [ $\pm$  object]. This, combined with basic well-formedness conditions and a single parameter, yields the attested facts:

(26) Asymmetrical Object Parameter (AOP)

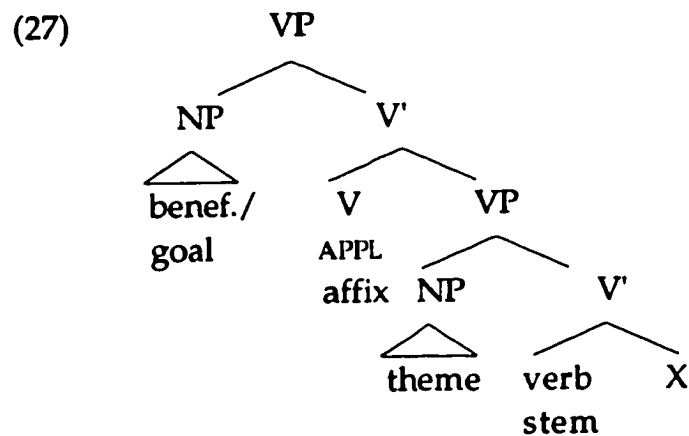
|   |          |     |          |
|---|----------|-----|----------|
| * | $\theta$ | ... | $\theta$ |
|   |          |     |          |
|   | [-r]     |     | [-r]     |

The AOP prevents more than one role from being intrinsically classified as unrestricted and is argued to be active in asymmetrical object languages such as Chichewa or Balanta, and inactive in symmetrical languages such as Kichaga or Kinyarwanda. Note, however, that the AOP is little more than a description of asymmetrical object languages. While it gets us most of the facts, it has very little explanatory power. Like Baker, Bresnan and Moshi (1990) do not make predictions about binding facts in applicative constructions.

The analysis presented in this paper owes much to Marantz (1993), as will become clear. Marantz, who himself builds on Larson (1988), proposes that the benefactive applicative construction has the following structure:<sup>11</sup>

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<sup>11</sup> Unlike Marantz, Larson maintains Baker's (1988a) UTAH, or Uniformity of Theta-role Hypothesis, and therefore must raise the goal over the theme to achieve this structure.



The verb stem heading the lower VP is dominated by the VP headed by the applicative affix, which creates a second argument position in its specifier. This is where we find the applied object, which is assigned a beneficiary or goal theta role. Marantz places the theme in the specifier of the lower VP.

Given the following assumptions, Marantz proposes that the differences between symmetrical and asymmetrical languages can be attributed to how the applied affix or verb and the lower verb combine:

(28) Marantz's assumptions

- i. Structural objective (accusative) Case is assigned only to [Spec, VP] and is assigned at S-structure.
- ii. Passivization is specifier-to-specifier movement — from one position potentially assigned structural objective Case to one potentially assigned structural nominative Case.
- iii. Object "agreement" involves an NP in [Spec, VP] that is assigned structural Case.
- iv. An element in [Spec, VP] for the purposes of (i-ii) is an element sister to V' that is not governed by the head V of the VP that

dominates it. The head of a phrase does not govern its specifier from its head position.

Marantz claims that in asymmetrical object languages, the verb stem and applicative affix combine by Merger or Incorporation. The derived form V + APPL governs the elements in the lower VP, given Baker's (1988a) Government Transparency Corollary. Therefore, according to Marantz, the object in the specifier of the lower VP no longer qualifies as a specifier, by (28iv) above. As a result, it may not participate in passivization (28ii) or object agreement (28iii). In symmetrical object languages, on the other hand, the verb stem combines with the applicative affix through raising and adjunction. The specifier of the lower VP is not governed from above or by its head, and therefore, it continues to count as a specifier. This analysis requires that we define specifier very narrowly, and that we believe that what is a specifier at one point in a derivation can cease to be one.

There are some valuable insights at the core of Marantz's analysis. He essentially claims that the direct object in benefactive applicative constructions in asymmetrical object languages is not a true direct object, a hypothesis that I will develop. And Marantz obtains this result by considering both syntactic structure and morphological mechanisms, which I believe is necessary, given the observation that all languages that have been shown to adhere to Bresnan and Moshi's symmetrical ~ asymmetrical object parameter share a set of morphological properties, namely the existence of object agreement markers and a morphological reciprocal. Marantz's approach, however, has some flaws. The most

serious is that it is not clear why raising and adjunction of the lower V to the next higher head in symmetrical object languages does not result in government of the lower specifier of VP from above. Under standard assumptions, Marantz's analysis predicts a problem for A-movement (e.g., passivization or object agreement) in any language with overt verb movement, since in these languages, [Spec, VP] position is governed — and therefore ceases to count as a specifier — when V raises and adjoins to the next higher head. Second, if we are to define 'specifier' narrowly, as Marantz suggests, it would be helpful to have some outside evidence first. Certain questions come to mind: If the specifier of the lower VP in asymmetrical object languages ceases to be a specifier, then what is it? If the specifier position itself is not eliminated, then why are its properties affected? If A-movement (passive raising) out of Marantz's "non-specifier" is prohibited in asymmetrical object languages, then why is A-bar movement sometimes permitted? (In Balanta, wh-movement of both beneficiaries and patients/themes is allowed.) Finally, as it stands, Marantz's analysis is not able to account for the unspecified theme deletion and reciprocalization facts described above, and he offers no suggestions on how we might include them.

All in all, while there are some problems with Marantz (1993), the insights he makes will serve as the foundation for the analysis elaborated here.

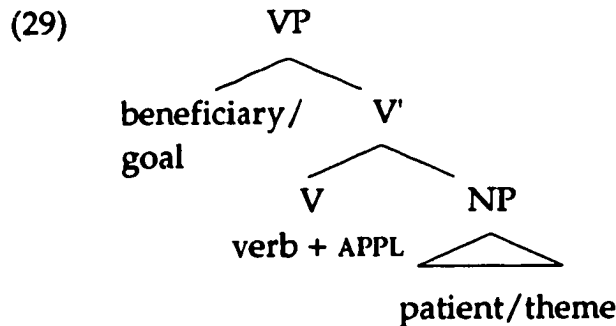
#### 4.4 A New Account

Ideally we would like to attribute the four covarying differences between symmetrical and asymmetrical object languages listed in Table 4.1 to a single parameter. Furthermore, following Chomsky (1995: 170), we might expect that parameter to be a lexical or morphological one.

I maintain that in symmetrical object languages, the applicative affix is a verbal head, as proposed by Marantz (1993). Because the applicative affix is a verbal head, the resulting structure, seen in (27), has two VP specifier positions, [Spec, VP1] and [Spec, VP2]. Building on Bowers' (1993) proposal that all A-movement is specifier-to-specifier movement, this configuration will have repercussions for object agreement, passivization, and as I will show, for reciprocalization and unspecified theme deletion.

In asymmetrical object languages, I argue that the applicative affix is attached to the verbal stem in the morphological component of the grammar. While it adds a semantic argument (the beneficiary/goal) to the verb, it is not a verbal head, and therefore does not project its own VP specifier. The single [Spec, VP] is occupied by the applied object, and the original direct object (the patient/theme) is forced to surface as a complement. On why the applied object takes precedence over the original direct object, one possibility is to follow Marantz (1982), who himself follows Lieber (1980), in noting that the features of an affix generally take precedence over those of its stem. Another is to follow Marantz (1993) who claims that the applied object is required to be higher than the patient/theme because it stands outside the event formed by the verb and

the patient/theme. He presents evidence for this position from zero derivation and adjectival passive formation:<sup>12</sup>



However we account for the primacy of the applied object, the result is that the structure of benefactive applicatives in asymmetrical object languages mirrors that proposed by Larson (1988) for English double object constructions. The only difference is that Larson maintains Baker's (1988a) UTAH, or Uniformity of Theta-role Hypothesis, and therefore must raise the goal over the theme to achieve the structure in (29). In separating semantic argument structure from syntactic structure, I maintain a weaker

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<sup>12</sup> While the analogy is not exact, it might be useful to think of the antipassive affix of some languages which demotes a direct object to an oblique or null, as seen in the Greenlandic Eskimo paraphrase pair below (Baker 1988a: 9):

- a.    aᅇut-ip       miirqa-t       paar-ai  
       man-ERG    child-PL(ABS) care-INDIC.3SG.SUB.3PL.OBJ  
       'The man takes care of the children'
- b.    aᅇut-Ø       miirqa-nik       paar-si-vuq  
       man(ABS)   children-INSTR   care-APASS-INDIC.3SG.SUB  
       'The man takes care of the children'

In (a), *miirqa-t* 'children', the receiver of the verb's action, is assigned absolutive case and is reflected in the agreement morphology of the verb. In (b) the same noun is realized with instrumental (oblique) case and is no longer reflected in the agreement morphology of the verb, suggesting it has been demoted to oblique status.



version of UTAH, in which the hierarchy of thematic roles is constant across languages, although the mapping of thematic roles to specific syntactic positions may be different.<sup>13</sup>

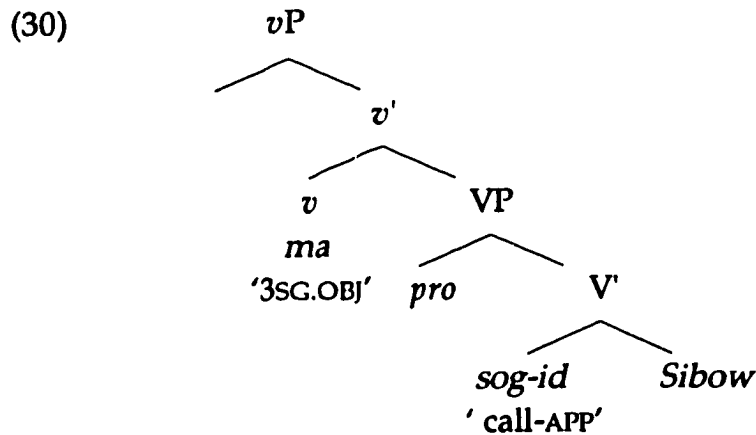
Given Bowers' proposal regarding A-movement as specifier-to-specifier movement, the structure in (29) predicts that only the applied object in asymmetrical object languages will be able to exhibit so-called 'primary object properties' of participating in object agreement, passivization, and so on.

#### 4.4.1 Agreement

Before describing my proposal, I lay out my assumptions regarding the mechanisms of agreement since, as argued in chapter 3, Balanta object clitics should be viewed as agreement markers coindexed with *pro*. Following work by Sportiche (1996), Zwart (1993), and Dornisch (1998), I generate object clitics in a functional head. I call this head  $v^o$ , and its maximal projection  $vP$ , as laid out in chapter 3:

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<sup>13</sup> Marantz (1993) and Miyagawa (1997) abandon a strong version of UTAH in their analyses of double object constructions as well. Marantz argues that principles of semantic compositionality, which allow theta roles to be assigned to more than one structural position, are more accurate than a universal mapping based on thematic roles.



i-        n-    sog- id- ma        Sibow  
 1SG.SUB- IMPF- call- APP- 3SG.OBJ Sibow  
 'I will call Sibow for him'

$v^\circ$  has [-interpretable] phi-features, and it therefore attracts the direct object (null in this case) to its specifier (Chomsky 1995). Through Spec-head agreement, the features (e.g., person and number) of  $v^\circ$  are checked by *pro*. (The full paradigm of object clitics can be found in Table 2.4.) In Balanta, no object clitic is generated in  $v^\circ$  when the direct object is overt, and therefore the direct object is not required to raise before Spell-out.

Raising of the direct object from [Spec, VP] to [Spec,  $v$ P] is A-movement, from one A-position (i.e., argument position), to another, and I follow Bowers (1993) in restricting A-movement to specifier-to-specifier movement. (This position is motivated below with evidence from passivization and quantifier floating.) As a result, agreement will be possible only with objects in [Spec, VP], and never with verb complements. This will become important below.

Evidence that complements to the verb may not raise to [Spec,  $v$ P] to check  $v^\circ$ 's features comes from French. French has no double object

construction. A beneficiary or goal must be expressed as a prepositional complement, as seen below:

- (31) a. Je donnerai le livre à Yves demain  
 I will.give the book to Yves tomorrow  
 b. \* Je donnerai Yves le livre demain  
 c. \* Je donnerai le livre Yves demain

Note also that past participles in French agree with a preceding direct object pronoun (32a), but not with a preceding indirect object pronoun (32b):

- (32) a. Je l' ai repeinte  
 I it.FEM have repainted.FEM  
 'I repainted it (the table)'  
 b. Je lui ai repeint(\*e) la table  
 I to.her have repainted the table  
 'I repainted the table for her'

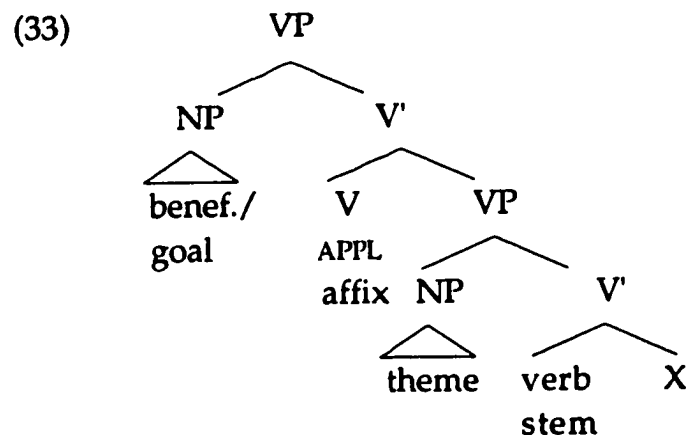
We can give these data a unified analysis following the general analysis of past participle agreement in Kayne (1989a) if the direct object clitic can attract a null object in [Spec, VP] to check its [-interpretable] features but the indirect object clitic cannot, since indirect objects in French are generated in complement position. There must be some other mechanism for eliminating the [-interpretable] features of *lui*, one that does not involve agreement. One possibility is that direct object pronouns like *le*, *la*, and *les* are agreement clitics and are generated in [Spec, *v*P], while indirect object pronouns like *lui* and *leur* are incorporated pronouns that are generated in [Spec, VP] and raise, either in the syntax or at PF. A similar possibility was

suggested for Balanta, above. In the next section I relate this analysis to other object facts in French (passivizability).

I next demonstrate how this theory of agreement may be applied to the question at hand: how to account for the symmetrical-asymmetrical object parameter. I start with passivization and object agreement facts since these appear to be central and are best attested cross-linguistically. I then show how the present proposal can be extended to account for reciprocalization and unspecified theme deletion facts.

#### 4.4.2 Accounting for the object agreement and passivization facts

Marantz (1993) proposes that the benefactive applicative construction has the following structure:<sup>14</sup>



The verb stem heading the lower VP is dominated by the VP headed by the applicative affix, which creates a second argument position in its specifier.

<sup>14</sup> In fact, he claims it is true of double object constructions even in languages without an applicative affix.

This is where we find the applied object, which is assigned a beneficiary or goal theta role. Marantz places the theme in the specifier of the lower VP.

Marantz's proposal is superior to some other existing proposals because it predicts that the higher object (the applied object) c-commands the lower object, as he demonstrates is the case. The ternary branching structure of Baker (1988a) does not make this prediction; nor do Gary and Keenan (1977) and Marantz (1982, 1984), who suggest that languages may differ in allowing verbs to take one or more direct objects.

In contrast to Marantz, however, I propose that the structure in (33) holds only for symmetrical object languages. In those languages, the verb will be able to agree with either the direct or applied object because both are in [Spec, VP] and can raise to check the [-interpretable] features of object clitics.<sup>15</sup> Passivization of either object will likewise be possible in symmetrical object languages if we accept Bowers' formulation of passivization as specifier-to-specifier movement, which is also assumed by Marantz (1993). Since both the direct and applied object originate as specifiers to VP, either one will be able to raise in the passive construction.

Since it is key to the present analysis, I go through Bowers' argumentation here regarding the claim that all A-movement operations involve specifier-to-specifier movement. A-movement is thus "structure-

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<sup>15</sup> Minimality would seem to be obviated here. It may be that in order for the lower object to raise in symmetrical object languages, the verb must also raise (cf. the Equidistance principle of Chomsky 1995). Another possibility is that Marantz's structures are correct for both types of languages, but that there is no raising of the verb out of the VP in asymmetrical object languages. But this hypothesis fails when we apply it to Balanta, where we have evidence (cf. chapter 3) that the verb raises at least as high as  $v^{\circ}$  in affirmative clauses.

preserving in the extremely strong sense that not only are categories only permitted to move to positions where categories of the same type are permitted, but in addition categories can only move between functional positions of the same kind" (p. 602). Evidence that passivization in particular is specifier-to-specifier movement comes from unpassivizable verbs in English. The following examples are from Bowers (p. 626):

- (34)
- a. John went home./\*Home was gone by John.
  - b. Mary left the room angry./\*The room was left angry (by Mary).
  - c. John resembles Bill./\*Bill is resembled by John.
  - d. The package weighed 10 lb./\*10 lb. was weighed by the package.
  - e. The book cost \$10./\*\$10 was cost by this book.
  - f. The book cost John \$10.00/\*John was cost \$10 by this book.

Bowers observes that the impossibility of passivization for these verbs can be explained if, following Bach (1979), the apparent direct objects are in fact dative complements, a position for which he gives independent evidence (p. 631).

Another set of data that Bowers uses to support the claim that passivization is specifier-to-specifier movement is the following. Transitive subject control verbs lack passives, as in (35), while transitive object control verbs have them (36):

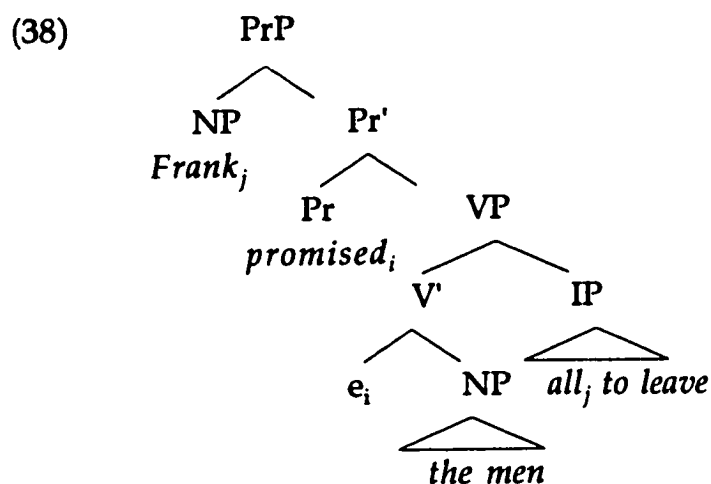
- (35)
- a. \*John is impressed (by Bill) as pompous.
  - b. \*The boys were made a good mother (by Aunt Mary).
  - c. \*The kids were failed (by Max) as a father.
  - d. \*The men were struck by the idea as nonsense.
  - e. \*The men were promised (by Frank) to leave.

- (36) a. John was persuaded to leave.  
 b. The boys were made good students by Aunt Mary.  
 c. The idea is regarded as nonsense by everyone.

These examples differ further in that the objects of the verbs in (35) may not be associated with floating quantifiers (data from Bowers 1993: 627):

- (37) a. \*Bill impresses his friends all as pompous.  
 b. \*Aunt Mary made the boys all a good mother.  
 c. \*Frank promised the men all to leave.

Bowers proposes that verbs like 'promise' or 'impress', like 'resemble', take an NP complement rather than a direct object in [Spec, VP]. Their object is unpassivizable, given the formulation of A-movement as specifier-to-specifier movement. The floating quantifier data can also be captured under this proposal if a controller must be the nearest c-commanding NP. In (38), the apparent objects do not c-command the floated quantifier 'all', as seen in the following structure for (37c):



To Bowers' arguments for English, we can add another, this time from French. Recall from section 4.4.1 that French has no double object

construction. Beneficiaries and goals must be expressed as prepositional complements. We therefore predict that French should not allow passivization of the indirect object. This is precisely what we find:

- (39) a. Le livre a été donné à Yves  
 The book has been given to Yves  
 'The book was given to Yves'
- b. \*Yves a été donné le livre  
 Yves has been given the book

While this could be because passive-raising of dative arguments is impossible, it is equally plausible to say that the dative preposition *à* is merely a rescue strategy, to assign case to a complement that would otherwise violate the Case Filter.

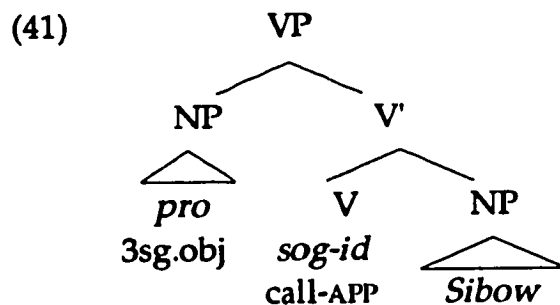
All of these facts suggest that passivization is specifier-to-specifier movement, and therefore support the proposal that passivization of either the applied or direct object is possible in symmetrical object languages because both are in specifiers of VP.

In asymmetrical object languages, as proposed above, the applicative is a derivational affix which adds a beneficiary/goal theta role (40b):

- (40) a. i- n- sog- ma  
 1SG.SUB- IMPF- call- 3SG.OBJ  
 'I will call him/her'
- b. i- n- sog- id- ma Sibow  
 1SG.SUB- IMPF- call- APP- 3SG.OBJ Sibow  
 'I will call Sibow for him/her'



But the VPs in (40a-b) are identical: in both, the verb has a single specifier position. In (40b) this is occupied by the applied object. The original direct object *Sibow* — the patient or theme — surfaces in complement position:



This structure has consequences for both object agreement and passivization. While agreement with either the direct or applied object is possible in symmetrical object languages, since both are in VP specifiers, only agreement with the applied object is possible in asymmetrical object languages. The patient or theme is a complement (see above), and therefore may not raise to check an object clitic's agreement features. Likewise, the patient or theme is not in a specifier in asymmetrical object languages, and so it cannot be the subject of a passive.

#### 4.4.3 Accounting for reciprocalization facts

As seen in section 4.2, Bresnan and Moshi (1990) identify two other differences between symmetrical and asymmetrical object languages. The first involves reciprocalization: reciprocalization of the patient or theme in the presence of an applied object is possible in symmetrical object languages, but not in asymmetrical ones. The second, unspecified theme deletion, allows a theme to be implied without being stated. The status of this latter as part of the parameter is uncertain, since it seems to be true in

only a subset of languages (Alsina 1993). The proposal made here is able to account for the participation of both reciprocalization and theme deletion in the parameter, and explains why the latter does not hold in all languages. Let us turn first to reciprocalization.

Reciprocalization in Balanta and the other languages that have typically been analyzed as symmetrical or asymmetrical is of a very different nature than reciprocalization in languages like English. In English, it involves a freestanding Principle A anaphor that must be bound by an appropriate antecedent. In Balanta, it involves a morphological affix that displays non-anaphoric properties. Most notably, in Balanta, a reciprocal verb may be used with a singular subject. In this case, the verb bearing the symmetrical suffix simply implies a mutual action or relationship. The same facts hold true in many Bantu languages (Doke 1954: 69):<sup>16</sup>

- (42) a. Sadio    jɛŋ-    dɛ       ŋgi    Sibow  
          Sadio    marry-SYM    with    Sibow  
          ‘Sadio married Sibow’
- b. à-        rɛŋ-    dɛ       ŋgi    alama  
          3SG.SUB-meet- SYM    with    king  
          ‘He met with the king’

*Sadio ŋgi Sibow jɛŋ-dɛ* ‘Sadio and Sibow married each other’ and *bi-rɛŋ-dɛ* ‘they met with each other’, with plural subjects, are also possible.

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<sup>16</sup> For examples of this construction, see Doke (1954: 69, 1963: 144-5) for Zulu, Louw and Jubase (1963: 154) for IsiXhosa and Mchombo (1993: 191-2) for Chichewa.

In addition, Balanta has verbs that bear the symmetrical suffix but that do not have a symmetrical or reciprocal interpretation at all. Again, we also find similar facts in Bantu:

- (43) a.    **bɛθu** ‘chase’                    **bɛs- dɛ** ‘chase’  
           **chase**                                **chase-SYM**
- a.    **gbaa** ‘ask’                        **gbaa- ndɛ** ‘ask for’  
           **ask**                                 **ask- SYM**

Before we can explain the interaction of reciprocalization with the symmetrical ~ asymmetrical object parameter, we must be able to say why reciprocalization in Balanta and Bantu displays different properties than reciprocalization in, for example, English. Although binding theoretic approaches to reciprocalization in languages like English do not appear to be sufficient to explain the facts, note that we do not want to abandon them altogether. The core set of reciprocalization examples are ones like the following, where the reciprocal interpretation is controlled by a plural subject:

- (44) **bi-       biifa- ndɛ**  
       **3PL.SUB- see- SYM**

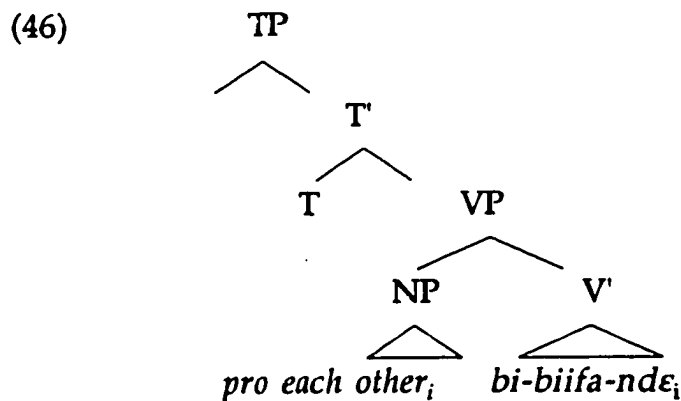
‘They saw each other’ (i.e., ‘they met’)

And in examples with an apparent singular subject, what Doke (1954) calls an “associated subject,” here *ngi Sibow* ‘with Sibow’, is generally required:

- (45) Sadio    jɛŋ-    dɛ    \*(ŋgi Sibow)  
       Sadio    marry- SYM    with Sibow  
       'Sadio married Sibow'

Examples like (45) show that while the symmetrical affix may appear on a verb whose syntactic subject is singular, the *understood* subject is generally plural. The same facts hold for some verbs in English. So while it is possible to say *John and Mary met* or *John met with Mary*, it is not possible to say *\*John met*.<sup>17</sup>

One way to account for these facts is to view the Balanta symmetrical affix as an agreement marker that is coindexed with a null anaphor. The structure of (44) prior to verb raising is something like the following:



Since the reciprocal affix agrees with the null anaphor, the possibility or impossibility of reciprocalization will be subject to the theory of agreement laid out above. Whether we generate the reciprocal affix as the head of a functional projection that must be checked by object raising of a

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<sup>17</sup> We do occasionally find examples like *i-tiŋ jɛŋ-dɛ* 1SG.SUB-NEG.IMPF-marry-SYM 'I will never get married'. I consider such examples to be lexicalized exceptions.

null anaphor to its specifier, or have the verb enter the derivation with the reciprocal affix already attached, the reciprocal affix will be able to be coindexed with a VP specifier, but not a complement of the verb. This means that reciprocalization of the patient or theme will be possible in symmetrical object languages (cf. (27)), but not in asymmetrical object languages (cf. (29)). Balanta and Chichewa (Baker 1988b: 386) both provide straightforward examples of this:<sup>18</sup>

(47) Sadio ngi Sibow gi numu- nde- de untjugub  
 Sadio with Sibow COP bring- SYM- APP chair  
 'Sadio and Sibow are bringing chairs for each other'

(48) Ana a- na- meny- er- an- a zigawenga  
 children SUB- PRES-hit- APPL- RECIP- ASP ruffians  
 a. OK The children<sub>i</sub> are beating the ruffians for each other<sub>i</sub>  
 b. \* The children are beating each other for the ruffians

Regarding examples like (45), where there appears to be a discontinuous subject, I assume that *Sadio* and *ngi Sibow* come together at some level (LF) to serve as the antecedent for the null anaphor. These examples are not unlike the better known phenomena of split antecedents, illustrated by *Mary argued with John about their getting married*, and split controllers, seen in *Mary argued with John about getting married* (both examples from Sakio (1976)).

There is a second possibility, not involving agreement with a null pronominal. This is to view the reciprocal affix as a theta-role absorbing derivational affix. To see how this would work, let us go through the

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<sup>18</sup> For ungrammatical Balanta examples parallel to (48b), see (14) above.





- b. Un dottore serio visita \_\_\_ nudi  
 A doctor serious visits \_\_\_ nude [plural]  
 'A serious doctor visits his patients nude'

Rizzi argues that the empty category in these examples is *pro<sub>arb</sub>*, which in Italian is understood to be [+human, +plural, +generic]. As seen in (53a), it can bind a reflexive — the subject of the sentence, which is singular, cannot be the binder, since the reflexive is plural. The example in (53b) contains a plural predicative adjective which cannot relate to the singular subject, but only to the inherently plural *pro<sub>arb</sub>*.

Rizzi proposes that *pro* is licensed by a governing head, “where the class of licensing heads can vary from language to language” (p. 519). In (53) we saw that in Italian, *pro* can appear in object position. This is because V belongs to the set of licensing heads in Italian. In English, examples like (53a-b) are ungrammatical; this is because V in English is not a licensing head. Regarding the interpretation of *pro*, Rizzi suggests the following rule, which can apply in either the lexicon (morphological component of the grammar) or the syntax:

- (54) Assign *arb* to the direct  $\theta$ -role.

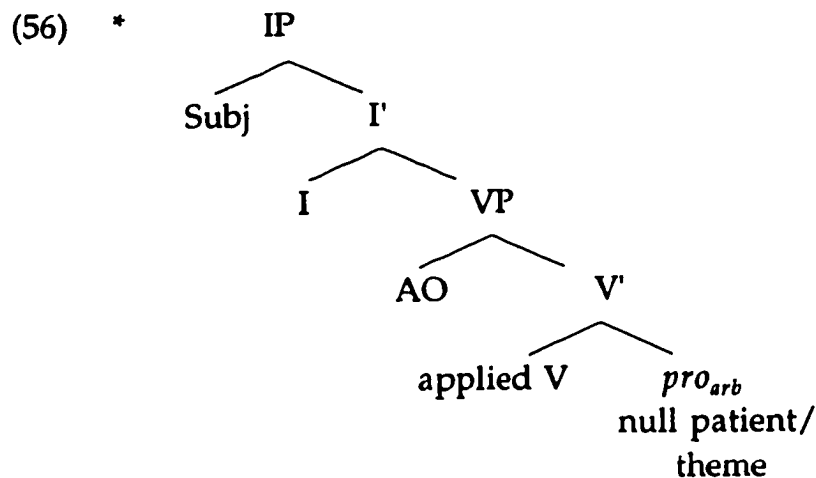
The challenge now is to apply Rizzi’s analysis to the unspecified theme deletion facts. The first issue is why no agreement is necessary in such cases, as seen by the following Kichaga example from Bresnan and Moshi (1990: 152):

- (55) n-ǎ-í-lyí-í-à                      m-kâ  
 FOC-1SUB-PRES-eat-AP-FV      CL1-wife  
 ‘He/she is eating for/on the wife’



The understood object 'food' or 'something' is not marked on the verb by any sort of agreement morphology. The reason for this is straightforward: *pro<sub>arb</sub>* has no content, such as noun class or person, that can be expressed by agreement morphology.

The second issue is why unspecified theme deletion is limited to symmetrical object languages. More specifically, given the analysis developed here, why is it that *pro<sub>arb</sub>* seems to be barred from complement position, which is the position of the theme in the Balanta applicative construction?



I suggest that we replace Rizzi's government requirement on the presence of *pro* with a Spec-head requirement, in the spirit of Chomsky (1995: 172-4), who sees the Spec-head relation as a core configuration in the Minimalist Program, with both agreement and structural case assignment depending on it. This explains the fact that unspecified theme deletion is limited to symmetrical object languages. It is only in such languages that the theme occupies specifier position in applicatives.

Finally, we must note that Alsina (1993) provides evidence that unspecified theme deletion takes place only in a subset of symmetrical object languages. This fact fits into the present analysis because the set of possible licensors varies across languages (Rizzi 1986b). We expect to find symmetrical object languages where V is a potential licensor, and others where it is not. Only in the former will unspecified theme deletion be possible.

#### **4.5 Additional Evidence**

We have already seen how the proposal that symmetrical and asymmetrical object languages differ in the nature of the applicative affix can account for the four covarying differences among applicative constructions identified by Bresnan and Moshi (1990). In this section I provide additional evidence and show how the preceding analysis can be extended to cover facts attested in non-applicative double object constructions.

As mentioned in section 4.1, different applicative types are attested cross-linguistically. While Balanta has only locative and benefactive applicatives, other languages may also have malefactive, goal, instrumental, and motive applicatives. What is most important here is that some of these applicative types pattern differently than benefactive applicatives with respect to the parameter at issue. For example, Alsina and Mchombo (1990) show for Chichewa that while word order in benefactive applicative constructions is V AO DO (AO = applied object), in locatives and instrumentals, either the locative/instrument applied object

or the theme may be adjacent to the verb. Locatives and instrumentals also pattern against benefactives in terms of object marking, relativization, and unspecified theme deletion. Regarding passivization, on the other hand, beneficiaries and instrumentals pattern together, both allowing only the applied object to be the subject. In locative applicatives, however, either the locative or theme may be a subject. These facts suggest that in Chichewa the applicative affix has different structural consequences in benefactive applicative constructions than in instrumental or locative constructions, and that the applicative affix also has different structural consequences in instrumental constructions than in locative constructions. In short, the data tell us that the applicative affix itself can differ in semantics and function, not only across languages as proposed above, but also within a single language.

The next issue to be taken up is non-applicative double object constructions. In Balanta, as well as in all other languages that I am aware of that have been discussed in this respect, if a language is asymmetrical with respect to benefactive applicative constructions, then it is also asymmetrical with respect to non-applicative ditransitives, as well, such as those formed with verbs meaning 'give' or 'show'. Likewise, symmetrical languages show symmetrical behavior in benefactive applicatives and in non-applicative ditransitives. According to the proposal made here, the difference between asymmetrical and symmetrical object languages depends on the nature of the applicative affix. Specifically, in symmetrical object languages, the applicative affix is a verbal head, following Marantz (1993), whose specifier contributes an additional argument position to the

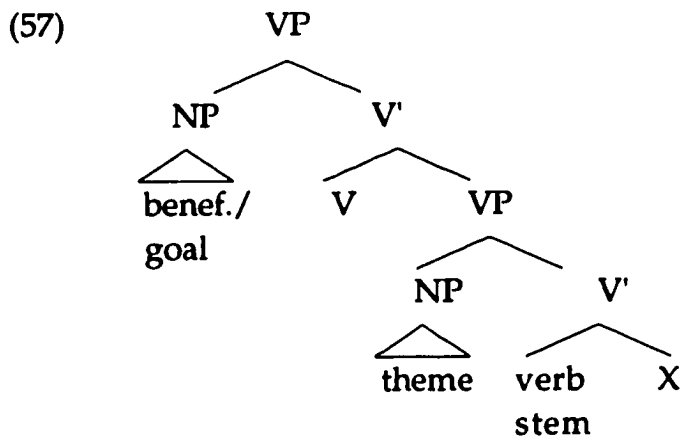
syntactic structure. In asymmetrical object languages, on the other hand, the applicative affix is not a syntactic head. It is a derivational affix that attaches to the verb stem in the morphology, and therefore does not project in the syntax. What would have been the direct object of the bare stem surfaces in complement position, while the applied object occupies [Spec, VP]. How can we extend this proposal to non-applicative ditransitive constructions?<sup>20</sup>

One possibility is that the availability of the asymmetrical-type analysis depends on the language's treatment of double object constructions in general. If, on the basis of positive evidence from passivization, object marking, and so on, learners of a language analyze double object constructions in the language as having the structure in (57),<sup>21</sup> then applicative constructions will be assigned the same structure:

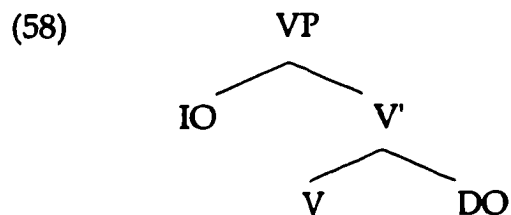
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<sup>20</sup> The proposals of Baker (1988a) and Marantz (1993) face the same challenge. Marantz solves the problem by proposing that there is a null applicative affix in non-applicative benefactive constructions, a possibility that I do not discount.

<sup>21</sup> Or one like it. While there may be a stacked VP structure with a higher null 'ditransitive' V<sup>o</sup> which adds a specifier, an alternative is that there is a single VP with multiple specifiers (cf. Ura 1996).



If, on the other hand, there is no positive evidence (e.g., from passivization or object agreement) that both objects in a double object construction occupy specifier position, then the default structure is assumed. That default, I claim, is the following:



It may also be the case that ditransitives involve a null counterpart of the applicative morpheme, as claimed by Marantz (1993). I do not believe that we have sufficient evidence to know whether or not this is the case.

A final question is, if (58) is a default, as I am claiming, and it is chosen in the absence of positive evidence for the structure in (57), which structure represents the situation in English? After all, in standard American English, there is no passivization of a theme argument (\*A

*pardon was given the prisoner*). Does this mean that, given the proposal made here, speakers choose the structure in (58)?

The possibility that standard American English ditransitives have the structure in (58) (cf. Larson 1988) is an enticing one, though I admit that other types of evidence could potentially signal to language learners that (57) is in fact correct. The proposal that English ditransitives have the structure in (58) gains quite a bit for us. For example, it provides an explanation for the split between dialects where passivization of a theme argument in ditransitives is impossible and those where it is not. One is an asymmetrical object dialect, and the other a symmetrical object dialect:

- (59) a. A pardon was granted the prisoner (*“symmetrical” dialects only*)  
 b. A book was given Mary (*“symmetrical” dialects only*)

The fact that unspecified theme deletion is never possible (*\*Helen cooked her friends Ø*, where Ø=something) even in “symmetrical object” dialects is because V is never a possible licenser for *pro* in English (Rizzi 1986b). As for reciprocalization, we have seen (section 4.4.3) that reciprocalization strategies in English and Balanta are very different, and thus should not be expected to exhibit the same behavior.

#### 4.6 Parallels between Locative Inversion and Locative Applicatives

The Balanta locative applicative construction was introduced in 4.1, and it was observed that the class of verbs that takes the locative applicative affix in Balanta appears to be the same as the one that allows locative inversion in English. I suggested that the data can be unified if both locative inversion and the surfacing of a locative phrase in an applicative

construction depend on whether speakers consider the locative phrase to be an argument. According to this hypothesis, the locative phrase in (60a), but not the one in (60b), can undergo locative inversion because it originates in argument position — [Spec, VP] — and locative inversion involves A-movement to [Spec, TP]. (Collins 1997 sees [Spec, TP] as the ultimate landing place of locative phrases that undergo inversion, but has them originate as complements to V). The locative phrase in (60b), on the other hand, is generated as a complement to V, and therefore cannot undergo A-movement, in accordance with Bowers (1993):

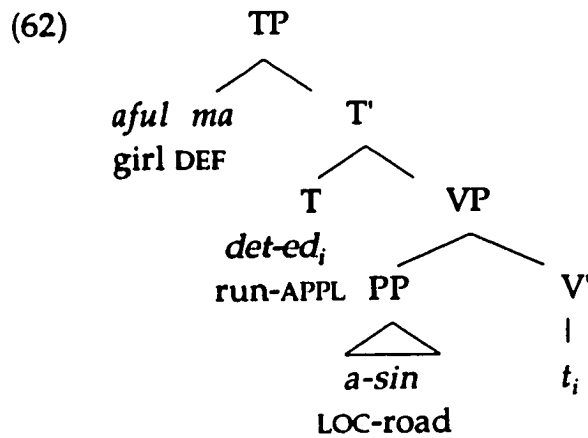
- (60) a. A kangaroo<sub>j</sub> [<sub>PrP</sub> *t<sub>j</sub>* [<sub>Pr</sub> jumped<sub>i</sub>] [<sub>VP</sub> [<sub>PP</sub> into the car] [*t<sub>i</sub>*]]]  
 Into the car jumped a kangaroo
- b. Jane<sub>j</sub> [<sub>PrP</sub> *t<sub>j</sub>* [<sub>Pr</sub> sang<sub>i</sub>] [<sub>VP</sub> [*t<sub>i</sub>*] [<sub>PP</sub> beside the road]]]]  
 \* Beside the road sang Jane

Turning to Balanta, let us hypothesize that all applied objects, whether locatives or benefactives, surface in [Spec, VP] position. The example in (61) therefore has the structure in (62):<sup>22</sup>

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<sup>22</sup> This structure is consistent with Marantz's (1993) view of the relation between semantic compositionality and syntactic structure. According to Marantz, locative objects are affected at the same level as theme/patient arguments, and thus are expected to map to the same position in a simple transitive construction. Thus, a Balanta transitive clause would also have the structure in (62), the only difference being that the locative PP would be realized as an NP. When a locative and theme/patient co-occur within a single clause (ungrammatical in Balanta), they are within the same event, and so Marantz's theory would predict no systematic difference based on event structure in their ordering.

- (61) a- ful ma det- ed a- sin  
 CL1- girl DEF run-APP LOC- road  
 'The girl ran along the road'



This raises two questions. First, why doesn't the locative argument trigger object agreement?

- (63) a- ful ma det- ed- ma  
 CL1- girl DEF run-APP- 3SG.OBJ  
 'The girl ran for him/her'  
 \* 'The girl ran along it'

Next, why can't the locative argument raise to be the subject of a passive?

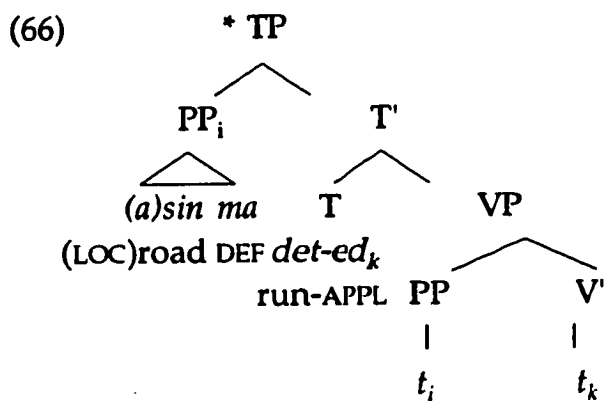
- (64) \* (a-) sin ma det- ed  
 LOC- road DEF run-APP  
 'The road was run on'

Note that inverted locatives in English do not participate in agreement either. The verb always agrees in number with the following noun phrase:

- (65) a. Along the road hop the kangaroos  
 b. \* Along the road hops the kangaroos



These two issues — lack of agreement and impossibility of passivization — can be related. The lack of agreement can be attributed to the fact that in both English and Balanta, locative arguments are PPs. PPs do not trigger agreement because cross-linguistically, agreement is for the features [person], [number], and [gender], and these are features associated with nouns and noun phrases — not with prepositions or prepositional phrases. As for the impossibility of passivization of locative arguments in Balanta, this is precisely what we would expect. While a PP in [Spec, TP] can check T<sup>0</sup>'s EPP feature (Collins 1997: 27-28), it cannot check T<sup>0</sup>'s subject agreement features, and the derivation crashes:



English allows preposition-stranding, and thus *The road was run on*, where the locative subject is an NP, is grammatical.

In this section we have seen how the present analysis accounts not only for the properties of benefactive applicatives in Balanta, but also for the properties of locative applicatives.

#### 4.7 Conclusion

The analysis presented here attributes the four covarying differences between symmetrical and asymmetrical object languages identified by Bresnan and Moshi (1990) to the nature of the applicative affix. In some languages it is a verbal head that contributes an additional argument position in its specifier; in others, it is a derivational affix that attaches in the morphology and does not contribute any additional syntactic argument positions. This analysis permits an account of the attested data. What's more, it offers an explanation for the special properties of the Balanta locative applicative and extends easily to languages like English, explaining why they may pattern with Balanta and related languages with respect to passivization, but not reciprocalization, unspecified theme deletion, or, of course, object agreement. Finally, the analysis supports Bowers' proposal that A-movement is always specifier-to-specifier movement by showing how it can be applied to characteristics of ditransitive constructions in languages as different as Balanta, French, and English.

## Chapter 5

### Introduction to the Balanta Noun Phrase

In this chapter I introduce the various elements of the Balanta noun phrase in anticipation of the syntactic account of their position and behavior in chapter 6. I begin with some basic word order facts in section 5.1. In section 5.2 I discuss nominalization. In sections 5.3 and 5.4 I go on to give more detail about possessors, adjectives, demonstratives, wh-words, and numerals.

#### 5.1 Word Order Facts

Nouns in Balanta precede all modifiers, which consist of the categories in (1):

(1) a. *Genitive pronouns*

biti hilli

dog 3SG.POSS

'his dog'

b. *Genitive Phrases*

biti na Sadio

dog GEN Sadio

'Sadio's dog'

c. *Demonstratives*

biti ho  
 dog this  
 'this dog'

d. *Adjectives*

biti umɔɔne  
 dog black  
 'a black dog'

e. *Numerals*

bi- biti bi- sibi  
 CL2- dog CL2- two  
 'two dogs'

f. *wh-words*

biti hila?  
 dog which  
 'which dog?'

g. *definite determiner*

biti ma  
 dog the  
 'the dog'

Nouns precede their modifiers in most other Atlantic languages as well, cf. Sapir (1965: 27-8) on Jóola Foñy, Sauvageot (1967) on Baïnouk, Stennes (1967: 198) on Adamawa Fula, Arnott (1970: 20-2) on Gombe Fula, Faye (1985: 52ff.) on Serer, Morgan (1996: 42ff.) on Ndut; Wilson (1993: 64-66) on Biafada; and Scott (1956: 12-3, 16, 23) on Temne.

## 5.2 Nominalization

There are two ways of forming nouns in the Ganja dialect of Balanta. We have seen the first already in section 2.1. A lexical stem can be prefixed with a noun class marker and be used as a noun. (Stems are most often used as verbs but in reality probably belong to no single lexical category, cf. Chomsky 1970):

| (2) | <i>Verb</i>          | <i>Noun</i>                    |
|-----|----------------------|--------------------------------|
| a.  | biifa 'see'          | gə-biifa '(act of) seeing'     |
| b.  | de 'bear (children)' | a-de 'mother'                  |
| c.  | dutur 'be ashamed'   | gi-dutur 'shame'               |
| d.  | latf 'tell lies'     | ∅-latf '(act of) telling lies' |
| e.  | tum 'put'            | gi-tum 'putting'               |

The nouns in (2a, c, e) are prefixed with the class 4 noun class marker *gə*, which surfaces as *gi-* when the first vowel of the verb stem is a /u/; the noun in (2b) is prefixed with the class 1 noun class marker *a-*, which attaches to nouns with human referents; and in (2d), the noun class marker is null.

The second means of forming nouns is through *n-* prefixation. Again, we start off with a bare stem. *n-* prefixation yields a noun. (3b) is further prefixed with the class 1 noun class marker, since it refers to a human:

|        |                    |                                  |
|--------|--------------------|----------------------------------|
| (3) a. | duulu '(be) small' | nduulu 'a little bit'            |
| b.     | garandi 'teach'    | ngarandi 'instruction, teaching' |
| c.     | kaande 'sell'      | a-nkaande 'merchant'             |
| d.     | tiitio 'be first'  | ntiitio 'beginning'              |

### 5.3 Genitives

#### 5.3.1 Genitive pronouns

The Balanta genitive pronouns are listed in Table 5.1:

TABLE 5.1. GENITIVE PRONOUNS.

|   | Singular | Plural        |
|---|----------|---------------|
| 1 | hinda    | mbán, mbánj   |
| 2 | (i)dma   | mbàa          |
| 3 | hilli    | mbogi, mbaama |

With at least one noun, the first person singular genitive pronoun surfaces as *finda*: *kɔ finda* 'my head'. (Quintino 1947 reports that the first person genitive pronoun in the Balanta dialect spoken in Jabadá, Guinea Bissau is *uĩdâ*, *fĩdâ*.) Likewise, *ndilli* is often used for the third person singular genitive pronoun, as in *fafa ndilli* 'his/her father'. The alternate *fafa hilli* is equally acceptable.

Notice that the first person and second person plural forms *mbán*, *mbánj* and *mbàa*, as well as the second third person plural form listed, *mbaama*, are derived forms. They consist of a genitive particle /-m, -n, -ŋ/ (cf. 5.3.2) plus the freestanding pronouns *báan*, *bàa*, and *baama* (cf. Table 2.2). The third person plural form *mbogi* is also derived, this time from the genitive particle plus the class two proximal demonstrative *bogi* (cf. Table 5.2).

Of all the categories in (1), genitive pronouns are most restricted with respect to their surface position: they invariably follow the noun (4), and may not be separated from it by any other material (5-7):

- (4) a. bi- biti mbogi  
 CL2-dog 3PL.POSS  
 'their dogs'
- b. \* mbogi bi- biti  
 3PL.POSS CL2-dog
- (5) a. anin hilli ubontfε  
 wife 3SG.POSS pretty  
 'his pretty wife'
- b. \* anin ubontfε hilli  
 wife pretty 3SG.POSS
- (6) a. bi- mbuta hinda bi- nduba  
 CL2- child 1SG.POSS CL2- all  
 'all my children'
- b. \* bi- mbuta bi- nduba hinda  
 CL2- child CL2- all 1SG.POSS
- (7) a. biti hilli hɔ  
 dog 3SG.POSS this  
 'This dog of his'
- b. \* biti hɔ hilli  
 dog this 3SG.POSS

Genitive pronouns are enclitics, as seen by both their syntactic and phonological behavior. We see in (8-9) that they may not be conjoined or stand on their own:

- (8) \* biti hinda ngi hilli  
 dog 1SG.POSS with 3SG.POSS  
 'his and my dog'

(9) \* hinda

1SG.POSS

'mine' (in response to question 'whose dog is this?')

Furthermore, they participate in the phonological process of /h/- elision, which applies only within prosodic words, as shown below. This results in variation in the surface form of the first and third singular genitive pronouns depending on the final segment of the preceding noun. If the preceding noun ends in a sonorant or fricative, the initial /h/ of /hinda/ 'my' and /hilli/ 'his, her' are elided:

- (10) a. /anin + hinda/ → [ani.nin.da]  
 wife 1SG.POSS  
 'my wife'
- b. /diin + hilli/ → [dii.nil.li]  
 breast(s) 3SG.POSS  
 'her breasts'
- c. /tʃif + hilli/ → [tʃi.fil.li]  
 hand 3SG.POSS  
 'his, her hand'

If the word preceding /hinda/ or /hilli/ ends in a vowel or stop, their initial /h/ is preserved:<sup>1</sup>

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<sup>1</sup> In the case of vowels, this is probably due to an overall dispreference for hiatus in the language. We might speculate that stops pattern against sonorants and fricatives in not eliding because sonorants and fricatives are produced with an egressive airflow, like /h/, and that /h/-deletion occurs only when the two consonants agree in glottal gestures. Phonetic studies would have to be conducted to confirm this, and it would be helpful to know whether final stops in Ganja are released.



- (11) a. /mbuta + hinda/ → [mbu.ta.hin.da]  
 child 1SG.POSS  
 'my child'
- b. /mbarimuso + hilli/ → [mba.ri.mu.so.hil.li]  
 sister 3SG.POSS  
 'his, her sister'
- c. /biti + hilli/ → [bi.ti.hil.li]  
 dog 3SG.POSS  
 'his, her dog'
- d. /kit + hinda/ → [kit.hin.da]  
 eyes + 1SG.POSS  
 'my eyes'

This elision rule can be characterized as an 'internal sandhi rule', since it occurs only within phonological words. The same rule operates, for example, between the first person singular subject affix /n-/ and /h/-initial verb roots, like *hubut* 'open':

- (12) /n-hubut/ → [nubut]  
 'I open'

Furthermore, the elision rule fails to operate between independent words; forms like *hembe* 'that (distal pres.)' or *hubut* 'open' (unprefixed form) never surface without their initial /h/:

- (13) a. anin [hembe], \*[aninembe]  
 'that woman'
- b. anin [hubut] palanter ma, \*[aninubut]  
 'A woman opened the window'

The operation of an internal sandhi rule between a noun and genitive pronoun indicates that the genitive pronoun is incorporated into the prosodic structure of the noun, and thus should be characterized as a clitic (Zwicky 1985: 286).

### 5.3.2 Genitive phrases

Non-pronominal possessors are preceded by the genitive particle *na*:

- (14) a. a- hodi na Sadio  
 LOC- room GEN Sadio  
 'in Sadio's room'
- b. a- de na a- ful ma  
 CL1- one.who.bears GEN CL1- girl DEF  
 'the girl's mother'

Note that *na* does not agree with either the regent or possessor, as such particles often do. For example, the Jóola Foñy genitive particle *Cati~Ceti* agrees with the regent in noun class (Sapir 1965: 76):<sup>2</sup>

- (15) ku- nin- ək k- ati e- suk- ey  
 CL2- man-DEF2 CL2-GEN CL3- village- DEF3  
 'the men of the village'

The genitive particle *na* must be differentiated from the linking particle *-n*, *-m*, or *-ŋ* that is used to create compound nouns, as seen in the pairs below:

---

<sup>2</sup> The Atlantic languages Temne, Landuma, and Biafada are similar to Jóola Foñy in this respect. In Nalu, the genitive particle agrees with the possessor (Wilson 1989: 99).

- (16) a. a- dzala- m balá  
 CL1- griot- LINK balafon  
 'balafon griot' (parallel to English *piano player*)
- b. a- dzala na balá  
 CL1- griot GEN balafon  
 'the balafon's griot' (semantically odd)
- (17) a. ɲireɛ- m balá  
 dance- LINK balafon  
 'balafon dance'  
 (i.e., a dance where balafon music is played)
- b. ɲire na balá  
 dance GEN balafon  
 'dance of the balafon'  
 (if this existed, it would be a particular dance that was done  
 when the balafon was played)
- (18) a. a- giti- ɲ suum ma  
 CL1- front- LINK battle DEF  
 'the one who is in front of the battle'
- b. a- giti na suum ma  
 CL1- front GEN battle DEF  
 'chief of the battle'

These compounds are given an analysis in the next chapter. Two more examples, which have no *na* counterparts, are given below:

- (19) a. fintfi- ɲ taa  
 leg- LINK wood  
 'wooden leg'

- b. kit- ij ver  
 eye- LINK glass  
 'glass eye'

As illustrated above in (5-6), genitive pronouns must appear adjacent to the head noun. Genitive phrases obey no such constraint, as seen in the examples below:

- (20) a. anin ubontʃe na Sadio  
 wife pretty GEN Sadio  
 'Sadio's pretty wife'
- b. anin na Sadio ubontʃe  
 wife GEN Sadio pretty  
 'Sadio's pretty wife'
- (21) a. oto na Mariama uhaame  
 car GEN Mariama new  
 'Mariama's new car'
- b. oto uhaame na Mariama  
 car new GEN Mariama  
 'Mariama's new car'
- (22) a. biti hɔ na Sadio  
 dog this GEN Sadio  
 'This dog of Sadio's'
- b. biti na Sadio hɔ  
 dog GEN Sadio this  
 'This dog of Sadio's'

## 5.4 Adjectives, Demonstratives, and Numerals

### 5.4.1 Adjectives

Some examples of Balanta adjectives are given in (23):

(23) *Balanta adjectives*

|                |                   |                 |                   |
|----------------|-------------------|-----------------|-------------------|
| <i>-bɔntʃɛ</i> | 'beautiful, nice' | <i>-ndaŋ</i>    | 'big, great, old' |
| <i>bulu</i>    | 'blue'            | <i>-numalɛ</i>  | 'busy'            |
| <i>-duulu</i>  | 'small'           | <i>-ɲuw</i>     | 'hot'             |
| <i>-fudɛ</i>   | 'tall'            | <i>-raalɛ</i>   | 'angry'           |
| <i>-haamɛ</i>  | 'new'             | <i>-samba</i>   | 'red'             |
| <i>-hii</i>    | 'white'           | <i>-sirɛ</i>    | 'smart, clever'   |
| <i>-lɔrɛ</i>   | 'dirty'           | <i>-sɔɔntʃɛ</i> | 'thin, slender'   |
| <i>-mɔɔnɛ</i>  | 'black'           | <i>-tfoolɛ</i>  | 'cold, cool'      |
| <i>-ɲanɛ</i>   | 'clean'           |                 |                   |

Most have verbal counterparts:

(24) *Some Balanta adjectives with their corresponding verbs*

|                |                   |                |                         |
|----------------|-------------------|----------------|-------------------------|
| <i>-bɔntʃɛ</i> | 'beautiful, nice' | <i>-bɔntʃu</i> | 'be beautiful, be nice' |
| <i>-haamɛ</i>  | 'new'             | <i>-haam</i>   | 'be new'                |
| <i>-sirɛ</i>   | 'smart, clever'   | <i>-sir</i>    | 'be smart, be clever'   |
| <i>-tfoolɛ</i> | 'cold, cool'      | <i>-tfoolu</i> | 'be cold, be cool'      |

More examples can be found in the Ganja-English lexicon in Appendix 3.

Note that adjectives are derived by attaching /-ɛ/ to the final consonant of the stem.

### 5.4.2 Demonstratives

Demonstratives in Balanta fall into two main classes, proximal and distal, as seen in Table 5.2 below. The proximal demonstratives, which

may be simple or emphatic, are used to express 'this' or 'that' when the person or object in question is close by. The distal demonstratives are used to refer to people or objects that are far away but in view, or that are absent altogether. Demonstratives labeled here as Past 1 (*Cε*) are used to refer to deceased people and objects which are no longer known to exist, as well as to characters in legends such as "Mali" (see Appendix 2). The demonstratives labeled "Distant, Past 2" (*Cεmbe*) are used to refer to distant or absent people or objects, as well as to situate a temporal word such as *vlej* 'day' or *res* 'year' in the past.

Kryk (1990) points out that while languages may differ in the number of distinctions they make among demonstratives, the basic opposition of proximal vs. distal remains stable. What's more, proximal vs. distal can be defined with reference to a personal 'zero-point' (i.e., 'I'), a spatial 'zero-point' (i.e., 'here') or a temporal 'zero-point' (i.e., 'now') (Bühler 1982: 10). For example, when we say, *I'll never forget that day*, it is clear that we are referring to a day in the past, whereas if we say, *I'll never forget this day*, 'this' is interpreted as the present. The same holds true for other languages, including German and French. So the Balanta temporal demonstratives, while unusual, are not without precedent.<sup>3</sup>

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<sup>3</sup> The proximal-present and distal-past correspondences seen in the contrast between 'this day' and 'that day' are reflected in language change as well. Schuh (1983) argues that tensed copular particles in Kilba, a Chadic language spoken in Nigeria, are etymologically derived from demonstratives. The original proximal-distal opposition has been reanalyzed for the copula as present-past. Gildea (1993) reports the same type of diachronic development for Panare, a Cariban language spoken in Venezuela. There the proximal demonstrative 'this' has been reanalyzed as a present or immediate future auxiliary; the distal demonstrative 'that' has been reinterpreted as a past (or rarely, distant future) auxiliary.

TABLE 5.2. DEMONSTRATIVES.

|                    | CL1     | CL2                    | CL3   | CL4   | CL5   | CL6     |
|--------------------|---------|------------------------|-------|-------|-------|---------|
| <b>Prox.</b>       |         |                        |       |       |       |         |
| Sim.               | hɔ      | a. bɔ, bɔgi            | bɔ    | gɔ    | fɔ    | wɔ      |
| Emph.              | hɔmmu   | a. bombɔgi<br>b. wɔmmu | bɔmmu | —     | fɔmmu | wɔmmu   |
| <b>Dist.</b>       |         |                        |       |       |       |         |
| Past 1             | hɛ      | bɛge                   | bɛ    | gɛ    | fɛ    | wɛ      |
| Distant;<br>Past 2 | hɛmbɛ   | a. bɛmbɛ<br>b. wɛmbɛ   | bɛmbɛ | gɛmbɛ | fɛmbɛ | wɛmbɛ   |
| Emph.              | hɛmbele | —                      | —     | —     | —     | wɛmbele |

The system illustrated in Table 5.2 is simplified compared to that described by N'Diaye-Corréard (1970: 34), in which there is a distinction between nearby ('this'), distant, but in view ('that'), and absent ('that X not in view'), and simple and emphatic forms for all types.

In my consultant's speech, agreement between nouns and demonstratives for noun class is inconsistent. (As discussed in section 2.2.2, the same is true for pronouns.) Because of the number of Balanta demonstrative types and the inconsistencies in noun class, I have provided many examples below. They are grouped by the noun's singular class.

In the first set of examples, we see demonstrative use with human (class 1) nouns. Here, class 1 demonstratives are used very consistently:

- (25) a. mɔ̃ baŋ- katfa wil na a- dzala-m bala  
 today 1PL.SUB- chat thing GEN CL1- griot- GEN balafon  
 a- dzal hɔ̃ gio a- ndzanga ŋgi  
 CL1- griot CL1.PROX COP.PAST LOC- affair with  
 a- nin- iŋ hal  
 CL1- woman- GEN person  
 'Today we are going to talk about the story of the balafon griot  
 . . . this griot was having an affair with another man's wife'
- b. hal hɛmbe, mbole a- n- loode  
 man CL1.DIST.PRES perhaps 1SG.SUB- IMPF-die  
 'That man (who we see from afar, or who is absent), maybe  
 he'll die (soon)'
- c. ma hɛ naŋu  
 CONS CL1.DIST.PAST accept  
 'And she accepted'
- d. bɔ̃gi mada to a- ntfigne  
 CL2.PROX be.able go LOC- fields  
 'Those ones can go to the fields' (speaker is pointing at them)
- e. bi- hal bɔ̃ mada jir bala  
 CL2- person CL2.PROX be.able dance balafon  
 'These people know how to dance the balafon'
- f. bi- dzala wɔ̃mmu n- to fomte  
 CL2-griot CL2.PROX.EMPH IMPF-go eat  
 'Those griots are going to eat'



g. bi- jaŋ bombɔgi mada jir bala  
 CL2- people CL2.PROX.EMPH be.able dance balafon

'Those people over there know how to dance the balafon'

We next see examples of class 3 nouns. Class 3 demonstratives, like those of class 1, are used consistently, although for some nouns my consultant has said that another demonstrative would have been acceptable, if not as good (e.g., *sin bɛmbɛ* (CL3), *gɛmbɛ* (CL4), *fɛmbɛ* (CL5)). But note the use of an originally class 5 pronoun (cf. N'Diaye-Corréard 1970) in (26c). Class 5 pronouns appear to be the default in my consultant's dialect, and they are very frequently used with nouns from other classes, whether singular or plural:

(26) a. sin bɔ mada to a- loptan  
 road CL3.PROX be.able go LOC- hospital

'This road goes to the hospital'

b. suufi bɔ mada wom lufi  
 food CL3.PROX be.able eat today

'This food can be eaten today'

c. ndundugi bɔ, u- mada fi tum a- jire  
 tunic CL3.PROX 2SG-be.able CL5.it put LOC- dance

'This tunic, you can wear it during the dance'

d. n- det- ed a- sin bɛ sɔ  
 1SG.SUB- run- APP LOC- road CL3.DIST.PAST yesterday

'I ran along that road (that we used to take when we were children) yesterday'

- e. **bàa- mada tum bi- ndundugi bembɛ a- jirɛ**  
 2PL- be.able put CL2- tunic CL3.DIST.PRES LOC- dance  
 ‘You can wear those tunics (distant or not in view) at the dance’

In (27) I have provided examples of class 4 nouns. Note that one of these, *gəbɛɛ* ‘calabash’, is used with a class 4 demonstrative in (27d), and a class 2 demonstrative in (27e). In the dialect described by N’Diaye-Corréard, a class 4 demonstrative could be used only with a singular noun, since it is a singular class. In the dialect being described here, singular demonstratives are beginning to be used with plural nouns, so a class 4 singular noun may also be used as class 4 in the plural:

- (27) a. **gə far gɔ bɔntfu**  
 CL4- kerchief CL4.PROX be.beautiful  
 ‘This head kerchief is pretty’
- b. **a- g- loode gɔ bi- jaŋ ma jobu hedma**  
 LOC- CL4-death CL4.PROX CL2-people DEF be.many there  
 ‘At that death there were a lot of people’
- c. **gə beɛ gembɛ, num fi a- gbaale**  
 CL4- calabash CL4.DIST.PRES bring CL5.IT LOC- house  
 ‘That calabash (far or out of view), bring it to the house’
- d. **bi- beɛ gembɛ, num- baa a- gbaale**  
 CL2- calabash CL4.DIST.PRES bring-3PL.OBJ LOC- house  
 ‘Those calabashes (far or out of view), bring them to the house’

- e. ja- ti- ni bi- beɛ bɛmbɛ  
 give- DIR- 1SG.OBJ CL2- calabash CL2.DIST.PRES  
 'Give me those calabashes over there' (they are far away or not  
 in view)

Class 5 nouns are given in (28):

- (28) a. vlej fɛmbɛ  
 day CL5.DIST  
 'That day' (in the past)
- b. bi- jaŋ bɔtʃi fɛmbɛ nduba tu rɛŋu.  
 CL2-people village CL5.DIST.PRES all all meet  
 'The people of that village got together'

And finally, class 6 nouns are used with demonstratives in (29).

Note the use of a class 1 demonstrative in (29a).

- (29) a. bi- jaŋ bə- tʃima hur wil hɛmbɛ  
 CL2-people CL2-village know thing CL1.DIST.PRES  
 'The people of the village knew about that thing (ongoing  
 incestuous pregnancy)'
- b. baa bi- bajnuŋka dʒandi dunia wɔmmu sowlu  
 2PL CL2- Bainouk before world CL6.PROX.EMPHfinish  
 ba- tiŋ gitilu mansake  
 2PL.SUB- NEG.IMPF have king  
 'You, the Bainouks, you will have no king before this world  
 ends'

- c. jaara a- wil wembe bi- gio kegin  
 then LOC- thing CL6.DIST.PRES 3PL.SUB- COP.PAST look.for  
 fæere sam bi- dogu  
 plan for 3PL.SUB- flee  
 'So during this affair, they were looking for a way to run off  
 together'

With the demonstratives, we can also mention the forms *-hondi* 'a certain' and *-ɔlla* 'one, a certain', shown below:

- (30) ma bæb jaa- baa hal a- hondi binti gɛ ando  
 CONS 3PL tell- 3PL.OBJ person CL1- certain come PAST here  
 'Then they told them, "A certain man came here"'

- (31) ma vlej f- ɔlla paaj ma gitilu Maarungu  
 CONS day CL5- one event DEF happen Maarungu  
 'And one day, an event was held in Maarungu'

### 5.4.3 Question words

In Table 5.3 I provide the Balanta interrogative adjectives meaning 'which?':

TABLE 5.3. INTERROGATIVE ADJECTIVES.

| CL1  | CL2  | CL4  | CL3, 5 | CL6  |
|------|------|------|--------|------|
| hila | hila | gila | fila   | wila |

They generally come at the end of the noun phrase:

- (32) a. *joomu samba fila u- tumlu a- jir*  
 loincloth red CL5.which 2SG-put.on LOC- dance  
 'Which red loincloth did you wear to the dance?'
- b. *biti mɔɔnɛ fila tʃed samte ma*  
 dog black CL5.which take shoe(s) DEF  
 'Which black dog took the shoes?'

#### 5.4.4 Numerals

The Balanta numerals are given in Table 5.4 for the Ganja dialect under study here, as well as the Ganja dialect described by N'Diaye-Corréard (1970), and the Kentohe dialect described by Wilson (1961a). The reader might also wish to refer to the lists in Quintino (1947: 736-8) and Tastevin (1963: 12-15). Those stems preceded by a hyphen take noun class prefixes. I have maintained the orthography of the original sources; forms in parentheses have been extrapolated from reported information:

TABLE 5.4. BALANTA NUMERALS.

|   | Ganja         | Ganja (N-C 1970) | Kentohe               |
|---|---------------|------------------|-----------------------|
| 1 | -wɔɔda        | -wɔɔdā           | -ɔɔɔn, -ɔɔdi', -ɔɔda' |
| 2 | -sibi         | -seebēe          | -sebm                 |
| 3 | -jaabi        | -yaabīi          | -habm, -hɔbm          |
| 4 | -tala         | -tahlā           | -tahəla               |
| 5 | -tʃiif        | jéef             | -cef                  |
| 6 | faatʃ         | fáaj             | -cef kə -ɔɔɔn         |
| 7 | faatʃ n'gɔɔda | fáaj nɔɔ -wɔɔdā  | -cef kə -sebm         |

TABLE 5.4. BALANTA NUMERALS (CONTINUED).

|     | < faatfi ŋgi wɔda      |                           |                                           |
|-----|------------------------|---------------------------|-------------------------------------------|
| 8   | faatfi ŋgi sibi        | (fáaj ngə -seebēe)        | -cef kə -habm                             |
| 9   | tʃim tala              |                           | -cef kə -tahəla                           |
| 10  | tʃimin                 | -jīnmīnn                  | fcef meen                                 |
| 11  | tʃimin ŋgi wɔda        | -jīnmīnn ngə fɔdā         | fcef meen kə -ɔɔdn                        |
| 20  | tʃimin sibi            | -jīnmīnn sebēe            | msaw ŋ hal                                |
| 30  | tʃimin jaabi           | -jīnmīnn habīi            | msaw ŋ hal kə fcef<br>meen                |
| 40  | tʃimin tala            | -jīnmīnn tahlā            | msaw m bənyaŋ<br>bəsebm                   |
| 50  | tʃimin tʃiif           | -jīnmīnn jéef             | msaw m bənyaŋ<br>bəsebm kə fcef<br>meen   |
| 60  | tʃimin faatf           | -jīnmīnn fáaj             | msaw m bənyaŋ<br>bəhabm                   |
| 70  | tʃimin faatf n'wɔda    | -jīnmīnn fáaj ngə<br>wɔdā | msaw m bənyaŋ<br>bəhabm kə fcef<br>meen   |
| 80  | tʃimin faatfi ŋgi sibi | -jīnmīnn tāntahlā         | msaw m bənyaŋ<br>bətahəla                 |
| 90  | tʃimin tʃim tala       | -jīnmīnn jīntahlā         | msaw m bənyaŋ<br>bətahəla kə fcef<br>meen |
| 100 | keme                   | gemē                      | msaw m bənyaŋ<br>bəcef                    |

TABLE 5.4 BALANTA NUMERALS (CONTINUED).

|      |                      |  |                                  |
|------|----------------------|--|----------------------------------|
| 120  | keme ŋgi tʃimin sibi |  | msaw m banyaj<br>bæcef kə hɔɔdn  |
| 140  | keme ŋgi tʃimin tala |  | msaw m banyaj<br>bæcef kə bæsebm |
| 200  | keme sibi            |  | msaw m banyaj fcef<br>meen       |
| 1000 | wil, wil wɔda        |  | fkontu fɔɔdn                     |
| 2000 | wil sibi             |  | kkontu ksebm                     |

The etymologies of the numbers are quite interesting. The word for 'five' appears to be derived from the word for 'hand', though in the Ganja dialect they differ in vowel length (*tʃiif* 'five', *tʃif* 'hand'). The word for 'ten' in Kentohe is literally 'hands all', i.e., 'both hands', which must also be the origin of the Ganja forms (cf. Sousa Bella 1946: 736, Quintino 1961: 766). 'Eleven' is literally 'all hands with one'. In the Jabadá dialect, the word for 'fifteen' is 'two hands and foot', *txif çim ku fodâ*. 'Twenty' in the Kentohe dialect appears to have something to do with 'person', *hal*, though I do not know the translation of *msaw*. Sousa Bella reports the forms *al odâ* and *çaua* for 'twenty' in the Jabadá dialect, literally 'one person' or 'all person'.

#### 5.4.5 The order of modifiers

Above it was shown that nouns in Balanta precede all modifiers (1). Note that the ordering of adjectives, numerals, and demonstratives is free (33b-e):

- (33) a. biti ma undaŋ umɔɔne  
 dog DEF big black  
 'The big black dog'
- b. bi- biti bi- sibi bi- ndaŋ  
 CL2- dog CL2- two CL2- big  
 'two big dogs'
- c. bi- biti bi- ndaŋ bi- sibi  
 CL2- dog CL2-big CL2- two  
 'two big dogs'
- d. ntʃiitʃi ho a- bɔntʃe  
 grandchild CL1.that CL1- beautiful  
 'that pretty/handsome grandchild'
- e. ntʃiitʃi a- bɔntʃe ho  
 grandchild CL1- beautiful CL1.that  
 'that pretty/handsome grandchild'

## 5.5 Conclusion

This chapter has provided a descriptive look at the Balanta noun phrase. In the next chapter I delve more deeply into the data presented here and related facts, focusing on how we might account for the distribution of genitive pronouns and phrases and the properties of compound nouns.



## Chapter 6

### Noun Phrase Structure

I begin this chapter by showing in section 6.1 that Balanta nouns raise overtly to  $D^\circ$ , as has been argued for nouns in many other languages. I next turn to the expression of possessors, agents, and themes in the noun phrase and propose an account of genitive pronouns and phrases in section 6.2. I show that Balanta genitive pronouns and genitive phrases exhibit different distributional properties and relate this to their ability or inability to undergo overt movement. I further argue that genitive case licensing involves multiple-feature-checking (cf. Ura 1994, 1996; Chomsky 1995; Collins 1995). In section 6.3 I address Balanta compounds, comparing them to Bantu synthetic compounds. I argue that Balanta synthetic compounds have a phrasal structure similar to that proposed by Carstens (1991) and Kinyalolo (1991) for Bantu, while Balanta root compounds do not. Finally, in section 6.4 I briefly consider the syntactic position of adjectives, demonstratives, and numerals.

Throughout this chapter, I build on certain basic assumptions that I believe are well motivated on empirical and theoretical grounds. The first is that noun phrases consist of at least three separate maximal projections, in ascending order: NP, NumP (independently proposed by Carstens 1991 and Ritter 1991), and DP (Abney 1986, 1987). Second, arguments of the noun are projected in DP just as arguments of the verb are in clauses

(Cinque 1980, Sportiche 1990, Giorgi and Longobardi 1991). Third, noun movement in the DP parallels verb movement in the clause.

### 6.1 N° Raises to D° in the Overt Syntax

As we saw in chapter 5, nouns in Balanta precede all modifiers:

(1) a. *Possessive pronouns*

biti hilli  
dog 3SG.POSS  
'his dog'

b. *Genitive Phrases*

biti na Sadio  
dog GEN Sadio  
'Sadio's dog'

c. *Demonstratives*

biti hɔ  
dog this  
'this dog'

d. *Adjectives*

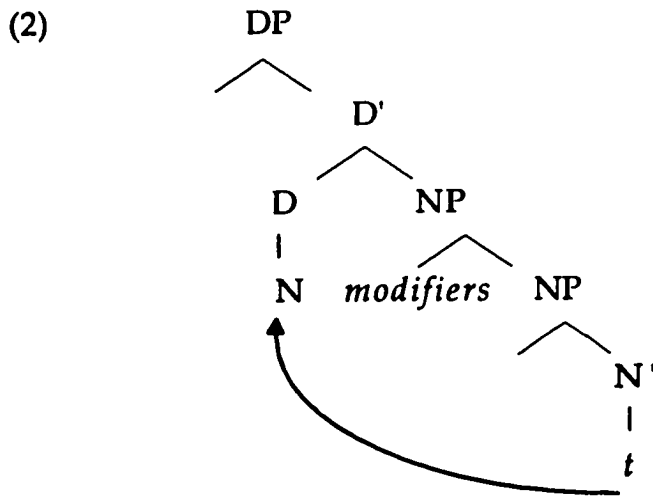
biti umɔɔne  
dog black  
'a black dog'

e. *Numerals*

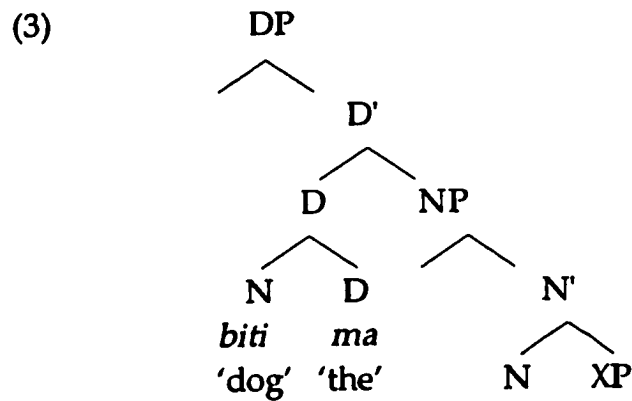
bi- biti bi- sibi  
CL2- dog CL2- two  
'two dogs'

- f. *wh-words*  
 biti hila?  
 dog which  
 'which dog?'
- g. *definite determiner*  
 biti ma  
 dog the  
 'the dog'

The observation that nouns precede their modifiers is easily explained under two of the assumptions laid out above. The first is that noun phrases are embedded within the functional projection DP, which parallels CP in clauses (Abney 1986, 1987; Szabolcsi 1987, 1989). The second is that noun movement parallels verb movement. More specifically, it has been argued that nouns must raise from N° to D° over the course of the derivation: see Guilfoyle (1988) for Irish; Ritter (1988, 1991), Sioni (1991, 1996) and Duffield (1996) for Hebrew; Duffield (1996) for Maltese; Mohammad (1988), Ouhalla (1988), and Fassi Fehri (1993) for Arabic; Taraldsen (1990) for Norwegian; Longobardi (1994) for Western Romance; Carstens (1991) for Swahili; and Carstens (1997) for Chichewa. Assuming for the moment that adjectives, demonstratives, *wh*-words, and possessors are generated somewhere below the DP, a position that will be made more precise below, if Balanta nouns are required to raise to D° prior to Spell-out, they will also be required to precede these other categories. For convenience, I have shown them here to be adjoined to NP:



When  $D^{\circ}$  is filled with the definite determiner *ma*, as in (3), the noun adjoins to it. This accounts for the order NOUN DEF:



'the dog'

## 6.2 Possessors, Agents, and Themes

In Balanta, genitive pronouns and genitive phrases obey different co-occurrence restrictions with respect to definite articles and genitive phrases. As we see in (4), co-occurrence of a genitive pronoun and a genitive phrase is possible within a single noun phrase (4a), but co-occurrence of two genitive phrases is impossible (4b-c). I consider the

particle *na* that introduces genitive phrases to be the realization of genitive case, as Chomsky (1995: 114) suggests for *of* in English. There are other possibilities, but they are not important for our present purposes:

- (4) a. wote mbogi na president ma  
 election 3PL.POSS GEN president DEF  
 'their election of the president'
- b. \*wote na botji ma na president ma  
 election GEN people DEF GEN president DEF  
 'The people's election of the president'
- c. \*wote na president ma na botji ma

The examples in (5) show that while a phrasal genitive may co-occur with a definite article, a genitive pronoun may not (an apparent exception is addressed in section 8.2):

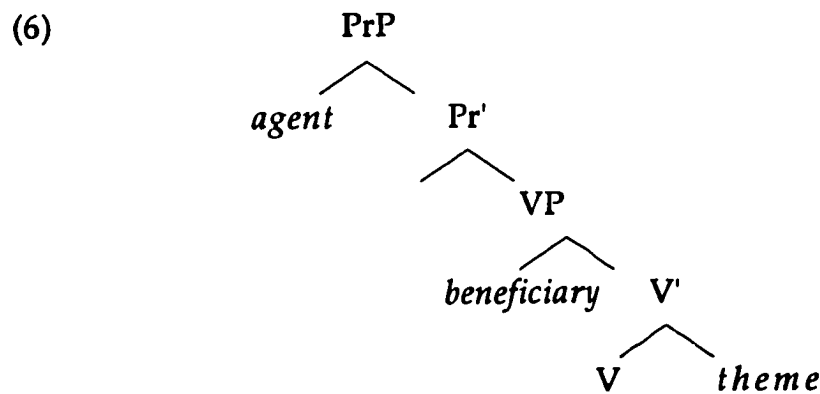
- (5) a. gbaale ma na Mariama  
 house DEF GEN Mariama  
 'Mariama's house'
- b. \*gbaale ma hilli  
 house DEF 3SG.POSS  
 'her house'
- c. \*gbaale hilli ma  
 house 3SG.POSS DEF

In this section I argue that these facts suggest that genitive pronouns and genitive phrases are located in different positions in the Spell-out representation. While both originate in specifier positions, genitive pronouns are required to raise overtly to a head position. In Balanta this position is  $D^{\circ}$ . Genitive phrases, on the other hand, raise at LF to [Spec,

DP]. This analysis relies on the theory of multiple feature checking developed by Ura (1994, 1996), Chomsky (1995), and Collins (1995).

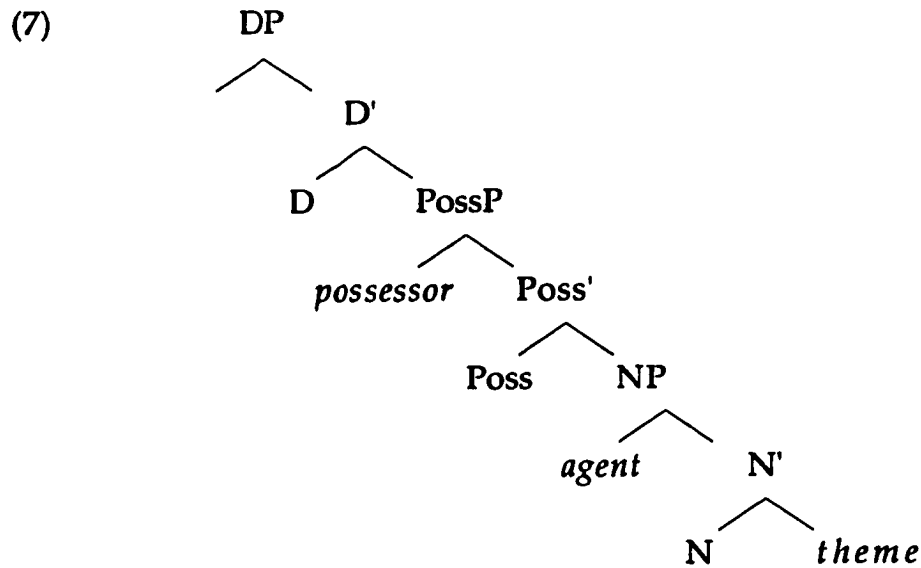
### 6.2.1 *The hierarchical syntax of genitives*

Elaborating upon observed parallels between verbs and nouns (Chomsky 1970, Cinque 1980), a number of linguists, including Sportiche (1990), Giorgi and Longobardi (1991), and Valois (1991), have proposed that arguments in the noun phrase are systematically mapped into hierarchical structures like their counterparts in the verb phrase. In chapters 3 and 4, it was argued that transitive verb phrases have the structure in (6):



Assuming that DP and CP are parallel (Abney 1986, 1987; Szabolcsi 1987, 1989; Sioni 1990), we might predict that the structure of the noun phrase is as follows, with both the agent and possessor generated in specifier positions and the theme as sister to the verb (Valois 1991). While strict parallelism between DP and CP would require us to generate agents of deverbal nouns in a functional projection corresponding to PrP, I have no

evidence for such a projection, and for expository simplicity have left it out:<sup>1</sup>



The structure above predicts asymmetrical c-command relationships between the three types of arguments in the DP, all of which are well attested (cf. Cinque 1980, Giorgi and Longobardi 1991, Valois 1991, Carstens 1991, Siloni 1996 *inter alia*). First, as the following examples from Valois (1991: 18-19) show, possessors bind agents and themes, and agents bind themes (I have modified some of the glosses). Valois uses the (c) examples to show that the surface order of the complements is irrelevant, as long as the quantificational phrase is within the higher DP:

---

<sup>1</sup> There is evidence for a fourth projection in the DP, NumP (Carstens 1991, Ritter 1991). I have chosen not to place possessors in [Spec, NumP] because of a lack of semantic connection between number and possession. On PossP, see Valois (1991).

(8) *Possessor binds agent*

- a. Le portrait de chaque
- <sub>i</sub>
- collectionneur de son
- <sub>i</sub>
- artiste favori

*possessor agent*

'Each collector's portrait by his favorite artist'

- b. \* Le portrait de son
- <sub>i</sub>
- mécène de chaque
- <sub>i</sub>
- artiste favori

*possessor agent*

'His benefactor's portrait by each favorite artist'

- c. Le portrait de son
- <sub>i</sub>
- artiste favori de chaque
- <sub>i</sub>
- collectionneur

*agent possessor*

'His favorite artist's portrait of each collector'

(9) *Possessor binds theme*

- a. La photo de chaque
- <sub>i</sub>
- partisan des Canadiens de son
- <sub>i</sub>
- joueur favori

*possessor theme*

'Each Canadiens fan's picture of his favorite player'

- b. \* La photo de son
- <sub>i</sub>
- instructeur de chaque
- <sub>i</sub>
- joueur favori

*possessor theme*

'His coach's picture of each favorite player'

- c. La photo de son
- <sub>i</sub>
- joueur de chaque
- <sub>i</sub>
- partisan des Canadiens

*theme possessor*

'Each Canadiens fan's photo of his favorite player'

(10) *Agent binds theme*

- a. La maquette de chaque
- <sub>i</sub>
- architecte de son
- <sub>i</sub>
- édifice préféré

*agent theme*

'Each architect's scale model of his favorite building'





(13) *Theme not extractable in presence of agent*

- a. La photo de ce photographe du Louvre

*agent*                      *theme*

‘This photographer’s picture of the Louvre’

- b. \* Le musée dont je connais la photo de ce photographe

‘The museum of which I know this photographer’s picture’

- c. Le photographe dont je connais la photo du Louvre

‘The photographer of whom I know the picture of the Louvre’

Finally, the hierarchical arrangement of possessors, agents, and themes results in differences in pronominalization facts. As we see in (14), an agent may be pronominalized in the presence of a theme, but not vice versa, and a possessor may be pronominalized in the presence of an agent or theme, but not vice versa:

- (14) a. Her (agent) portrait of Morisot (theme)

- b. \* Her (theme) portrait of Morisot

- c. Her (possessor) portrait of Morisot('s) (theme or (agent))

- d. \* Her (agent or theme) portrait of this collector('s) (possessor)

In Balanta, a constraint on the co-occurrence of more than one phrasal possessor, to be discussed below, prevents us from testing binding and extraction facts in DP, but we do find the same results with respect to pronominalization:

- (15) a.
- Pronominalization of agent possible in presence of theme*

wote            mbogi    na        alama

election    3PL.POSS    GEN    king/president

‘Their (agent) election of a president (theme)’

- b. *Pronominalization of theme possible when neither agent or possessor is present*

wote            hilli  
 election        3SG.POSS  
 'his (theme) election'

- c. *Pronominalization of theme impossible in presence of agent*

wote        hilli        na        bɔtʃi        ma  
 election    3SG.POSS    GEN    village/people DEF

\* 'His (theme) election of the people('s) (agent)'

- d. *Pronominalization of possessor possible in presence of agent or theme*

portale    hilli        na        Mariama  
 photos    3SG.POSS    GEN    Mariama

'His/her (possessor) photos of/by Mariama (agent/theme)'

- e. *Pronominalization of agent or theme impossible in presence of possessor*

\* portale    hilli        na        Mariama  
 photos    3SG.POSS    GEN    Mariama

\* 'His/her/its (agent or theme) photos of Mariama (possessor)'

I next turn to how the structure in (7) can account for word order and distribution facts in Balanta noun phrases.

### 6.2.2 *Genitive pronouns*

We saw in the last chapter that genitive pronouns, which are enclitics, follow the noun in Balanta. To that we can add the observation

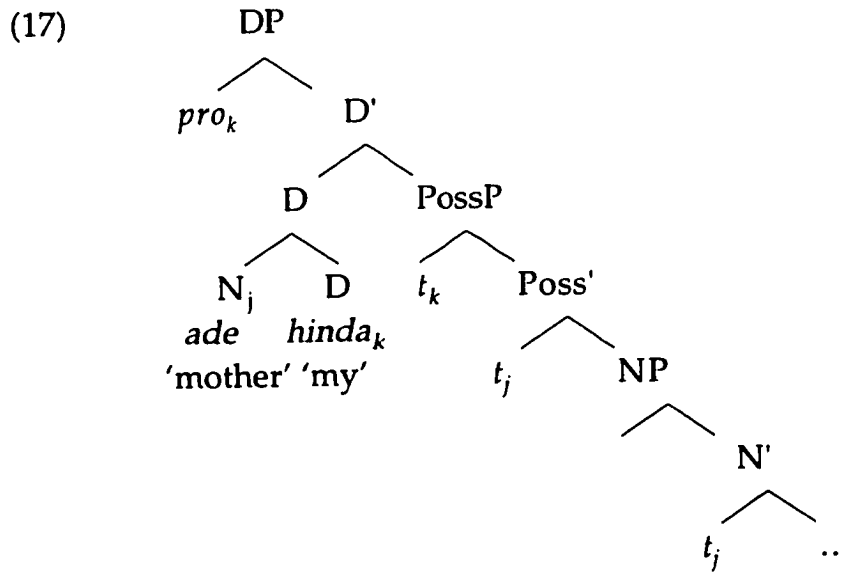
that under normal circumstances (an apparent exception will be addressed in section 8.2), they do not co-occur with determiners:

- (16) a. a- de hinda  
 CL1- mother 1SG.POSS  
 'my mother'
- b. \*a- de hinda ma (normally not occurring)  
 CL1- mother 1SG.POSS DEF
- c. \*a- de ma hinda (never grammatical)  
 CL1- mother DEF 1SG.POSS

Typically, genitive pronouns are analyzed as being required to raise from their base position to a higher position (see Carstens 1991, Valois 1991, Picallo 1994), an analysis that we could potentially follow here. Since genitive pronouns are incompatible with the definite article, we would have to say that they raise to  $D^{\circ}$ . There is a problem with this, however: it is unclear why the genitive pronoun could not simply adjoin to the definite article, yielding a structure like the following:  $*N + pron + def$ .<sup>2</sup> To avoid this, I propose instead that genitive pronouns are base-generated in  $D^{\circ}$ , to the exclusion of the definite article. They are co-indexed with a *pro* in the appropriate position ([Spec, PossP for possessors, [Spec, NP] for agents, and so on) that must raise overtly to [Spec, DP]. Likewise, the noun raises overtly and left adjoins to the genitive pronoun, as was proposed earlier in the chapter:

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<sup>2</sup> As noted above, we do find this in one context. Its analysis is presented in 8.2.



I propose, following Cardinaletti (1994), that the raising of *pro* to [Spec, DP] occurs prior to Spell-out. Cardinaletti claims that different types of pronouns have different syntactic structures. Weak and clitic pronouns contain only functional projections. Specifically, they have no lexical NP. Strong pronouns, on the other hand, do contain a lexical NP projection. Because weak and clitic pronouns consist solely of phi-features, they cannot be moved at LF, in accordance with the Minimalist Program. They must be raised prior to Spell-out, violating Procrastinate. Strong pronouns, on the other hand, do have lexical content, and may wait until LF to raise. We know that *pro*, like weak and clitic pronouns, also lacks lexical content. This means that it must raise prior to Spell-out, violating Procrastinate.<sup>3</sup>

### 6.2.3 Restrictions on multiple genitives in Balanta

Returning to the discussion above about the expression of possessors, agents, and themes in the noun phrase, it has been observed

<sup>3</sup> I thank V. Carstens for suggesting this analysis of weak pronouns to me.



(20) a. \* watju na alama na naamo  
 reduction GEN king GEN taxes  
 'The king's reduction of taxes'

b. \* watju na naamo na alama

These must be expressed periphrastically, as in (21) or (22):

(21) a. wote botji ma wotelu president ma  
 electionpeople DEF elect president DEF  
 'The people's election of the president'

b. watju alama watj naamo  
 reduction king reduce taxes  
 'The king's reduction of taxes'

(22) watju naamo, gina alama  
 reduction taxes that-of king  
 'reduction of taxes by the king'

The structure of these examples will be addressed in section 6.2.4.

These facts suggest that NPs with other types of multiple genitive phrases may also be impossible in Balanta. This prediction is borne out. While it is possible to say 'Sibow's pictures' or 'pictures of Dakar' (23a-b), it is not possible to say 'Sibow's pictures of Dakar' (23c-d):<sup>5</sup>

(23) a. portale na Sibow  
 picture(s) GEN Sibow  
 'Sibow's pictures' (or 'pictures of Sibow')

---

<sup>5</sup> I tentatively assume that *Sibow* and *Dakar* in (23) have no theta-roles because 'picture' is not a derived noun. I do not go into the analysis of such examples here.

- b.   portale       na     Dakar  
       pictures     GEN  Dakar  
       'pictures of Dakar'
- c.   \*portale na Sibow na Dakar
- d.   \*portale na Dakar na Sibow

Instead, the Balanta speaker expresses this periphrastically, as in (24):

- (24) m-       biifa   portale    Sibow jaa- ti     Dakar  
       1SG.SUB-see   pictures(s) Sibow make-PAST  Dakar  
       'I saw the pictures that Sibow took in Dakar'<sup>6</sup>

Before moving on to an analysis of these facts, we can point out that they illustrate the inherent difference between genitive pronouns and genitive phrases. If there were no difference, we would expect an across-the-board ban on multiple genitives, whether phrasal or pronominal. The distributional split between genitive pronouns and genitive phrases can be related to the requirement that genitive pronouns are generated in  $D^{\circ}$ .

My analysis rests on the theory of multiple feature checking, as developed in work by Ura (1994, 1996), Chomsky (1995), and Collins (1995). Ura (1994) relates the existence of multiple specifiers to multiple sets of formal features of a head, a suggestion that Collins (1995) applies to his account of serial verb constructions. In a modification of Ura's original proposal, Chomsky (1995) proposes that multiple specifiers of a head H can be attributed to the violability of Procrastinate. According to Chomsky, languages differ with respect to their tolerance of unforced violations of Procrastinate. Take a language that has a head H with a strong feature that

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<sup>6</sup> The locative prefix *a-* is not required with names of cities.



must be checked prior to Spell-out. If the language does not allow unforced violations of Procrastinate, then H will project a single specifier to which the checker of H's strong feature will be attracted, and the strong feature will be deleted and erased. This is because each application of Move that forms a new [Spec, HP] violates Procrastinate. If the language does allow unforced violations of Procrastinate, however, then, even if the strong feature is checked prior to Spell-out, it will not have to be erased. Another element will be able to be attracted to a specifier of H, as long as it also enters into a checking relation with H.

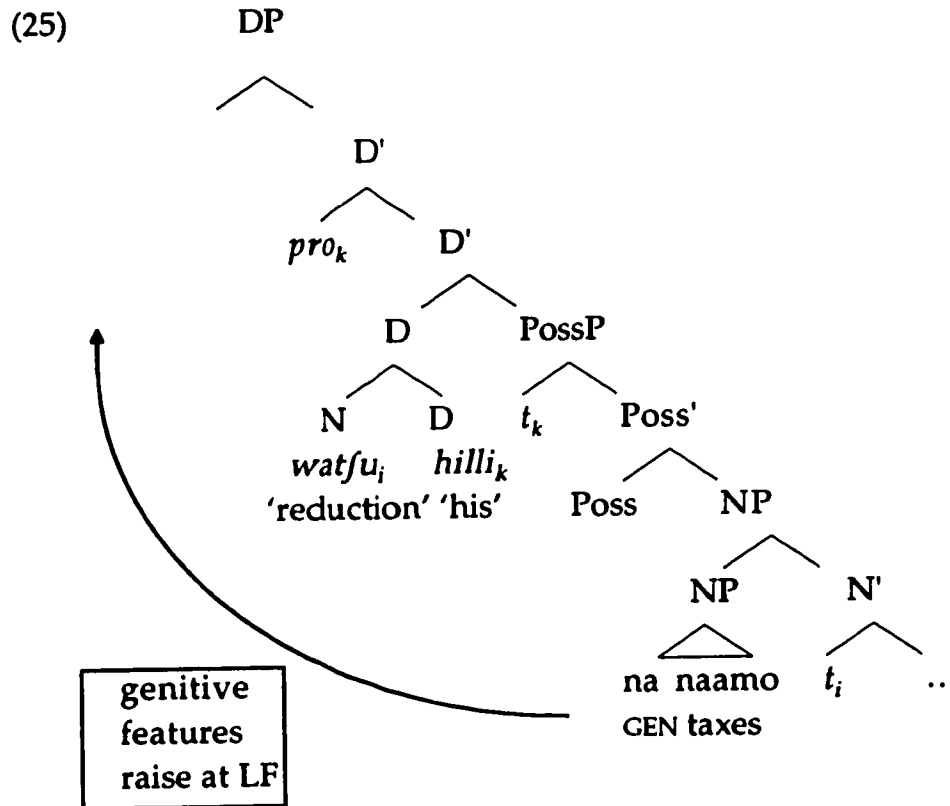
Returning to the Balanta data, note first that an association between genitive case and  $D^{\circ}$  has been established in the literature (see Abney 1987, who puts English 's in  $D^{\circ}$ ; Ritter 1991; Kayne 1994, ch. 8; Siloni 1996). A particularly striking case is Romanian, where genitive elements generally appear only after a definite article which is cliticized to the right edge of the noun. If for some reason this is not possible,<sup>7</sup> a genitive particle must appear instead. Grossu (1988) and Chitoran (1993) both see this as evidence that  $D^{\circ}$  licenses genitive case.

I propose that Balanta  $D^{\circ}$  has a [-interpretable] genitive feature. When *pro*, coindexed with the genitive pronoun in  $D^{\circ}$ , raises to [Spec, DP] (as explained in the preceding section), this genitive feature is checked and deleted, but not erased. This enables a genitive phrase to be attracted by the genitive feature to a new [Spec, DP] at LF. At this point, the feature is checked, deleted, and erased. Since  $D^{\circ}$ 's genitive case feature has been

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<sup>7</sup> The possibilities are as follows: (i) the noun is indefinite, (ii) the definite article is cliticized to a prenominal adjective, or (iii) an adjective in postnominal position intervenes between the definite-marked noun and the genitive phrase.

erased, no more genitive features are allowed to raise. This is why only a single genitive phrase is licensed in Balanta:



Swiss German patterns with Balanta in not allowing multiple genitive phrases (B. Ham, personal communication):

- (26) a. d Zerstöriḡ vor Schtadt dur d Lawine  
 the destruction of.the city through the avalanche  
 'The avalanche's destruction of the city
- b. \* d Zerstöriḡ vor Schtadt vor Lawine  
 the destruction of.the city of.the avalanche  
 (only has nonsense meaning 'the destruction of the avalanche's city')

- c. \* d Zerstöriḡ vor Lawine vor Schtadt  
 the destruction of.the avalanche of.the city  
 (only has nonsense meaning 'the destruction of the city's  
 avalanche')

As in Balanta, it is possible to say 'its destruction of the city':

- (27) ihre Zerstöriḡ vor Schtadt  
 its destruction of.the city  
 'its destruction of the city'

These data presumably share the same analysis as the Balanta facts.

Not all languages pattern with Balanta, however. In French (Valois 1991) and some dialects of Swahili (Carstens 1991), more than one genitive phrase may co-occur, presumably because more than one can be licensed. Building further on the theory of multiple feature checking developed by Ura (1994, 1996) and Chomsky (1995: 349-77), one possibility is that the genitive features of  $D^\circ$  are permitted to enter into more than one checking relation at LF. This permits multiple genitive phrases:

- (28) *Swahili (Carstens 1991: 84)*  
 uandishi wa vitabu wa Toni Morrison  
 CL14.write CL14.of CL8.book  
 'Toni Morrison's writing of books'

Siloni's (1996) analysis of the Hebrew construct state raises another possibility. Siloni argues that genitive case is assigned under government by  $D^\circ$ .  $D^\circ$  governs NumP and NP, and therefore, following Chomsky (1986), it also governs the specifiers of those projections. Following Siloni, we might imagine that in some languages,  $D^\circ$  can assign genitive case to more than one NP. In those languages, multiple genitives will be possible.

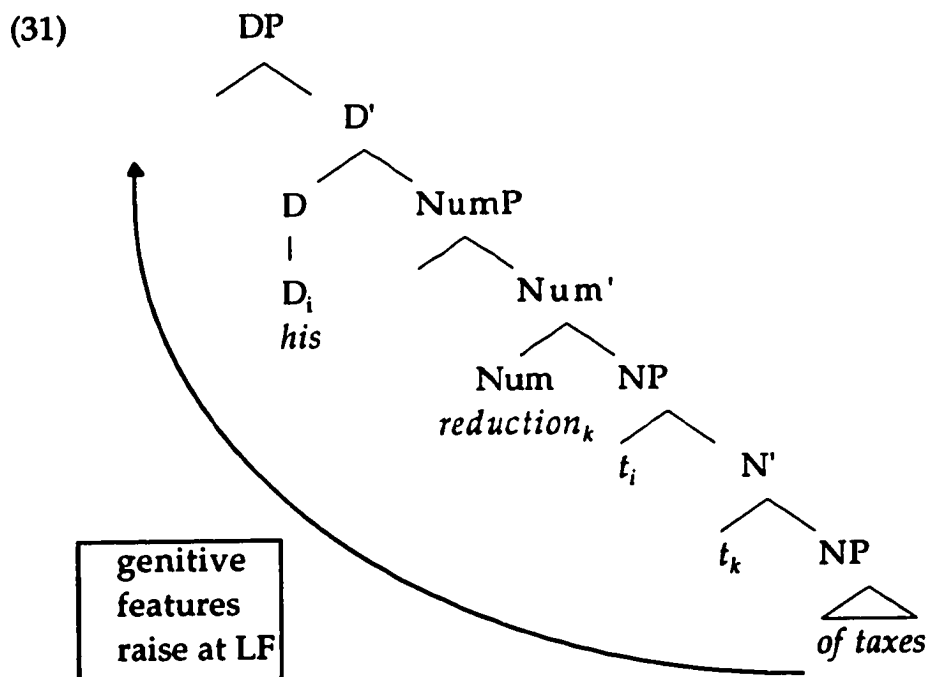
In other languages, like Balanta,  $D^{\circ}$  can assign only one genitive case. Therefore, only one genitive phrase is possible. I opt for the preceding analysis, which incorporates recent ideas about multiple feature checking, for two reasons. First, the proposal that  $D^{\circ}$  is able to assign genitive case to one NP in some languages and more than one NP in others is very similar to the proposal that  $D^{\circ}$ 's [genitive] feature can be checked more than once. It achieves the same results as multiple feature checking, but with no external motivation. Second, Chomsky (1995: 173) has suggested that we try to take a "narrower approach" to case-marking, recasting government analyses of structural Case assignment in terms of the Spec-head relation. If we can analyze the difference between languages like Balanta and Swiss German, on the one hand, and Swahili and French on the other, as taking place in the Spec-head configuration, then we might as well.

Before concluding this section, note that English examples like 'Sibow's pictures of Dakar' and 'the avalanche's destruction of the city' become ungrammatical if the prenominal possessor or agent is replaced by a postnominal one. Just as in Balanta, two genitives are possible only if they are in different positions — in English, this means that one is prenominal and the other postnominal; in Balanta it means that one is pronominal ( $D^{\circ}$ ) and the other phrasal ([Spec, XP]):

- (29) a. \* The pictures of Sibow of Dakar  
 b. \* The pictures of Dakar of Sibow  
 c. Sibow's pictures of Dakar
- (30) a. \* The destruction of the enemies of the city  
 b. \* The destruction of the city of the enemy (agent)  
 c. The enemy's destruction of the city

- d. \*The reduction of taxes of the president
- e. \*The reduction of the president of taxes
- f. The president's reduction of taxes

In fact, postnominal genitive phrases with an agentive reading are never possible in English, cf. *\*the destruction of the army = the army's destruction of X*. These data fit into the account developed above. We can propose that English is like Balanta regarding the checking and deletion of D°'s genitive case feature. Once the genitive feature of D° is checked by the features of a genitive phrase at LF, it is deleted. No other postnominal genitives are able to be licensed:



There are other issues in the structure of the English noun phrase that I do not address here, including prenominal genitives (e.g., *Sara's arm*, *the Romans' invasion*, and *the man with the yellow hat's monkey*) and postnominal possessors (e.g., *this book of John's*). See, for example, Anderson (1984), Valois (1991), Kayne (1994).

#### 6.2.4 *Expressing multiple phrasal genitives periphrastically*

In the preceding section, it was mentioned that Balanta speakers may express multiple phrasal genitives periphrastically, as in the following examples:

(32) a. wote bɔtʃi ma wotelu president ma  
 electionpeople DEF elect president DEF  
 ‘The people’s election of the president’

b. watʃu alama watʃ naamo  
 reduction king reduce taxes  
 ‘The king’s reduction of taxes’

(33) watʃu naamo, gina alama  
 reduction taxes that-of king  
 ‘reduction of taxes by the king’

In this section I propose structures for each of these constructions.

I turn first to the construction in (32). We essentially have two ways of breaking this construction into constituents:

(34) a. [watʃu alama] [watʃ naamo]  
 reduction king reduce taxes  
 b. [watʃu] [alama watʃ naamo]  
 reduction king reduce taxes

I demonstrate here that the second option is correct.

If the parse in (34a) were correct, we would expect both bracketed constituents to occur independently. In fact, the first may not occur on its own. While Balanta has a compounding construction that consists of two

nouns (the first a deverbal) not joined by any sort of particle (cf. 6.3), it is not possible for the second member of the compound to be an agent:

- (35) \* watfu        alama  
           reduction    king  
           'the king's reduction (of X)'

Further examples of multiple phrasal genitives expressed periphrastically are given in (36):

- (36) a.    ngarandi    al-mamo    garandi    binaŋ    ma  
           instruction the-Mullah teach    people    DEF  
           'The Mullah's instruction of the people'
- b.    dante        ma    Sadio    dante        vjem    ma  
           description DEF    Sadio    describe    theft    DEF  
           'Sadio's description of the theft'
- c.    dante        binin    ma    dante        anto        mbaa  
           description women    DEF    describe    husband 3PL.POSS  
           'The women's description of their husband'

In each case, the first two nouns may not co-occur as a constituent, because the second element is an agent and agents do not appear in Balanta synthetic compounds. Furthermore, the first noun in (36-37b) is modified by the definite article, something else that is prohibited in compounds:<sup>8</sup>

- (37) a.    \* ngarandi    al-mamo  
           instruction the-Mullah  
           'The Mullah's teaching'

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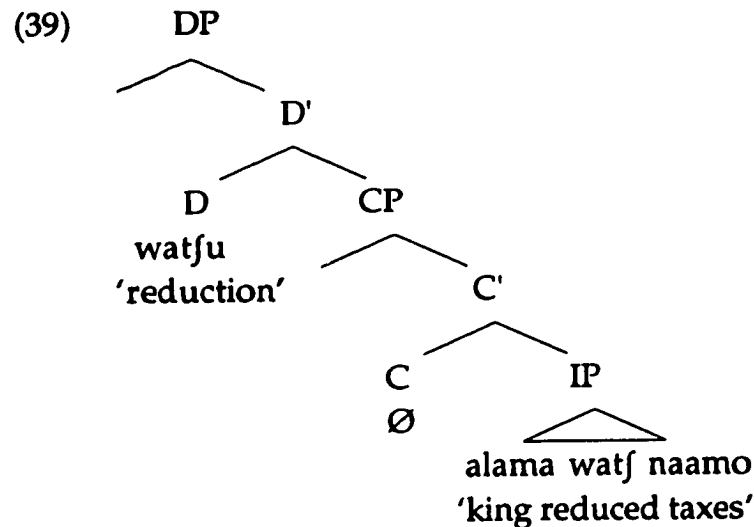
<sup>8</sup> The form *al-mamo* in (37a) is a single Balanta lexical item, borrowed from Arabic; the determiner *al-* is not synchronically analyzable as such.

- b. \* dante            ma    Sadio  
       description DEF   Sadio  
       'Sadio's [agent] description'
- c. \* dante            binin    ma  
       description women DEF  
       'The women's [agent] description'

These facts tell us that (34a) is not the correct parse. Our alternative is (34b), repeated below:

- (38) [watfu]            [alama        watf naamo]  
       reduction        king        reduce taxes

Its structure is provided in (39):



This raises the question of why there is no gap, as we expect in relative clauses. I suggest that this is because gaps are typically only found where a nominal element has been relativized. When a verbal element is relativized, some sort of resumptive strategy is necessary. In English, when a verbal noun is relativized, the 'gap' is filled by the verb 'do': *The dance that Bill did really surprised me*. Balanta has no verb like 'do' that can be



used to replace lexical verbs in the construction under discussion, or, for example, ellipsis constructions, and so the lexical verb stem is repeated instead.

The second periphrastic means of expressing multiple phrasal genitives is illustrated in (40):

- (40) *watfu naamo, gina alama*  
 reduction taxes that-of king  
 'reduction of taxes by the king'

This is a straightforward appositive structure, identical in structure to the French *la réduction des impôts, celle du roi* 'the reduction of taxes, the one of (by) the king':

- (41) [DP *watfu naamo*] [DP *gi-na alama*]  
 reduction taxes one-GEN king

*Gina* is composed of two morphemes: the class 4 pronoun *gi*, which agrees with the class 4 noun *watfu* 'reduction', and the genitive particle *na*. Since most deverbal nouns belong to class 4, *gina* is typically what we find in this construction, but it is also possible to get other forms, such as *hina* (class 1) or *wina* (class 6), e.g., *mbarimuso na Sadio, hina ubontŋe* 'Sadio's sister, the pretty one'.

### 6.3 Compounds

#### 6.3.1 Synthetic compounds

Up until this point, I have dealt primarily with genitive constructions containing the particle *na*, which I analyzed as the realization of genitive case:

- (42) dante        na    alaante    ma  
       description GEN    man        the  
       ‘a description of the man’

Balanta also has synthetic, or verbal, compounds, illustrated in (43). These have a deverbal head and, like their English counterparts, obey certain constraints on their formation which will be addressed below (Marchand 1969, Downing 1977, Roeper and Siegel 1978, Grimshaw 1990, Ravid and Shlesinger 1995):

(43) *Balanta synthetic compounds*

- a.    fal        alama  
       voting    king/president  
       ‘presidential election’
- b.    dante        suum  
       description    battle  
       ‘battle description’
- c.    watju        naamo  
       reduction    taxes  
       ‘tax reduction’

In this section, I compare and contrast Balanta synthetic compounds with their Bantu counterparts (Carstens 1991; Kinyalolo 1991; Bresnan and Mchombo 1995). I establish that their characteristics best support the analysis proposed by Carstens (1991) and Kinyalolo (1991), according to which the noun class prefix attaches to a null N° with a phrasal complement.

Balanta synthetic compounds most commonly express a relation between a deverbal noun and a theme, as seen in (44):

- (44) a. bi- simle dante gə-suum ma  
 3PL.SUB- listen description CL4-battle DEF  
 'They listened to the description of the battle (i.e., battle-  
 description)'
- b. bi- nge naŋ gi-tumlu samte a-misir  
 3PL.SUB- NEG accept CL4-wearing shoe(s) LOC-mosque  
 'Shoe-wearing is not permitted in the mosque'

Members of Balanta compounds may not be separated by lexical material. Adjectives, for example, must come after the compound, never in the middle:

- (45) a. dante suum ma undaŋ  
 description battle DEF big  
 'The great, long description of the battle'  
 or 'The description of the great battle'
- b. \* dante undaŋ suum ma  
 description big battle DEF

Likewise, the definite article, an enclitic, may not attach to the first member of compounds (46), and possessive pronouns and demonstratives cannot modify the first noun (47):

- (46) a. \* dante ma v-jɛm  
 description DEF CL5-theft
- b. dante v-jɛm ma  
 description CL5-theft DEF  
 'The description of the theft'

- (47) a. dante v-jɛm ma  
description CL5-theft DEF  
‘The description of the theft’
- b. \*dante hinda/ fɔmmu v-jɛm  
description 1SG.POSS/ that CL5-theft
- c. dante v-jɛm hinda/ fɔmmu  
description CL5-theft 1SG.POSS /that  
‘My description of the theft’/‘That description of the theft’

If *dante vjɛm* were not a compound, we would expect the definite determiner and possessive pronoun to attach to *dante*, since they always attach to the head of the noun phrase, as in (48):

- (48) dante (hilli) undaŋ (\*hilli)  
description 3SG.POSS big 3SG.POSS  
‘his great/long description’

The relevant constraint here appears to be non-separability (Di Sciullo and Williams 1987), the prohibition against components of a single morphological word being separated by any lexical or phonological material:<sup>9</sup>

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<sup>9</sup> Incidentally, this test fails when applied to Semitic construct states since the definite article, which is a proclitic, intervenes between the two members:

- a. *Classical Arabic* (Mohammad 1988: 242)  
kitaab-u l-walad-i  
book-NOM the-book-GEN  
‘the boy’s book’, ‘the book of the boy’
- b. *Hebrew* (Ritter 1991: 42)  
ben xaver ha-mora  
son friend the-teacher  
‘the teacher’s friend’s son’

- (49) a. \*dogshouses (a house for more than one dog)  
 b. \*dog the house  
 c. \*dog my house  
 d. \*dog red house

It is perhaps surprising to note, therefore, that noun class prefixes may freely appear on the second member of a Balanta synthetic compound, as well as the first:

- (50) a. dante            v-jɛm  
           description CL5-theft  
           'theft-description'  
 b. bi- dante            v- jɛm  
           CL2-description    CL5-theft  
           'theft-descriptions'

If Balanta synthetic compounds are indeed single morphological words, then we might expect to find them made up of bare stems rather than stems bearing a noun class prefix. Take, for example, noun incorporation in Khoekhoegowab (Nama/Damara) (Haacke 1995). Noun class in Khoekhoegowab is expressed by a person-number-gender suffix/postclitic, as seen in (51a). This person-number-gender marker is absent from noun incorporation structures (*ge* marks indicative main clauses; *ra* is a tense-aspect particle marking present continuous):

- (51) a. Aob ge !arisa            ra !au  
           man IND steenbok-PGN CONT hunt  
           'The man is hunting (a) steenbok'

---

This would be unexpected if the Semitic construct state was a morphological unit.

- b. Aob ge ra !ari+!au  
 man IND CONT steenbok+hunt  
 'The man is hunting steenbok'

I will demonstrate, following Carstens (1991) and Kinyalolo (1991) on Bantu, that Balanta synthetic compounds have an internal phrase structure that accounts for the presence of noun class prefixes on their second member, as well as a number of other facts.

Bantu synthetic compounds (see, *inter alia*, Sproat 1985, Myers 1987, Kinyalolo 1991, Carstens 1991, Bresnan and Mchombo 1995) are illustrated in (52). Both members of the compound bear a noun class prefix, although it is the noun class of the first, or head, noun that determines the noun class of the compound:

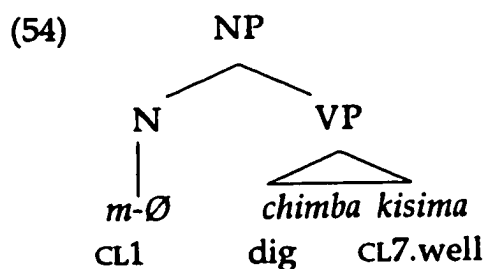
- (52) a. *Xhosa* (McLaren 1963: 104)  
 um-nini- n- dlu  
 CL1- owner-CL5- house  
 'owner of a house'
- b. *Kiswahili* (Carstens 1991: 57)  
 m-chimba ki-sima  
 CL1-dig CL7-well  
 'well-digger'
- c. *Kilega* (Kinyalolo 1991: 218)  
 ki-bing-a mbwá zi-kéké  
 CL7-hunt-FV CL10.dog CL10-small  
 'hunter of small dogs'

All of these examples have human referents, leading Carstens (1991) to call them Group A compounds. (In her work on Swahili, she groups classes 1

and 2 into a single gender, Group A.) Although the Balanta synthetic compounds discussed in this chapter do not denote humans, I will show that they nonetheless share a number of characteristics with Bantu synthetic compounds. Examples of Balanta synthetic compounds are given in (53):

- (53) a. gi-tumlu    samte  
           CL4-wearing shoes  
           'shoe-wearing'
- b. watfu        naamo  
           reduction    taxes  
           'tax-reduction'
- c. fal            alama  
           election     president, king  
           'president-election' ('presidential election')
- d. kano bi-de'en  
           love    CL2-parent  
           'parent-love, love of one's parents'

Carstens (1991) and Kinyalolo (1991) argue that these compounds are formed in the syntax and are headed by a null N whose number feature is spelled out by a class prefix. This is shown for Carstens' Swahili example, *m-chimba kisima* 'well-digger'; I label N<sup>o</sup>'s complement VP, following Kinyalolo (1991); Carstens' claim is that it must contain VP:



The proposal that Bantu synthetic compounds are headed by a null N whose number feature is spelled out as a noun class prefix depends on Carstens' overall analysis of noun class prefixes. Since this is a key point on which Carstens' analysis of synthetic compounds differs from earlier analyses (Mchombo 1978, Sproat 1985, Myers 1987), and because there is reason to extend Carstens' treatment of Bantu noun class prefixes to Balanta, I review her argumentation here.

Carstens' treatment of noun class prefixes as number morphology is grounded in her proposal that the noun class system is, in reality, a gender system. She groups Swahili stems into groups, or genders, each of which corresponds to two traditional (Meinhoff) classes (for the class prefixes themselves and more discussion, see Carstens 1991: 13-26, 1993):

(55) *Swahili stem groups for classes 1-10*

Group A: = stems of classes 1/2

Group B: = stems of classes 3/4

Group C: = stems of classes 5/6

Group D: = stems of classes 7/8

Group E: = stems of classes 9/10

Carstens points out that individual stems must be specified for membership in a particular group. Otherwise, "[t]here is no obvious means of ruling out undesirable mismatches between prefixes and stems"

(p. 17):

(56) a. \*n-tu  
CL9-person



- b. \*mi-atu  
CL4-shoe

The same type of mismatches result in ungrammatical structures in Balanta, as shown for the class 1 noun *a-laante* 'man':

- (57) a. \*gə-laante  
CL4-man  
b. \*v-laante  
CL5-man

Further evidence comes from Swahili nouns denoting animates that do not bear Group A prefixes, but nevertheless, trigger Group A agreement. This is true of animals, which bear class 9/10 or 7/8 prefixes, but trigger class 1/2 agreement (Carstens 1991: 20):

- (58) a. huyu            ng'ombe        a-na-kula        nyasi  
CL1.this        CL9.cow        1AGR-PRES-eat    CL10.grass  
                  'This cow is eating grass'  
b. \*hii            ng'ombe        i-na-kula        nyasi  
CL9.this        CL9.cow        9AGR-PRES-eat    CL10-grass

As Carstens points out, this sort of data would be wholly unexpected if noun class prefixes were specified for class information. But it is compatible with the hypothesis that nouns contain gender information, and that prefixes are specified only for number.<sup>10</sup>

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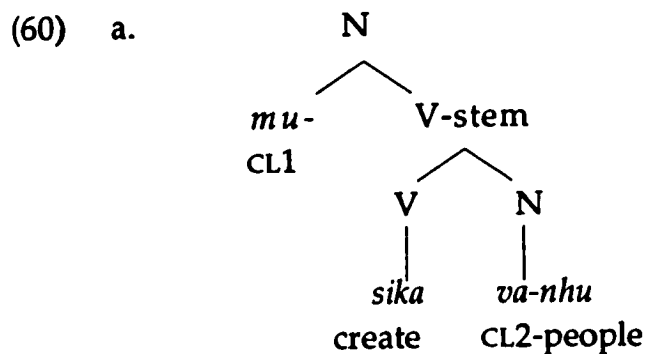
<sup>10</sup> Carstens notes that data involving animate nouns that superficially belong to classes 9/10 or 7/8 but trigger class 1/2 agreement have been accounted for by proposing that their animacy is responsible. But this alternative cannot explain data she presents involving diminutive or augmentative, animate nouns that do not trigger class 1/2 agreement.

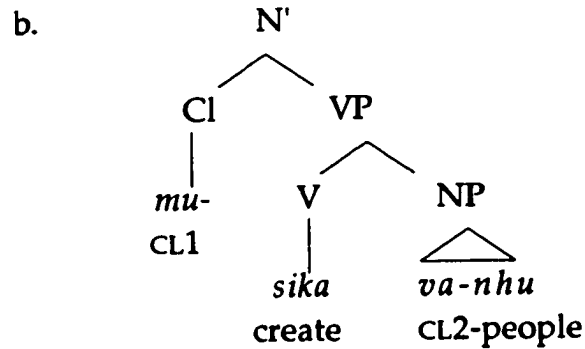
While there are no parallel examples in Balanta, we do find Balanta nouns that bear no class prefix, but nonetheless trigger a given sort of agreement:

- (59) a. hal hɔmmu/\*gɔmmu, \*fɔmmu  
 person CL1.that/CL4.that, CL5.that, etc.
- b. sin bɔ/\*hɔ, \*fɔ  
 road CL3.this/CL1.this, CL5.this, etc.

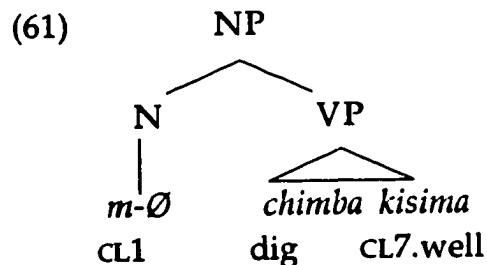
These data are consistent with Carstens' proposal that it is the stem itself that is specified for gender.

Returning to Balanta and Bantu synthetic compounds, Mchombo (1978) and Sproat (1985) have proposed that noun class prefixes attach to a complex verbal stem that consists of both a verb and a noun, as in (60a), and Myers (1987) hypothesizes that noun class prefixes attach to phrasal categories (60b). None of these are consistent with Carstens' proposal, motivated immediately above, that noun class prefixes contribute only number information (structures for *mu-sika va-nhu*, Shona for 'people creator' from Carstens 1991: 58):





So far we have seen why it must be the case that the noun class prefix attaches to a null head that is specified for gender. What about the claim that this null head is followed by a VP? I repeat Carstens' structure for Swahili *m-chimba kisima* 'well-digger' below. (Note that Carstens does not specify that N°'s complement is a VP, merely claiming that it is a constituent equal to or containing VP. Kinyalolo 1991 presents evidence from Kilega that the constituent cannot be larger than VP):



Both Carstens and Kinyalolo present a great deal of evidence that Bantu synthetic compounds contain at least a VP. As mentioned by Carstens (1991: 62), objects of the verb within a synthetic compound may be modified:

- (62) mjenga      hoteli      za      kigerumani  
 CL1.build    CL10.hotel    CL10.of    CL7.German  
 'A builder of German hotels'

This holds true in Balanta, as well:

- (63) a.   lofu            bi-baale    bi-franse  
           construction house    CL2-French  
           ‘construction of French houses’
- b.   dante         gə-suum    undaj  
           description CL4-battle   big  
           ‘description of a great war’
- c.   gbaas    sooba   na    alama  
           labor    field   GEN   king  
           ‘labor in the field of the king/chief’

Likewise, the object of the verb can be a conjunct, as seen by the following Swahili example (Carstens 1991: 62):

- (64) mpanda    farasi       na    punda  
           CL1.ride    CL1.horse   and   CL1.donkey  
           ‘A horse and donkey rider’

The same is true in Balanta:

- (65) a.   demo       dzato   ngi    malo  
           hunting   cat       with   hippopotamus  
           ‘hunting of cats (e.g., lion) and hippopotamus’
- b.   gi-tumlu    samte   ngi    laafa  
           CL4-wearing shoes   and   hat  
           ‘wearing of shoes and hat’

The data presented so far could simply show that the null N° is followed by a V'. One of the clearest pieces of evidence that the null N° of Bantu synthetic compounds selects a VP is that it is possible for adverbs to appear, as shown by Carstens (1991: 61) for Swahili:

- (66) a. mwenda pole  
 CL1.go gently  
 'one who proceeds gently'
- b. mfika mapema  
 CL1.arrive early  
 'one who arrives early'

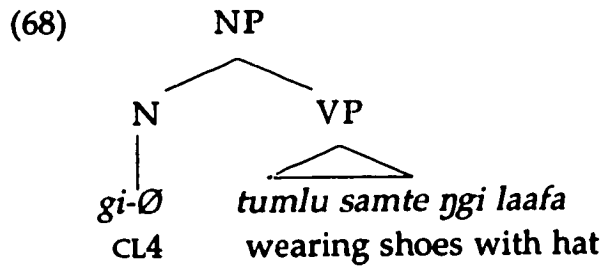
Carstens demonstrates that words like *pole* 'gently' and *mapema* 'early' are unambiguously adverbs and not adjectives, since they are not able to modify nouns.

Balanta has few VP adverbs; the only one I have been able to find in my research so far is *gai* 'quickly'. (None of the other researchers who have worked on Balanta include adverbs in their descriptions or lexical lists, cf., Sousa-Bella 1946; Quintino 1951, 1961; Wilson 1961a; N'Diaye-Corréard 1970.) This adverb does occur in Balanta synthetic compounds, as seen in (67):

- (67) dante gai gə-suum  
 description quickly CL4-battle  
 'the quick description of the battle'

From this fact I surmise that, as in Bantu, the null noun in Balanta synthetic compounds has a VP complement.

The data presented above suggest that Carstens' and Kinyalolo's claim about the structure of Bantu synthetic compounds should be extended to Balanta. The structure of an example like (65b) is therefore as follows, with a class 4 prefix and a null stem:

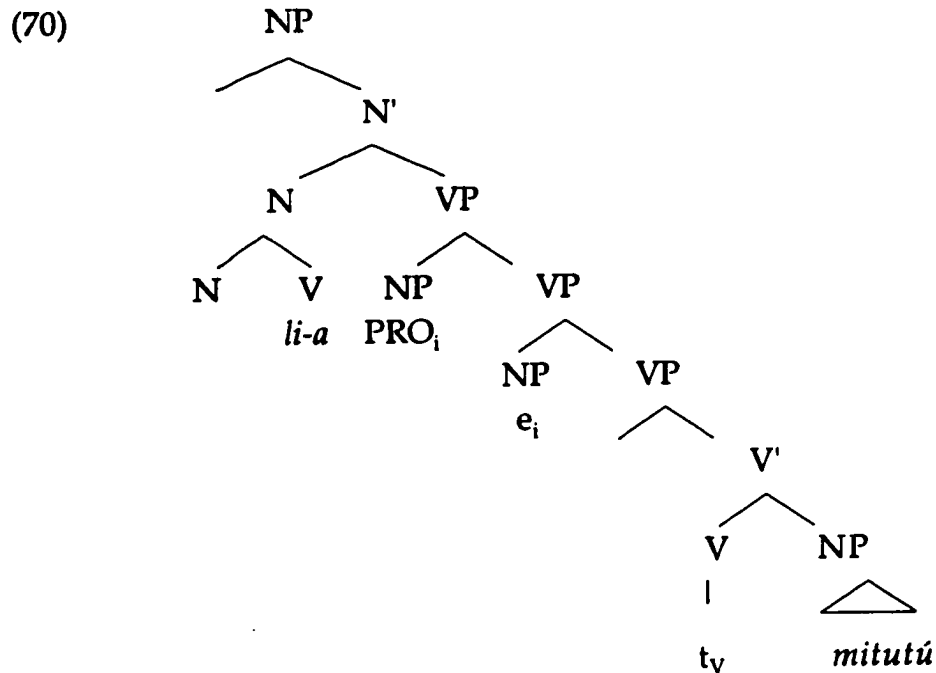


Bresnan and Mchombo (1995) propose an analysis that runs counter to Carstens' and Kinyalolo's claims. Essentially they argue that Bantu class prefixes and their stems form morphological words which adhere to the Lexical Integrity Principle. Carstens and Kinyalolo are able to show that most of Bresnan and Mchombo's arguments for a lexical view of Bantu class prefixes plus stems can be given a syntactic explanation as well. As Carstens notes, only one of Bresnan and Mchombo's arguments cannot be given a syntactic explanation, and this is the non-compositional semantics of Chichewa compounds. Since Kiswahili does not have synthetic compounds with non-compositional meaning, Carstens concludes that in Chichewa — where compounding is not a productive process — synthetic compounds are lexically listed. Their internal structure is therefore irrelevant.

So far I have not addressed the restriction on the expression of agents and possessors in Balanta compounds. In Bantu synthetic compounds, the question is a slightly different one, since there is an understood agent that is not expressed by any overt morphology:

- (69) *Kilega* (Kinyalolo 1991: 218)
- ki-li-á      mitutú
- CL7-eat-FV    CL4.ripe banana/plantain
- 'eater of bananas/ripe plantains'

Kinyalolo accounts for the understood agent by proposing that the external theta-role is assigned to PRO and that "PRO adjoins to the VP, creating an operator-variable relation" (p. 221):



Note that the prohibition on the expression of possessors and agents in Balanta synthetic compounds is reminiscent of English, where agents are also prohibited in synthetic compounds (Roeper and Siegel 1978, Selkirk 1982, Grimshaw 1990; (71a) from Selkirk 1982: 34):

- (71) a. \*The hours for [girl swimming] at this pool are quite restricted  
 b. \*[Termite destruction] is a real problem in old houses

Grimshaw, building on ideas first developed by Roeper and Siegel (1978) and Selkirk (1982), proposes that one argument must always be satisfied outside the compound. Prominence theory, based on argument structure and the thematic hierarchy, requires that it will be "the most prominent argument" — i.e., the external argument. As Grimshaw points

out, “there is really nothing special about an external argument beyond the fact that it is always the last to be theta-marked.” As one might predict, therefore, *internal* arguments do not appear within compounds based on unaccusative verbs since they are the only argument:

(72) \*Leaf-falling makes a big mess

\*Glass-breaking can be caused by sound waves

Grimshaw’s analysis extends to much more than noun-noun compounds, including other types of compounds (e.g., noun-adjective) and Japanese light verbs. The prediction is therefore that in Bantu synthetic compounds that are fully parallel to the Balanta examples here (ones that denote actions, not individuals), agents will not be possible.

### 6.3.2 Root compounds

The characteristics of root compounds in Balanta constitute some interesting evidence for the syntactic approach taken to synthetic compounds in 6.3.1. Root compounds come in two types. The latter is most productive, and is therefore the focus of my argumentation in this section:

- (73) a.   bi-ɲaŋ       baal  
           CL2-people   house  
           ‘people of the house, family’
- b.   bi-ɲaŋ       bɔtʃi  
           CL2-people   village, country  
           ‘inhabitants, citizens of a place’



- (74) a. daali-ŋ baale  
 cat- LINK house  
 'housecat'
- b. baal- iŋ alama  
 house-LINK king  
 'palace'
- c. adzala- m bala  
 griot- LINK balafon  
 'balafon griot'

Root compounds, like synthetic compounds, adhere to nonseparability. The two members of the compounds in (73-74) may not be separated by adjectives, determiners, demonstratives, and the like. But there is an additional restriction, not found in synthetic compounds. Only the compound as a whole may be modified. The second member may not:

- (75) a. daali-ŋ baale  
 cat-LINK house  
 'housecat'
- b. daali-ŋ baale ubontʃe  
 cat-LINK house beautiful  
 'a nice housecat'  
 \* 'a cat of a nice house'

- (76) a. adzala-m bala  
griot-LINK balafon  
'balafon griot'
- b. adzala-m bala undaŋ  
griot-LINK balafon big  
'a great balafon griot'  
\* 'griot of a big balafon'

Compare these examples to the following, repeated from above:

- (77) a. lofu bi-baale bi-franse  
construction house CL2-French  
'construction of French houses'
- b. dante gə-suum undaŋ  
description CL4-battle big  
'description of a great war'

Similarly, the second member of a root compound may not be a conjunction structure:

- (78) a. hodi- ŋ falas  
room-LINK horse  
'horse stable/barn'
- b. \*hodi- ŋ falas ŋgi hara  
room-LINK horse with goat  
'horse and goat stable/barn'

Conjunction is possible in synthetic compounds:

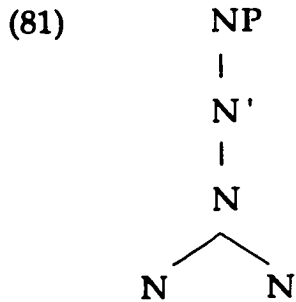
- (79) a. demo dzato ŋgi malo  
hunting cat with hippopotamus  
'hunting of cats (e.g., lion) and hippopotamus'

- b. gi-tumlu        samte    ŋgi    laafa  
 CL4-wearing   shoes    and    hat  
 'wearing of shoes and hat'

Finally, we saw many examples above that showed that the second member of a synthetic compound may bear a noun class prefix. This is impossible in root compounds:

- (80) a. \*daali-ŋ        gə-baale                    'housecat'  
           cat-LINK        CL4-house  
           (but *gə-baale* OK on its own)
- b. \*hodi-ŋ        gə-falas                    'stable'  
           room-LINK    CL4-horse  
           (but *gə-falas* OK on its own)

Root compounds have been argued to contain no argument structure (Grimshaw 1990), since they are not headed by a verbal element. They have also been shown to be immune to the types of thematic restrictions that apply to synthetic compounds, and to have virtually unlimited productivity (Downing 1977). From this it appears that they are morphological entities, not syntactic ones. Note that this accounts for the absence of class prefixes on the second member, assuming Carstens' proposal regarding noun class prefixes as number morphology. If root compounds are generated in the morphological component of the grammar, then they are made up of stems not dominated by any sort of syntactic structure, including functional projections such as NumP and DP. The root compound itself can then be merged into the syntax, yielding the following sort of structure:



Since the NP in (81) is dominated by NumP, the root compound as a whole can have number morphology, realized as a class prefix. The second member alone cannot.<sup>11</sup>

#### 6.4 Modifiers: Adjuncts or Specifiers?

Above it was shown that nouns in Balanta precede all modifiers (1).

The ordering of these post-nominal modifiers is free:

- (82) a. biti ma undaŋ umɔɔŋɛ  
           dog DEF big black  
           ‘The big black dog’
- b. bi- biti bi- sibi bi- ndaŋ  
           CL2- dog CL2- two CL2- big  
           ‘two big dogs’
- c. bi- biti bi- ndaŋ bi- sibi  
           CL2- dog CL2-big CL2- two  
           ‘two big dogs’

---

<sup>11</sup> I do not go into the question of how morphological compounding takes place. As long as the final output is an N<sup>o</sup>, the precise mechanism is not relevant.

- d. ntjiitfi hɔ a- bɔntʃɛ  
 grandchild CL1.that CL1- beautiful  
 'that pretty/handsome grandchild'
- e. ntjiitfi a- bɔntʃɛ hɔ  
 grandchild CL1- beautiful CL1.that  
 'that pretty/handsome grandchild'

There has been debate over whether adjectives are adjuncts or specifiers. Cinque (1995) uses the fixed ordering of adjectives in some languages to argue that they are specifiers. We see that in Balanta, however, there are no constraints on the relative ordering of adjectives (including numbers), which is more consistent with their being analyzed as adjuncts:

- (83) a. bi- biti bi- sibi bi- ndaŋ  
 CL2-dog CL2-two CL2-big  
 'two big dogs'
- b. bi- biti bi- ndaŋ bi-sibi  
 CL2-dog CL2-big CL2-two  
 'two big dogs'
- (84) a. bi- biti bi- ndaŋ bi- mɔɔŋɛ  
 CL2-dog CL2-big CL2-black  
 'big, black dogs'
- b. bi- biti bi- mɔɔŋɛ bi- ndaŋ  
 CL2-dog CL2-black CL2-big  
 'big, black dogs'

Ideally we would want to look at a range of adjective types (e.g., big, red, intelligent, possible, unfortunate, complete), but this is impossible, given

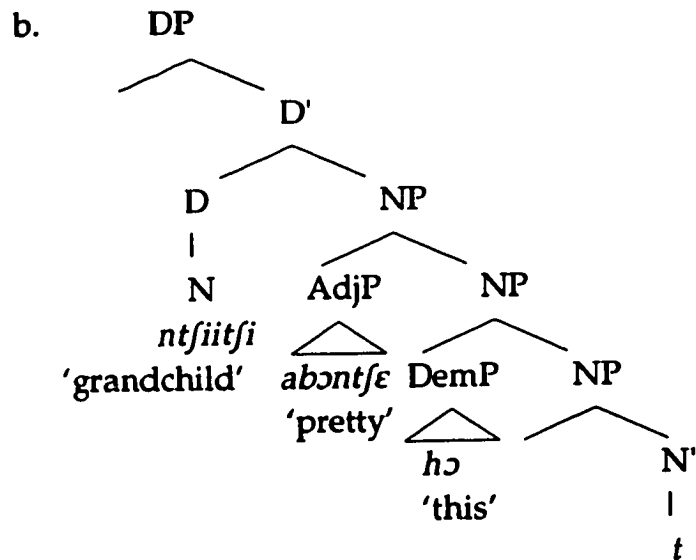
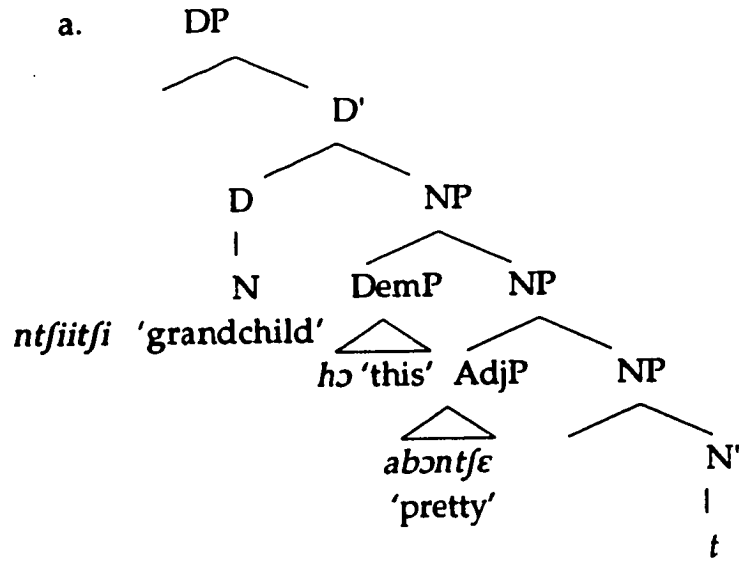
the paucity of adjectives in Balanta. Balanta only has adjectives of the ‘big, red, intelligent’ type, and notions like ‘possible’, ‘unfortunate’, or ‘complete’ require a paraphrase, usually verbal.

Bernstein (1995) has argued that demonstratives occur in the specifier of a functional projection with a fixed position in the syntactic structure. This functional projection is headed by an optionally null reinforcer, which corresponds to English *here* in *this guy here*/*this here guy*, or French *ci* in *cette femme-ci* ‘this woman-here’. Bernstein’s proposal leads one to expect certain restrictions in the ordering of elements in the noun phrase. But Balanta demonstratives may be freely ordered with adjectives and other modifiers:

- (85) a.   ntfiitfi    hɔ       a- bɔntʃɛ  
           grandchild CL1.thatCL1-beautiful  
           ‘that pretty/handsome grandchild’
- b.   ntfiitfi       a- bɔntʃɛ   hɔ  
           grandchild CL1-beautiful CL1.that  
           ‘that pretty/handsome grandchild’

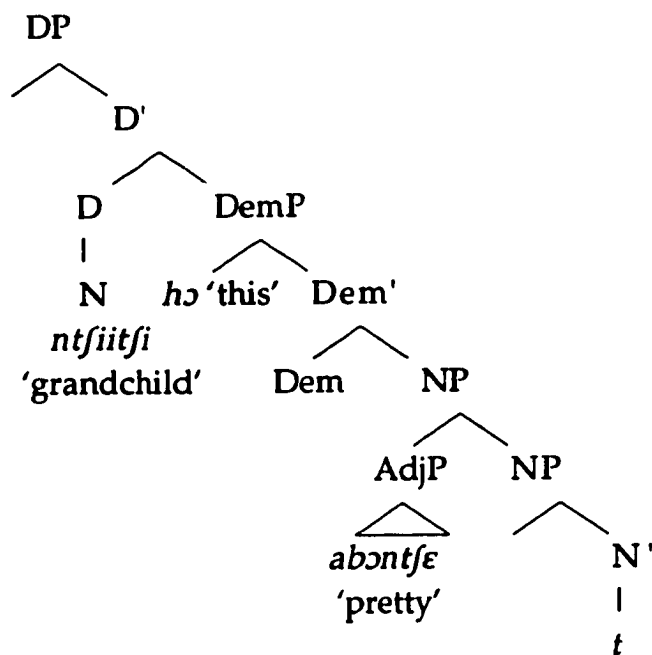
One possibility is that both the adjective and the demonstrative in these examples are adjuncts, and can be freely ordered with respect to one another:

(86) *Demonstratives and adjectives are both adjoined to NP*

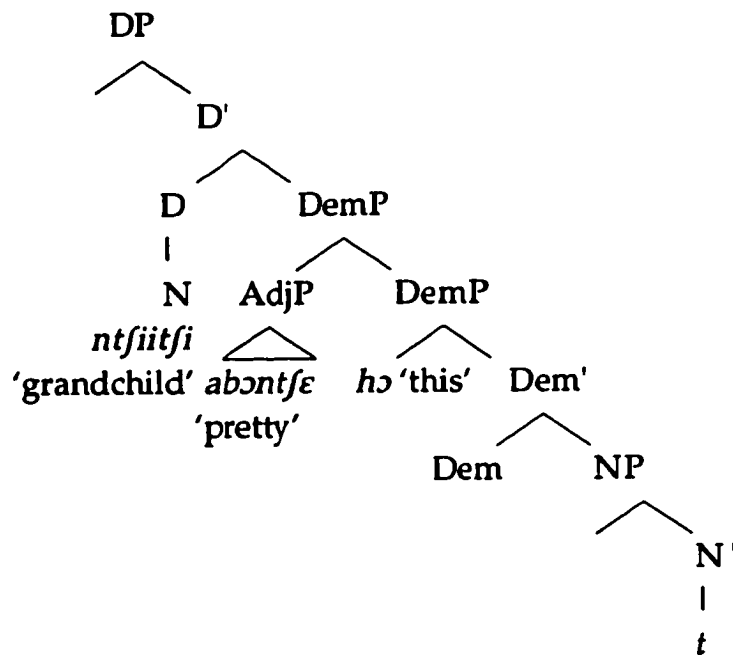


Another possibility is that the demonstrative has a fixed position, but that the adjective is allowed to adjoin in more than one position. In (87a), the adjective *abontfe* has adjoined to NP. In (87b), it has adjoined to DemP, which is presumably headed by a null element:

- (87) a. *Demonstrative has a fixed position; adjectives are adjoined to NP*



- b. *Demonstrative has a fixed position; adjectives are adjoined to DemP*





The analysis whereby the demonstrative has a fixed position, but adjectives may adjoin in more than one position is perhaps the best solution given the observation that adjectives may appear in different positions with respect to each other or to other elements in the noun phrase across and within languages (see Valois 1991; Ewert and Hansen 1993; Menuzzi 1994; Cinque 1995, ch. 10; Crisma 1996; Radatz and Stammerjohann 1996 for evidence and discussion). As discussed by some of these authors, notably Cinque (1995) and Crisma (1996), differences in adjective position are sometimes triggered by semantics (manner interpretation vs. subject-oriented interpretation). On the other hand, it is possible that there are different types of demonstratives. Some are determiner-like elements, and others are adjectival.

The limited set of adjectives in Balanta makes it difficult or impossible to investigate here the various claims that have been made about adjectives, their position, and the interaction between position and interpretation. I have merely presented two possibilities, given the limited data at our disposal.

## 6.5 Conclusion

In this chapter I have provided an analysis of the Balanta noun phrase. First I showed that Balanta genitive pronouns and genitive phrases exhibit different distributional properties and related this to their ability or inability to undergo overt movement. Central to the analysis was the proposal that genitive case licensing involves multiple-feature-checking. Next I explored two types of Balanta compounds, synthetic and root. Synthetic compounds were shown to have internal phrasal structure,

unlike root compounds. The observation that synthetic compounds but not root compounds permit noun class prefixes on their second member was attributed to Carstens' (1991) characterization of noun class prefixes as number morphology that is checked against a Num° head.

## Chapter 7

### The Morphology of Event Modification\*

The following English sentence is ambiguous. One reading — sometimes called the ‘intersective’ reading — entails that Olga is beautiful, although her dancing might not be. The second — the ‘non-intersective’ reading — entails that it is Olga’s dancing that is beautiful, although she herself may be quite unattractive (Larson 1995, 1998; Larson and Segal 1995: 497ff.):

(1) Olga is a beautiful dancer

The two interpretations of (1) are differentiated morphologically in the Ganja dialect of Balanta. As shown in (2), we get the intersective reading when the adjective occurs with the prefix *u-* (2a), but the non-intersective reading when the adjective occurs with the prefix *a-* (2b):

(2) a. Sibow gi ajire u-bɔntʃɛ  
Sibow COP dancer U-beautiful  
‘Sibow is a beautiful dancer’  
(entails that Sibow is beautiful)

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\* I am especially grateful to Richard Larson for his help and encouragement as I worked on this section. I also thank Sally McConnell-Ginet, Christine Brisson, Molly Diesing, Ray Jackendoff, Sandro Zucchi, and my committee members, who helped me to refine my analysis and its presentation.

- b. Sibow gi aɲire a-bɔntʃɛ  
 Sibow COP dancer A-beautiful  
 ‘Sibow is a beautiful dancer’  
 (entails that Sibow dances beautifully)

This phenomenon occurs only with human nouns. Adjectives modifying non-human nouns always bear the *u-* prefix, as in the Balanta dialects discussed by Quintino (1951).

In this chapter I argue that the examples in (2) support a proposal of Larson’s (1995, 1998),<sup>1</sup> who argues that nouns like *dancer* are relational and take an individual-event pair as their semantic value. Larson proposes that some adjectives, like *beautiful*, can apply to either the event or the individual. I propose that these two possibilities are differentiated morphologically in Balanta. When an adjective modifies the individual, we find *u-* prefixation (2a); when it modifies the event, we find *a-* prefixation instead (2b).

### 7.1 Theoretical Treatments of the Problem

According to Larson (1995, 1998), who builds on previous work on events in semantics, the noun *dancer* takes an individual-event pair  $\langle x, e \rangle$  as its semantic value. The adjective *beautiful* can apply to either the event, dancing, or to the individual dancer. When it applies to the event, we get the entailment that the dancing is beautiful; when it applies to the individual, we get the entailment that the person is beautiful. (The source of the event is explored below.)

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<sup>1</sup> See also Larson and Segal (1995: 497ff.).

Larson's approach permits parallel analyses of sentences like *Tim is an enthusiastic speaker* and *Tim speaks enthusiastically*, which intuitively seem to be related. It also enables him to propose an account of substitution failure in adjectival sentences (i.e., even if Olga is both a dancer and a singer, it does not follow that if Olga is a beautiful dancer, she is also a beautiful singer) that is similar to the one provided by Davidson (1967), McConnell-Ginet (1982), and Davies (1991) for adverbs.

We might contrast Larson's proposal with other approaches to adjectival modification. Siegel (1976a, b), for example, claims that the two readings of (1) result from the existence of two different, albeit homophonous, adjectives: *beautiful*<sub>1</sub> and *beautiful*<sub>2</sub>.<sup>2</sup> The first occurs underlyingly as a nominal modifier, and expresses a function from a common noun denotation to a common noun denotation. The second occurs underlyingly as a predicate and expresses a function from entities to truth values. But consider what happens when we extend Siegel's analysis to the examples in (3-4):

- (3) a. I lost my one good hat  
 b. Bill's a good typist  
 c. Is 79 a good road?  
 d. I went home and had a good cry
- (4) a. Gwen's a fast typist

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<sup>2</sup> Chierchia and McConnell-Ginet (1990) also classify adjectives as belonging to different semantic types. This allows them to account for different entailments that adjectives enter into, as well as the fact that not all adjectives have a predicative use. While this is undoubtedly the case, it is not sufficient to account for the facts presented here. Extending it to examples like 'Olga is a beautiful dancer' encounters the same problems as does Siegel's approach; see discussion below.

- b. This is a fast car
- c. The Mass Pike is a fast road
- d. This book's a fast read

The adjective *good* has three different interpretations in (3): in (3a), it refers to the hat's ability to keep my head warm, in (3b) to the typist's speed and accuracy, in (3c) to the road's condition, and in (3d) to the heartiness of the cry. Likewise, in (4), a typist is not fast in the same way that a car, a road, or a read is; for example, while a fast car moves fast, a fast road does not move at all: the cars on it do. (For more examples and discussion, see Aronoff 1980, Pustejovsky 1995, Jackendoff 1997.) If we accept Siegel's proposal regarding (1), we might as well say that (3) contains examples of four homophonous adjectives *good*, and (4) contains examples of four homophonous adjectives *fast*. The problem is that the meanings of adjectives like *good* and *fast* are practically infinite and what is more, totally recoverable from pragmatics, our world knowledge of hats, roads, typists, and so on. Do we really want to say that the infinite meanings of *good* and *fast* (and *lousy*, *wonderful*, etc.) are all listed in the lexicon? Of course not. And if we do not want to say this about the adjectives in (3-4), then we have to look for an alternative to Siegel's analysis of the data in (2). In what follows, I provide further evidence for the proposal made above, that Larson (1995, 1998) is precisely that alternative.

## 7.2 Analysis

### 7.2.1 Individual vs. event modification

To return to the data presented at the beginning of this chapter, Balanta differs from English in that the morphology of adjectives makes it

clear when the adjective is predicated of an individual (5a) or an event (5b) (Larson 1998: 8). When the adjective is predicated of an individual, it appears with the prefix *u-*. When it is predicated of an event, it appears with the prefix *a-*:

- (5) a. Sibow gi aɲire u-bɔntʃɛ  
 Sibow COP dancer U-beautiful  
 'Sibow is a beautiful dancer'  
 ∃e [dancing(e) & Agent(Sibow,e) & beautiful(Sibow)]
- b. Sibow gi aɲire a-bɔntʃɛ  
 Sibow COP dancer A-beautiful  
 'Sibow is a beautiful dancer'  
 ∃e [dancing(e) & Agent(Sibow,e) & beautiful(e)]

One way of looking at the Balanta data is as confirmation of a common assumption: events play an important role in syntax and semantics. Since Davidson (1967) proposed that adverbs are predicates that are true of events, events have been given an increasingly visible role in linguistic analysis; Parsons (1990) describes them as "ubiquitous." The next group of data, however, is less expected. It appears that the event modified by the adjective may be outside the noun phrase, or in the extreme case, outside of the clause altogether.

The first case is illustrated in (6b), where the event modified by the adjective appears to be the passing by contributed by the verb *diiste*. This reading is contrasted with the one in (6a), where the adjective applies to the individual, *alaante* 'man':

- (6) a. alaante u-sire hembε diiste ando  
 man U-smart CL1.that pass.PAST here  
 'That smart guy passed by here'  
 (entails that the man is inherently smart or devious)  
 $\exists x \exists e$  [guy(x) & smart(x) & passed-by-here(e) & Agent(x,e)]
- b. alaante a-sire hembε diiste ando  
 man A-smart CL1.that pass.PAST here  
 'That smart guy passed by here'  
 (entails that the man did something smart or devious while  
 passing by)  
 $\exists x \exists e$  [guy(x) & passed-by-here(e) & Agent(x,e) & smart(e)]

We might translate (6b) something like *The guy passed by smartly*, with the adjective *asire* 'smart, clever' being interpreted as a matrix adverbial. This brings to mind examples presented by Bolinger (1967) which show that the same type of phenomenon occurs in English with adjectives like *occasional* or *sporadic*:

- (7) a. An occasional customer strolled by  
 Occasionally, a customer strolled by
- b. A sporadic shot was heard  
 A shot was heard sporadically

In (8-9b), it is difficult to motivate the presence of an event, covert or overt, in the clause at all. Its existence is implied by situational context:<sup>3</sup>

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<sup>3</sup> M. Diesing has pointed out that in the following examples, the copula itself can be regarded as ambiguous with an "active" reading giving an eventive result (cf. Partee 1977). This is consistent with the essential claim of this section, that *a-* appears on adjectives with an eventive reading, and



- (8) a. u- gi hal u-/ \*a- bontʃɛ  
 2SG.SUB- COP person U-/ \*A-beautiful, nice  
 'You are a nice person'  
 $\exists x$  [person(x) & you(x) & nice(x)]
- b. alla u- mada gi hal a-/ \*u- bontʃɛ mɔʃ?  
 how 2SG.SUB- be.able COP person A-/ \*U-beautiful, nice today  
 'Why are you being nice today?'  
 (Said to someone who is not typically friendly)  
 $\exists x \exists e$  [person(x) & you(x) & Agent(x,e) & nice(e)]
- (9) a. n- gi u-raale  
 1SG.SUB- COP U-angry  
 'I am an angry person' (inherently angry)  
 $\exists x$  [I(x) & angry(x)]
- b. n- gi a-raale  
 1SG.SUB- COP A-angry  
 'I am angry' (because of something that just happened)  
 $\exists x \exists e$  [I(x) & cause-angry(x,e)]

In (8b), the event is connected to the person's being nice; in (8a) there is no event at all. In (9b) the implied event is understood to be the cause of my being angry, but not in (9a).

### 7.2.2 *Against a stage-level vs. individual-level analysis*

The examples in (8-9), in particular, raise the question of whether we are simply dealing with a stage-level vs. individual-level contrast. There

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potentially provides some insight into the question of how the eventive reading comes about.

are a number of reasons why this cannot be so. First, the stage-level vs. individual-level contrast would not account for examples like (2a-b), since whether Sibow dances beautifully or is a beautiful person, 'beautiful' is an individual-level adjective.

We can also look at temporal modification as a diagnostic for the presence of a stage-level vs. individual-level contrast. As discussed by Kratzer (1995), stage-level predicates are compatible with 'when'-clauses in English, but individual-level predicates are not. Hence, it is possible to say *When Mary is at home, she speaks French*, but not *When Mary is at home, she knows French*. If *a-* and *u-* prefixation reflected a stage-level vs. individual-level contrast in interpretation of the adjective, we would expect different judgments for the Balanta sentences below. Specifically, if *u-* attached to individual-level adjectives only, (10b) should be ungrammatical. But it is not:

- (10) a. Oussou gio hal a- raale bini a- biifa  
 Oussou COP.PAST person A- angry when 3SG.SUB-see  
 mbarimuso hilli nggi alaante hembe  
 sister 3SG.POSS with man CL1.THAT  
 'Oussou was an angry person when he saw his sister with that man'
- b. Oussou gio hal u- raale bini a- biifa  
 Oussou COP.PAST person U- angry when 3SG.SUB- see  
 mbarimuso hilli nggi alaante hembe  
 sister 3SG.POSS with man CL1.THAT  
 'Oussou was an angry person when he saw his sister with that man'

As seen by the logical representations in (11), both sentences contain an event, which is Oussou's seeing his sister with a certain man. In (10a) (= (11a)), Oussou's being angry is a direct result of the event of seeing his sister with this man. In (10b) (= (11b)), Oussou's being angry simply coincides with seeing his sister with a particular man, and may have resulted from something unexpressed:

- (11) a.  $\exists e$  [seeing-sister-with-that-man( $e$ ) & Agent(Oussou, $e$ ) & person(Oussou) & cause-angry(Oussou, $e$ )]  
 b.  $\exists e$  [seeing-sister-with-that-man( $e$ ) & Agent(Oussou, $e$ ) & person(Oussou) & angry(Oussou)]

These interpretations are consistent with the event analysis developed so far, but not with a stage-level/individual-level account.

A final set of data that tells us that we are dealing with events and not the stage-level vs. individual-level contrast involves adjectives that cannot be construed of as describing an event. Notice that the morphological contrast between the following examples is dependent on properties of both the noun and the adjective:

- (12) a. Sibow gi asingi u-bɔntʃe  
 Sibow COP singer U-beautiful  
 'Sibow is a beautiful singer'  
 $\exists e$  [singing( $e$ ) & Agent(Sibow, $e$ ) & beautiful(Sibow)]
- b. Sibow gi asingi a-bɔntʃe  
 Sibow COP singer A-beautiful  
 'Sibow is a beautiful singer'  
 $\exists e$  [singing( $e$ ) & Agent(Sibow, $e$ ) & beautiful( $e$ )]

First, the noun's semantic value consists of an individual-event pair  $\langle x, e \rangle$ , as explained above. Secondly, the adjective *beautiful*, like *graceful* or *compulsive*, has both a predicative reading and an adverbial reading (Larson and Segal 1995: 499), which allows it to describe either an event or an individual:

- (13) a. Maria is a beautiful singer  
 b. Maria is beautiful, and Maria is a singer  
 c. Maria sings beautifully
- (14) a. Ken is a compulsive mail carrier  
 b. Ken is compulsive, and Ken is a mail carrier  
 c. Ken delivers mail compulsively

One prediction that we can make, therefore, is that event marking (*a-*) will be impossible with pure intersective adjectives—those with a predicative use, but not an adverbial use. Color words are adjectives of this type. (I maintain the use of the noun 'mail-carrier' in (15) because its semantic value consists of an event-individual pair  $\langle x, e \rangle$ ; imagine that Ken is from a planet where everyone is green):

- (15) a. Ken is a green mail carrier  
 b. Ken is green, and Ken is a mail carrier  
 c. \* Ken is greenly a mail carrier, he carries mail greenly

The prediction is borne out in Balanta. Event (*a-*) marking is impossible with pure intersective adjectives, like 'white', 'red', or 'ill', even if the adjective is understood to be linked to a particular event. (16a) was elicited in two separate contexts: first, that the subject was Caucasian (individual-level property), and second that the subject was Balanta, but

covered with white paint (stage-level property). In both cases, 'white' occurs with *u-* marking.

- (16) a-        gi        u-/ \*a-hii  
        3SG.SUB-COP    U-/ \*A-white  
        'He is white'

Similarly, 'ill' in (17) was elicited in the contexts of being chronically ill, and ill because the subject has eaten something that disagreed with her:

- (17) a-        gi        u-/ \*a-saagε  
        3SG.SUB-COP    U-/ \*A-sick  
        'She is sick'

We would have no explanation for the ungrammaticality of *a-hii* and *a-saagε* if the contrast between *a-* and *u-* were dependent upon the individual-level vs. stage-level interpretation of the adjective.<sup>4</sup>

### 7.2.3 *The source of the event*

We now need to address the source of the event that the adjective modifies. Taking *dancer* as an example, one possibility is that the stem *dance* provides the event and the suffix *-er* supplies the individual. This turns out to be too simplistic. First of all, it does not allow us to provide a neat account of examples like (18a), where the adjective appears to modify

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<sup>4</sup> We also predict that nonpredicative adjectives—ones that lack a predicative use, but that have adverbial counterparts—would always occur with the *a-* prefix in Balanta. Examples include *former*, *future*, and *mere*. Unfortunately, the inventory of adjectives in Balanta, as in many related languages, is extremely limited, and I have been unable to find any adjectives of this type.

an event, but the noun has no corresponding verb (18b) (data from Vendler 1967):

- (18) a. Arthur was a just king  
king(Arthur) & just(Arthur)
- b. Arthur ??-ed justly  
 $\exists e$  [ruling(e) & Agent(Arthur, e) & just(e)]

Similar examples include *Bob is a frequent passenger* (\**Bob passenges frequently*) and *Jill is a wonderful linguist* (\**Jill linguists wonderfully*).

A second problem with this approach is that it has nothing to say about examples like (8-9) above, where the event is supplied by the speaker's and listener's knowledge of the situation, not by anything in the clause itself. Even (6) and (10), where the event is supplied by the verb and 'when'-clause, respectively, prove problematic for this approach. Similarly, an analysis by which certain (or all) nouns are lexically listed as having such an event associated with them fails, because it again fails to account for examples like (8-9).

What we need is an analysis that is flexible enough to accommodate the full range of data witnessed here. On the one hand, we have seen examples like *Sibow gi ajire a-bontfe* 'Sibow is a good dancer' (i.e., she dances beautifully) (2), where the event seems to be contributed by the noun *ajire* 'dancer'. On the other hand, we have seen examples like *n-gi hal a-raale* 'I am an angry person (because of something that just happened)' (9), where the event appears to be provided by situational context. In between, we have examples like *Oussou gio hal a-raale bini a-biifa mbarimuso hilli ngi alaante hembε* 'Oussou was an angry person when

he saw his sister with that man' (10), where the event is contributed by an element in the clause — here the 'when' clause.

Aronoff (1980), in an analysis of zero-derived denominal verbs in English, argues that the interpretations of simple and derived words may result from the combination of sparse semantics with general pragmatic principles. Using data first presented by Clark and Clark (1979), Aronoff points out that the bizarre meanings of many zero-derived verbs become reasonable once we are aware of the pragmatic context. For example, *He tried to teapot a policeman* makes sense when we learn that the subject (Max) has a teapot fetish — he strokes the backs of strangers' legs with a teapot. The rule describing the morphology of zero-derived denominal verbs, according to Aronoff, is quite simple. We need only say that it takes a noun and forms a verb. Gricean principles of cooperation do the rest, ensuring that the verb has something to do with an activity connected to the noun.

The full range of Balanta data is compatible with Aronoff's general approach because it allows us to account for the observation that the event modified by the adjective can be provided by the pragmatic situation rather than the linguistic context. The choice between *a-* (event) and *u-* (individual) prefixation derives from a speaker's real world knowledge about the noun or situation.

#### 7.2.4 *The history of the morphological contrast between individual and event modification*

The preceding analysis raises a number of questions of a historical order. How did a morphological distinction between individual and event

modification arise in Balanta? Why is it that the class 1 prefix *a-* came to be associated with an event reading, and an originally class 6 prefix *u-* (N'Diaye-Corréard 1970) with an individual reading? In this section I argue that the tendencies of analogical change reported by Kuryłowicz (1947) (also see discussion in Hock 1991, chapter 10), combined with facts about Balanta itself, provide many of the answers.

To begin, consider the following table, which shows the relationship between noun class and adjectival marking in the Balanta (Ganja) dialect described by N'Diaye-Corréard (1970), which has a much richer system of noun class agreement than Guinea Bissauan dialects (Quintino 1951) and the dialect described here:

TABLE 7.1. RELATION BETWEEN NOUN CLASS AND ADJECTIVAL MARKING (N'DIAYE-CORRÉARD 1970)

| Class | Description                                                          | Adjectival agreement |
|-------|----------------------------------------------------------------------|----------------------|
| 1     | non-kinship humans, sg.                                              | ha-                  |
| 2     | non-kinship humans, pl.                                              | bə-                  |
| 3     | inanimates, sg.                                                      | b-                   |
| 4     | inanimates, sg.                                                      | gə-                  |
| 5     | inanimates, sg.                                                      | f-                   |
| 6     | a. animates including kinship terms, sg.<br>b. inanimates, sg. & pl. | u-<br>u-             |
| 7     | a. animates including kinship terms, pl.<br>b. inanimates, pl.       | bə-<br>g-            |



We see in Table 7.1 that nouns referring to human beings are divided between two classes: non-kinship terms belong to class 1, while kinship terms belong to class 6. Class 6 contains some non-kinship terms, as well: *mbuuta* 'child' (has sense 'youngster'), *mfora* 'ghost' (N'Diaye-Corréard 1970: 26).

Class 6 stands out from the other classes because of its semantic variety: in addition to kinship terms, class 6 includes most, if not all, words referring to animals, and a wide variety of words referring to inanimates. In fact, class 6 and its plural class, class 7, are the only ones to include words referring to both animates and inanimates, and class 6 is the only one to contain both singular and plural nouns (both classes 3 and 4 form their plural in class 6). As a result, the majority of words in the dialect described by N'Diaye-Corréard form either their singular or plural in class 6. Adjectival agreement with these nouns is realized as *u-*.

It therefore comes as no great surprise that in the Guinea Bissauan dialect of Balanta described by Quintino (1951), all adjectives surface with the *u-* prefix, regardless of the class of the noun modified. This can be seen as a direct consequence of the "sphere-of-usage provision" (Hock 1991) in Kuryłowicz's second law of analogical change, which captures the fact that productive morphological patterns are more likely to be generalized than unproductive ones. In the case of the Guinea Bissauan dialects of Balanta, the more productive pattern — *u-* prefixation on adjectives — was generalized to all adjectives. The same generalization of *u-* marking has taken place in the Senegalese Ganja dialect described here.

The next step was for *u-* marking to take over the function of individual modification, and for *a-* marking to be “relegated” to event modification. This, too, has a ready explanation if we examine tendencies of analogical change. Kuryłowicz’s fourth law is as follows (translated by Hock 1991: 222):

(19) *Kuryłowicz’s fourth law of analogical change*

When as a consequence of morphological [= analogical] change, a form undergoes differentiation, the new form takes over its primary (‘basic’) function, the old form remains only in secondary (‘derived’) function.

This law states that if old and new forms continue to co-exist after an analogical change, the new form takes over the basic and productive function, while the old form is used in secondary or marginal contexts. As Hock notes, examples of this law in action are plentiful, and “[g]enuine counterexamples are not easy to find” (p. 223). Some examples from English are given below; the older form is on the left, and the newer, analogical form is on the right. In each case, the newer word has taken over the primary function of the older form, which has acquired or retained a secondary or marginal use:

- (20) hussy : housewife  
 brethren : brothers  
 elder : older  
 molten : melted  
 wrought : worked

In the dialect of Balanta explored here, *a-* and *u-* prefixation co-exist, but the productive formation — *u-* prefixation — has gained ground to the point

that it is the default choice for marking adjectives. In other words, *u-* prefixation has taken over *a-*'s basic or primary function, which is individual modification. Speakers have consequently been forced to reanalyze the function of *a-*. The fact that they reanalyzed it as a marker of event modification is in part accidental — we can imagine other ways of reanalyzing it which may, in fact, exist in other dialects of Balanta. But it is not wholly accidental. This reanalysis seems to have been helped along by two facts about Balanta. First, the words that belong to class 1 all denote human beings.<sup>5</sup> And second, Balanta, like related languages, has very few non-temporal adverbs.

Regarding the first point, it was possible for an event modification reading to become associated with adjectives bearing class 1 agreement since class 1 (human) nouns are more likely than nouns from other classes (specifically, non-human nouns) to be seen as important participants in events. Let's make this idea more precise. Recall that all kinship terms belong to Balanta class 6, and so the words in class 1 tend to be of the 'profession' type: *alama* 'king', *ajirɛ* 'dancer', *anjandɛ* 'merchant'. Many of these nouns express, in Larson's view, relations between individuals and events. Many of them also have corresponding verb forms. If we take examples like the following as the core case, then it is clear that reanalysis of the class 1 agreement marker *a-* as reflecting event modification would have been facilitated by — and even dependent on — the types of nouns that belong to class 1:

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<sup>5</sup> This includes words like *ntiibale* 'soul carried away by spirits' and *aloode* 'dead person'.

(21) Sibow gi aɲire a-bɔntʃɛ  
 Sibow COP dancer A-beautiful

'Sibow is a beautiful dancer'

∃e [dancing(e) & Agent(Sibow,e) & beautiful(e)]

Nouns outside of class 1 are less likely to take an individual-event pair  $\langle x, e \rangle$  as their semantic value. A mother (class 6) is a mother whether she "mothers" well or not. Words like *gə-fal* (class 4) 'stick' are difficult to assign an event value at all; a stick is not something that sticks, in the way that a dancer is someone that dances.

The virtual absence of adverbs in Balanta might also have encouraged the reanalysis of class 1 agreement as reflecting event modification. Most Balanta adverbs are temporal modifiers like *so* 'yesterday' or *wammo* 'now'; the only VP adverb I have been able to find is *gai* 'quickly'. Speakers therefore resort to various strategies for expressing 'adverbial' notions. This includes the use of nouns like *nduulu* 'a little bit' or *ndaani* 'a lot' to translate notions like slowly/gently/rarely or loudly/frequently; prepositional phrases with *ngi* 'with'; the use of verbs like *bontʃu* 'be beautiful' or *sir* 'be smart'; and the use of ideophones.<sup>6</sup> Therefore, morphological marking of event modification can be seen as one more strategy that allows speakers to express notions that would be expressed adverbially in some other languages.

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<sup>6</sup> For example: *agio adete, ma ahit mbuta ma, bij!* 'He was running, and he hit a kid, bam!'

### 7.3 Conclusion

On one level, the data presented here have been shown to fit well into Larson's (1995, 1998) approach to adjectival modification in which certain adjectives like *beautiful* or *compulsive* can modify an individual or an event. Speakers of the Ganja dialect of Balanta exploit this property to make fine-tuned morphological distinctions that are not available to speakers of many other languages, such as English, in the realm of adjectival modification.<sup>7</sup>

On another level, these facts add to our knowledge of the possible ways in which events may interact with the grammars of particular languages. The state of affairs described in this chapter seem to have arisen as the noun class and agreement system of Balanta underwent simplification. Nouns in the dialect described by N'Diaye-Corréard (1970) belong to seven noun classes, all of which trigger different agreement on adjectives. In the dialect described by Quintino (1951), on the other hand, all adjectives surface with the *u-* prefix, regardless of the class of the noun modified. From a diachronic perspective, then, the Ganja dialect's morphological distinction between adjectives describing events and adjectives describing individuals can be seen as a point on the continuum of the simplification of its noun class system. There seem to be two possibilities for the future development of the system. It may be that the morphological opposition seen here for adjectives modifying human nouns will spread to those modifying nonhuman nouns as well. Or, it might happen that the *u-* prefix, by far the most common means of

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<sup>7</sup> It is possible that some other dialects make the distinction; data is simply unavailable.

marking adjectives, will continue to gain ground and will eliminate the lovely opposition we have witnessed here.

## Chapter 8

### Focus Constructions

In this chapter I address two focus constructions in Balanta. In the first, discussed in section 8.1, a direct object may be focused via raising to [Spec, FP]. A noun class marked clitic that follows the focused direct object is argued to be a focus marker in  $F^\circ$ . In the second, addressed in section 8.2, what appears to be the definite determiner is used to lend emphasis to various elements, including pronouns, adjectives, and nouns. I propose that in Balanta, as well as in the Semitic language Amharic, a focus projection, FP, may be present within the noun phrase when  $F^\circ$  is filled with a null operator.  $F^\circ$  has strong, [-interpretable] features that are checked when it attracts an XP headed by a focal polarity item to its specifier.

#### 8.1 Focusing the Object

Balanta has the previously undiscussed construction in (1b-f) where a noun or noun phrase is followed by a pronoun that agrees with the preceding noun for noun class. Since the noun class system in the dialect under investigation is breaking down, more often than not, the class 5 pronoun *fi* is used for non-human nouns, regardless of the noun's original class affiliation:<sup>1</sup>

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<sup>1</sup> Alternatively, we could translate the examples in (1b-f) NP, S V: A snake, the king ate. I have chosen not to because in my dialect of English, the construction *Obj, Sub V* does not necessarily convey focus (and specifically,

- (1) a. a- lama womu saa  
 CL1- king eat snake  
 'The king ate a snake'
- b. [saa fi] a- lama womu  
 snake CL5.PRON CL1- king eat  
 'It was a snake the king ate'
- c. [saa ma fi] a- lama womu  
 snake DEF CL5.PRON CL1-king eat  
 'It was the snake the king ate'
- d. [saa fi ŋgi baali fi] a- lama womu  
 snake CL5.PRON with goat CL5.PRON CL1- king eat  
 'It was a snake and a goat that the king ate'
- e. [bi- saa fi] a- lama womu  
 CL2- snake CL5.PRON CL1- king eat  
 'It was snakes that the king ate'
- f. [bi- saa bi- nduba fi] a- lama womu  
 CL2- snake CL2-all CL5.PRON CL1- king eat  
 'It was all the snakes that the king ate'

In each case, the bracketed element consists of a noun phrase followed by a class-marked pronoun, which receives a high tone in the phonology.

It is important to note that the bracketed elements in (1b-f) are not clefts (as in the English translations). The strongest evidence for this is that a cleft construction exists in Balanta, but it contains an overt copula:

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identificational focus, as we will see below) in the way that the Balanta construction does.



- (2) u- gi saa alama womu  
 INAN.SUB- COP snake king eat  
 'It was a snake (that) the king ate'

We can also point out that the focus construction can occur after the constituent negator *ŋgetta*, while the cleft construction is ungrammatical:

- (3) a. u- gi saa alama womu, ŋgetta gsel gi  
 INAN.SUB-COP snake king eat, not CL4.fish CL4.PRON  
 'It was a snake that the king ate, not a fish'
- b. \*u- gi saa alama womu, ŋgetta u- gi gsel  
 INAN.SUB-COP snake king eat not INAN.SUB- COP fish

I will return to this construction below.<sup>2</sup>

Temne, which belongs to the Southern branch of Atlantic, has a very similar construction, illustrated below with examples from Hutchinson (1969: 40, 44):<sup>3</sup>

- (4) a. i nəŋk u- tik  
 I saw CL1-stranger  
 'I saw a stranger'
- b. u- tik kɔnɔ i nəŋk  
 CL1- stranger him I saw  
 'It was a stranger I saw'<sup>4</sup>

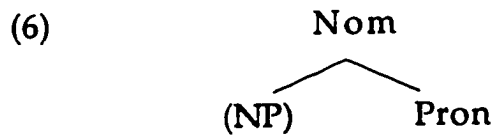
<sup>2</sup> While we are not dealing with synchronic clefts, it is probable that this construction derives historically from a cleft construction. See discussion in Harris and Campbell (1995).

<sup>3</sup> I thank C. Collins for bringing these data to my attention.

<sup>4</sup> Hutchinson's gloss here is 'I saw a stranger', but I have changed it to be consistent with the gloss of (5b), 'It was the ax I saw'. The latter type of gloss is to be preferred for this construction in Balanta since it conveys identificational focus, as I establish below.

- (5) a. i nəŋk ka- bap  
 I saw CL3- ax  
 'I saw an ax'
- b. ka- bap ka i nəŋk  
 CL3- ax CL3.it I saw  
 'It was the ax I saw'

Hutchinson accounts for these facts by proposing that subjects and objects in Temne are expressed by a Nom constituent, which consists of an optional noun phrase and an obligatory pronoun. The latter is deleted when it and the object noun phrase both follow the verb:



As evidence, he presents other instances where an NP is doubled by a pronoun:

(7) *Subjects* (data from Hutchinson, p. 21)

- a. u- tik ɔ nəŋk kɔ  
 CL1- stranger CL1 saw him  
 'A stranger saw him'
- b. \*u- tik nəŋk kɔ  
 CL1- stranger saw him  
 'A stranger saw him'

(8) *Objects* (data from Hutchinson, p. 24)

- ɔ- bai, i nəŋk kɔ  
 CL1- chief I saw him  
 'As for the chief, I saw him'

In (7) we see that NP subjects in Temne are obligatorily doubled by a subject pronoun; example (7b), where there is no subject pronoun, is ungrammatical. In (8) a topicalized noun phrase is coindexed with a pronoun in canonical object position. According to Hutchinson, this construction results when an NP raises out of the Nom constituent to the front of the clause, leaving the pronoun.

The data in (7) suggest that Temne has obligatory subject agreement, a position that Hutchinson rejects because there appears to be no agreement with pronominal subjects (example from Hutchinson, p. 11):

(9)    *i*       *fumpɔ*  
           I       fell

But it is very common for languages with obligatory subject agreement not to show overt agreement with homophonous pronominal (and especially affixal) subjects. Examples include Jóola Foñy (Sapir 1965) and Cherokee (Scancarelli 1987). One explanation is that such sentences have a null pronominal in subject position:

(10) *pro i*       *fumpɔ*

As for the example in (8), where a fronted object is obligatorily doubled by an object pronoun in complement position, I suggest that this is a topicalization construction, and that the object pronoun is simply coindexed with the topicalized noun phrase. This is true of topicalization constructions cross-linguistically (Bresnan and Mchombo 1987, Rizzi 1997).

I propose that the initial noun phrase in the Balanta examples in (1b-f), as well as those in the corresponding Temne examples in (4-5b), is an identificational focus, to be defined below. I argue that the identificational focus is located in the specifier of a functional projection, Focus Phrase (FP)

(see Brody 1990, 1995; Rizzi 1997; and Kiss 1998) and that the pronoun that follows the noun phrase in Balanta and Temne is in F°. I support this proposal with evidence from Balanta, but I believe that the results would turn out similarly for Temne. This of course needs to be determined through future work with Temne speakers.

### 8.1.1 *Focus vs. topicalization*

To begin, we can use a number of diagnostics to establish that the Balanta examples in (1b-f) involve focus rather than topicalization. First, as discussed by Cinque (1990: 63), a topic is compatible with a resumptive clitic, as in (11a), but a focalized constituent is not (11b):

- (11) a. That movie, I saw it  
 b. \*It's that movie that I saw it

Note that the Balanta examples in (1b-f) are all characterized by the lack of an object clitic. Examples with a resumptive clitic in (12) are ungrammatical:

- (12) a. \*saa fi a- lama wom- ma  
 snake CL5.PRON CL1- king eat- 3SG.OBJ  
 b. \*saa ma fi a- lama wom- ma  
 snake DEF CL5.PRON CL1-king eat- 3SG.OBJ

The topicalization construction seen below, on the other hand, requires the presence of a resumptive clitic within the comment:

- (13) a. Sadio, Mariama kano- \*(ma)  
 Sadio Mariama love- 3SG.OBJ  
 'Sadio, Mariama loves him'

- b. bug fo, n- karaj \*(fi)  
 book CL5.THIS 1SG.SUB-read CL5.OBJ  
 'This book, I read it'

A second diagnostic involves weak crossover effects. Rizzi (1997) observes for Italian that topicalization does not lead to weak crossover effects, but focus does (examples from Rizzi 1997):

- (14) a. Gianni<sub>i</sub>, sua<sub>i</sub> madre lo ha sempre apprezzato  
 'Gianni, his mother always appreciated him'  
 b. ?? GIANNI sua madre ha sempre apprezzato *t* (non Piero)

Likewise, in Balanta, sentences corresponding to (14a) are judged to be fine, while those corresponding to (14b) are odd:

- (15) a. Sadio, mbarimuso hilli kano- ma ndaani  
 Sadio sister 3SG.POSS love- 3SG.OBJ a.lot  
 'Sadio<sub>i</sub>, his<sub>i</sub> sister loved him a lot'  
 b. ?? Sadio hi mbarimuso hilli kano ndaani  
 Sadio CL1.PRON sister 3SG.POSS love a.lot  
 'It's Sadio<sub>i</sub> that his<sub>i</sub> sister loved a lot'

A third diagnostic we can use to show that the construction in (1b-f) involves focus has to do with uniqueness. Topicalization of more than one element is possible, but focalization of more than one is not (Benincà 1988, Rizzi 1997; data from Rizzi 1997):

- (16) Il libro, a Gianni, domani, glielo darò senz'altro  
 'The book, to John, tomorrow, I'll give it to him for sure'  
 (17) \*A GIANNI IL LIBRO darò (non a Piero, l'articolo)  
 'TO JOHN THE BOOK I'll give, not to Piero, the article'

The Balanta construction in (1b-f) clearly patterns as focus in this respect (18); contrast these examples with the topicalization examples in (19):

- (18) a. \*Sadio hi bug ma fi a- deen  
 Sadio CL1.PRON book DEF CL5.PRON CL1- mother  
 hilli wun  
 3SG.POSS give  
 'It's to Sadio and it's the book that his mother gave'
- b. \*Sadio hi bug ma fi a- karaj  
 Sadio CL1.PRON book DEF CL5.PRON 3SG.SUB- read  
 'It's Sadio and it's the book that (he) read'
- (19) a. Sadio, bug ma, a- deen hilli wun- ma  
 Sadio book DEF CL1- mother 3SG.POSS give- 3SG.OBJ  
 fi  
 CL5.IT  
 'Sadio, the book, his mother gave it to him'
- b. Sadio, bug ma, a- karaj fi  
 Sadio book DEF 3SG.SUB- read CL5.IT  
 'Sadio, the book, he read it'

Next, Rizzi (1997) shows that a wh-operator is compatible with a topic (with the order Top Wh), but not with a focus:

- (20) A Gianni, che cosa gli hai detto?  
 'To Gianni, what did you tell him?'
- (21) a. \*A GIANNI che cosa hai detto (non a Piero)?  
 'TO GIANNI what did you tell (not to Piero)?'
- b. \*Che cosa A GIANNI hai detto (non a Piero)?  
 'What TO GIANNI did you tell (not to Piero)?'

Once again, the Balanta construction in (1b-f) patterns as a focus construction (22), against the topicalization example in (23):

(22) a. \*Sadio hi bug fila u- karaŋ-ma  
 Sadio CL1.PRON book CL5.which 2SG.SUB-read- 3SG.OBJ  
 'SADIO, which book did you read to him?'

b. \*bug fila Sadio hi u- karaŋ-ma  
 book CL5.which Sadio CL1.PRON 2SG.SUB-read- 3SG.OBJ  
 'Which book TO SADIO did you read?'

(23) Sadio, bug fila u- karaŋ-ma?  
 Sadio book CL5.which 2SG.SUB-read- 3SG.OBJ  
 'Sadio, which book did you read to him?'

### 8.1.2 Analysis

We have now established that the Balanta construction in (1b-f) is a focus construction. Following Kiss (1998), we can make this conclusion more precise. According to Kiss, two types of focus constructions have been conflated in the literature. Identificational focus is quantificational in nature and has been argued to appear in the specifier of a focus projection (Brody 1990, 1995; Rizzi 1997, Kiss 1998). Informational focus, on the other hand, merely conveys non-presupposed information (24):

(24) m- biifa Sadio ma  
 1SG.SUB-see Sadio DEF  
 'I saw SADIO'

Informational focus here involves no fronting and does not pattern with informational focus with respect to the criteria enumerated below.

I next turn to evidence that the Balanta construction — and therefore, possibly the Temne construction as well — is an identificational focus construction. This will lead into a syntactic analysis of the examples seen in (1b-f).

One indication that we are dealing with identificational focus is that the focused constituent is interpreted as performing exhaustive identification, as would be predicted by the definition given in Kiss (1998: 249):

- (25) The function of identificational focus: An identificational focus represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; *it is identified as the exhaustive subset of this set for which the predicate phrase actually holds.* (Emphasis mine.)

We see this in the English examples below. First, (26b) is not a logical consequence of (26a); it contradicts it:

- (26) a. It was Margot and Joe that put together the volume.  
b. It was Margot that put together the volume.

Likewise, in a test that Kiss attributes to Donka Farkas, the negation of an informational focus may only be interpreted as the negation of its exhaustivity:

- (27) a. It was hippos we saw by the shore.  
b. No, we saw crocodiles, too.

In the Balanta focus construction, we get the same results. Example (28b) is a contradiction of (28a), not a logical consequence:



- (28) a. saa fi ngi baali fi a- lama womu  
 snake CL5.it with goat CL5.it CL1- king eat  
 'It was a snake and a goat that the king ate'
- b. baali fi a- lama womu  
 goat CL5.it CL1-king eat  
 'It was a goat that the king ate'

As further evidence, the negation of (29a) is a negation of its exhaustivity:

- (29) a. saa fi a- lama womu  
 snake CL5.it CL1-king eat  
 'It was a snake that the king ate'
- b. hani?, a- womu baali ma fanag  
 no 3SC.SUB-eat goat DEF also  
 'No, he also ate a goat'

Besides exhaustivity, another means of distinguishing identificational and informational focus constituents is through examination of distributional restrictions. The diagnostic most applicable to Balanta involves 'also' phrases. These are prohibited from occurring in an identificational focus constituent (examples from Kiss 1998: 252):

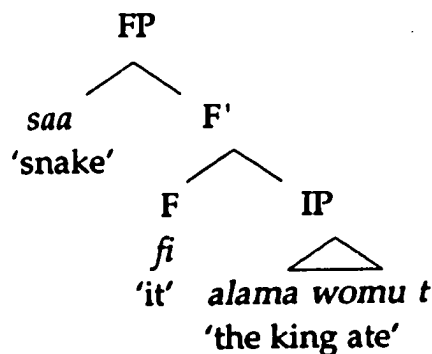
- (30) a. *Hungarian*  
 \*Mari egy kalapot is nézett ki magának  
 Mary a hat.ACC also picked out herself.DAT  
 'It was also a hat that Mary picked for herself'
- b. *English*  
 ? It was also a hat that Mary picked for herself'

The Balanta focus construction is equally unacceptable with 'also':

- (31) a. \*saa fi fanaj a- womu  
 snake CL5.it also 3SG.SUB-eat  
 'It was also a snake that he ate'
- b. \*saa fanaj fi a- womu  
 snake also CL5.it 3SG.SUB-eat  
 'It was also a snake that he ate'

These facts can be explained under Brody's (1990, 1995) proposal that the identificational focus constituent is in [Spec, FP], and takes scope over the complement of F°. Applied to Balanta, this suggests the following structure as one possibility:

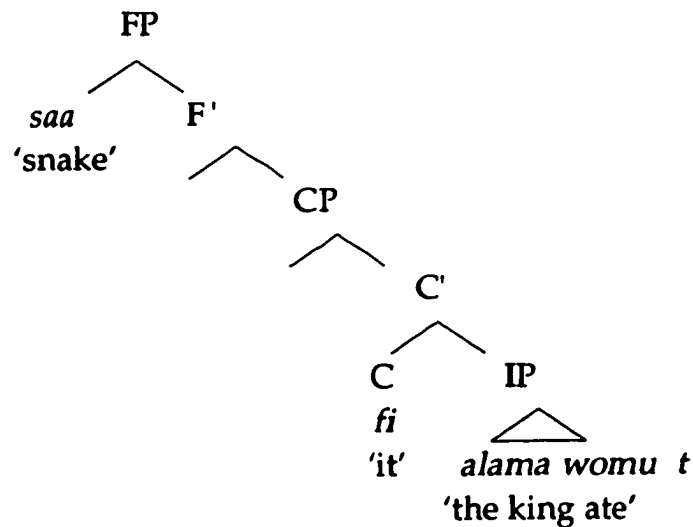
- (32) [saa fi] a- lama womu  
 snake CL5.PRON CL1-king eat  
 'It was a snake the king ate'



Here I have placed the class-marked pronoun in F°. We might imagine that in Balanta and Temne, an identificational focus in [Spec, FP] triggers the phonological realization of noun class features in F° in the form of a class-marked pronoun.

Is there another possibility? According to Kiss (1998: 258), FP subcategorizes for a CP. If this were so in Balanta, we could assign the preceding example the following structure instead:

(33) [saa fi] a- lama womu



The dominance relation  $FP > CP$  of this structure is problematic. Rizzi (1997) motivates the ordering  $CP > FP$  based on the order of complementizers and focused constituents. Compare (34a) and (34b):

- (34) a. I know that BEANS, John likes  
           C   Foc
- b. \*I know BEANS that John likes  
           Foc   C

Furthermore, proposing that Balanta class-marked pronouns occur in  $C^\circ$  in focus constructions is somewhat odd given that Balanta generally does not have overt complementizers or relativizers (an exception is *sam* 'in order that'):

- (35) a. saa ma Ø alama womu gi ŋgi gunu  
           snake DEF that king eat COP with poison  
           'The snake that the king ate is poisonous'

- b. Mariama jaa- ni Ø alama womu saa  
 Mariama tell- 1SG.OBJ that king eat snake  
 'Mariama told me that the king ate a snake'
- c. u- gi bug Ø n- wus te  
 3SG.SUB.INAN-COP book that 1SG.SUB-buy PAST  
 'It was a book that I bought'

And finally, a salient phonological characteristic of the class-marked pronoun appearing in focus constructions is its high-tone (class-marked pronouns in other contexts are clitics, and therefore lack tone or independent stress). High tone is a characteristic that one might expect to find associated with focus markers, but not with complementizers; complementizers are function words, and function words tend to be stressless.

There is some evidence in favor of the second hypothesis, that the class-marked pronoun is in C°. Balanta has a second focus construction in which a pronoun receives a contrastive interpretation. Example (36a) shows the class-marked pronoun in its usual position. In (36b-c), it has been fronted:

- (36) a. a- womu fi  
 3SG.SUB-eat CL5.it  
 'He ate it'
- b. fi a- womu  
 CL5.it 3SG.SUB-eat  
 'He ate IT'

- c. fi Sadio womu  
 CL5.it Sadio eat  
 'Sadio ate IT'

Temne has a similar construction (Hutchinson 1969: 44):

- (37) ka i nəŋk  
 CL3.it I saw  
 'I saw IT'

There is some evidence that the pronoun in (36b-c) occupies  $C^\circ$ .

First, it is incompatible with the complementizer *sam* 'that, in order that':

- (38) a. Mariama bin- tɛ sam a- biifa fi  
 Mariama come-DIR that 3SG.SUB-see CL5.it  
 'Mariama came to see it'
- b. \*Mariama bin- tɛ sam fi a- biifa  
 Mariama come-DIR that CL5.it 3SG.SUB-see  
 'Mariama came to see IT'

Example (38a) shows that a postverbal class-marked pronoun may co-occur with the complementizer *sam*. But when it occurs preverbally, this is no longer possible (38b).

We might also expect the pronoun, if it occupies  $C^\circ$ , to be incompatible with a filled [Spec, CP] (the doubly-filled COMP constraint). This is precisely what we find. A fronted class-marked pronoun is incompatible with a *wh*-word in [Spec, CP]:

- (39) a. mfila a- dasu fi  
 when 3SG.SUB-break CL5.it  
 'When did he break it?'
- b. \*mfila fi a-dasu?

- (40) a. hila dasu fi  
 who break CL5.it  
 'Who broke it?'  
 b. \* hila fi dasu?

However, as pointed out to me by M. Suñer, none of these examples is convincing evidence against the structure in (32). As for the incompatibility between the focus marker and the complementizer *sam* 'that, in order that', this might only show that the Balanta focus construction is incompatible with subordinate clauses. The examples in (39)-(40) that I suggested could be reflective of the doubly-filled COMP constraint, on the other hand, are easily accounted for with the structure in (32) if *wh*-words are in fact in [Spec, FP] (Rizzi 1997), as suggested by a general incompatibility between focused phrases and *wh*-words. If this is so, then the incompatibility of a class-marked pronoun in  $F^\circ$  with a *wh*-word in [Spec, FP] might be due to  $F^\circ$ 's being filled with a null *wh*-head, or to a clash in features between a non-identificational *wh*-word in [Spec, FP] and the identificational class-marked pronoun in  $F^\circ$ .

Before concluding, let us return to example (3a), repeated below as

(41):

- (41) u- gi saa alama womu, ŋgetta gsel gi  
 INAN.SUB-COP snake king eat, not CL4.fish CL4.PRON  
 'It was a snake that the king ate, not a fish'

This example shows that the Focus projection itself may be negated, with ellipsis of the rest of the clause (*It was a snake that the king ate, not a fish that the king ate*). A similar example is given in (42):

- (42) *ngetta nani ma gi a- ritf bari biti hi*  
 not baby DEF COP LOC- crying but dog CL1.PRON  
 'It was not the baby that was crying, but the dog'

Here, too, FP seems to dominate an elided clause.<sup>5</sup>

### 8.1.3 Summary

In this section I illustrated a Balanta construction in which NP objects are fronted and followed by a high-toned, class marked pronoun. Using diagnostics gathered by Rizzi (1997), I demonstrated that this is a focus construction. It was proposed that the focused constituent occupies [Spec, FP], with the class-marked pronoun in F°.

## 8.2 Focus in the Noun Phrase: The Role of the Definite Article *ma*

The Balanta enclitic *ma*<sup>6</sup> typically functions as a definite determiner, and it is impossible to get a definite reading without it. We see this in the following pairs of sentences, which come from the stories in Appendix 2. In (40), an indefinite noun phrase 'a war' in the first sentence is mentioned again in the second sentence, this time with the definite article *ma*. A class inclusion relationship holds between situations and wars, which permits reference back to 'war' using the more general descriptive predicate 'the situation', cf. Hawkins 1978: 107:

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<sup>5</sup> The constituent negator *ngetta* negates the NP [*naani ma*] 'the baby', not the clause 'the baby is crying'. There is a covert relative pronoun here: *ngetta naani ma (who) gi aritf, bari biti hi*.

<sup>6</sup> Homophonous with this *ma* is the consecutive particle (cf. Appendix 2) and the third person singular non-agreeing object pronoun.

- (43) u-        gio        su u m juugi    bi- tjaa        ŋgi  
 INAN.SUB- COP.PAST war    between CL2- Balanta    with  
 bi- bajnuŋka ma  
 CL2- Bainouk DEF

'There was a war between the Balantas and the Bainouks'

wil ma wuflu ndaani waabo

thing DEF last much now

'The situation lasted a long time'

In (44), the existence of a chair is implied by the verb *mæesu* 'sit!' in the first sentence. Accordingly, 'chair' in the second sentence bears the definite article:

- (44) bini a-        gaf        mɔ ma bi-        jaa- ma        mæesu  
 when 3SG.SUB- arrive HYPO CONS 3PL.SUB- tell- 3SG.OBJ sit

'When he arrived, they told him, "sit down"'

bini a-        mæes hɛdma ma        untjugub        ma        gobu

when 3SG.SUB- sit        there        CONS        chair        DEF        fall

a-        dijko

LOC-        hole

'When he sat down there, the chair fell into the hole'

Nouns with unique referents are always definite, and thus in a language with obligatory marking of definiteness, this marking will be obligatory. In English, we cannot say \* $\emptyset$  sun or \*a sun when referring to the star around which our planet revolves. We must say *the sun*. Earth has only one moon, and thus when we refer to it, we say *the moon*, not \* $\emptyset$  moon or \*a moon. The same is true in Balanta. We find *lej ma sun* DEF



and *karo ma* moon DEF, when referring to these entities, respectively, never \**lej* ∅ or \**karo* ∅.

A final environment in which definite determiners are generally found across languages is shown in (45) (example from Hawkins 1978: 101):

(45) What's wrong with Bill? Oh, *the woman he went out with last night* was nasty to him.

As Hawkins points out, the italicized NP in (45) is definite even if the woman has never been mentioned previously or implied by some preceding NP. He attributes it to the relative clause being an 'establishing relative', one that establishes a definite referent without there being any previous mention (pp. 131ff.). We find the same type of examples in Balanta:

(46) *saa ma alama womu gi ngi gunu*  
 snake DEF king eat COP with poison  
 'The snake that the king ate was poisonous'<sup>7</sup>

The usual position of *ma* is following the noun. Since Balanta nouns are always first in the noun phrase, this puts the definite determiner in second position:

(47) a. *biti ma undaŋ umɔɔne*  
 dog DEF big black  
 'The big black dog'

<sup>7</sup> It is an idiosyncrasy of *alama* 'king' that it is never followed by the definite article, even when definite. We know that it is not due to across-the-board haplology because, for example, *Mariama ma* 'Mariama' is perfectly acceptable.

- b.    *cheŋ*        *ma*    *undaj*  
       palm.tree DEF big  
       ‘the big palm tree’
- c.    *anin ma utiitil*  
       wife DEF first  
       ‘the first wife’ (in polygamous marriage)

This is what we would expect if nouns in Balanta raise to adjoin to  $D^{\circ}$ , as argued in chapter 6, and if *ma* is a definite determiner, as was assumed there. In the majority of cases, the diagnostics above show this assumption to be correct.

Interestingly, however, speakers of Balanta may exploit the placement of the definite determiner to convey emphasis. This is illustrated by the brief exchange in (48), where *ma* surfaces attached to an adjective in order to highlight it. In the unmarked situation, where the noun is the focus of the noun phrase, cliticization of *ma* to the adjective would be unacceptable:

- (48) A:   *tod- ni sis usamba*  
           bring- 1SG.OBJ chair red  
           ‘Bring me a red chair’
- B:    (Picks up black chair.)
- A:    *hani?, tod- ni sis usamba ma*  
       no       bring- 1SG.OBJ chair red       DEF  
       ‘No, bring me the RED one.’

The fact that the definite determiner is required in speaker A’s response to speaker B’s picking up the wrong chair is not surprising. It is precisely what we would expect given the typical pattern of “first-mention indefinite

description before second-mention definite description” attested cross-linguistically (Hawkins 1978: 86). What makes this example interesting is that manipulating the position of the definite article is obligatory: since ‘red’ is emphasized, it must be followed by the definite article. Intonational emphasis of *usamba* by itself is not sufficient:

- (49) \* hani? tod- ni sis ma USAMBA (inton. emph. on *samba*)  
 no bring-1SG.OBJ chair DEF red  
 ‘No, bring me the RED one’

One possibility is that the adjective *usamba* is being used as a noun in its second occurrence in (48), as in English *Bring me the chair, the red one*. But we know this is not the case because this adjective, when nominalized, requires the class 4 *gə-* noun class prefix; *u-* generally appears only on adjectives and verbs.

When there is a string of adjectives, Balanta speakers can use the position of the definite determiner to highlight one of them. Example (50a) shows the unmarked use of *ma*, following the noun. In (50b) and (50c) respectively, it cliticizes and lends emphasis to *undaj* ‘big’, and *umɔɔnɛ* ‘black’:

- (50) a. biti ma undaj umɔɔnɛ  
 dog DEF big black  
 ‘The big black dog’ (\*a big black dog)
- b. biti undaj ma umɔɔnɛ  
 dog big DEF black  
 ‘The BIG black dog’ (\*a BIG black dog)

- c.    biti    undaŋ    umɔɔne    ma  
       dog    big        black     DEF  
       'The big BLACK dog' (\*a big BLACK dog)

Given these data, we might expect to find examples where *ma* cliticizes to both the noun and the adjective (N *ma* Adj *ma*) or to more than one adjective (N Adj *ma* Adj *ma*). But we do not. In fact, there is a cross-linguistic generalization we can make about topic and focus, which confirms my characterization of *ma* as a focus marker: more than one topic may occur in a single sentence, but focus is limited to a single constituent (Benincà 1988, Bossong 1989, Rizzi 1997). Bossong (p. 40) explains this as follows: "... if we define the sentence as the minimal independent utterance, it is evident that there must be exactly one assertive speech act per sentence; on the other hand, the topics about which something is asserted can be indefinitely multiplied..." A structural explanation for the existence of a single focus within the noun phrase that builds on work on focus in the clause (e.g., Brody 1990, 1995; Rizzi 1997; Kiss 1998) is proposed below.

Other facts in Balanta confirm the role of *ma* cliticization in focus. For example, as shown below, cliticization of *ma* serves to make an interrogative pronoun more emphatic:

- (51) A: alaantɛ holla gobu a- wedɛ  
 man some fall LOC-water  
 'Some guy fell in the water'
- B: Hila ma?  
 who DEF  
 'WHO?'
- A: Segu  
 'Ségou'

Likewise, emphatic personal pronouns are formed with the addition of *ma* (see Tables 2.2 and 2.3 for paradigms and section 3.2 for discussion):<sup>8</sup>

- (52) jima haao palanter ma  
 1SG.EMPH broke window DEF  
 'It was I who broke the window'

N'Diaye-Corréard (1970: 37) reports the same strategy, with numerous examples.

The Atlantic language Temne, encountered earlier in this chapter, has a particle *ma* that behaves similarly, though not identically, to Balanta *ma* (cf. Scott 1956, Hutchinson 1969). Hutchinson reports that it is not found in simple clauses, but occurs in *wh*-questions, clefts, and relative clauses.<sup>9</sup> The picture is complicated by the fact that a homophonous particle indicates that the verb is present tense (Wilson 1961b, Hutchinson

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<sup>8</sup> Emphatic pronouns are used (i) for emphasis or (ii) in place of clitic pronouns in environments where clitics are prohibited (e.g., in conjoined structures).

<sup>9</sup> I do not present the relative clause data here because the *ma* particle does not seem to me to have a focus function there. But see Hutchinson (1969: 54) for data and brief discussion.

1969: 54), but at least some of the data below are suggestively similar to Balanta.

As seen in the following examples from Hutchinson (1969: 61), *wh*-questions in Temne have a sentence initial *wh*-word and a sentence final question marker:

- |      |    |                      |      |      |   |  |    |                       |     |    |   |
|------|----|----------------------|------|------|---|--|----|-----------------------|-----|----|---|
| (53) | a. | kane                 | nəŋk | mi   | a |  | c. | kəŋ                   | sá  | kɔ | a |
|      |    | who                  | see  | 1SG  | Q |  |    | why                   | 1PL | go | Q |
|      |    | 'Who sees/saw me?'   |      |      |   |  |    | 'Why do/did we go?'   |     |    |   |
|      | b. | kane                 | í    | nəŋk | a |  | d. | reke                  | sá  | kɔ | a |
|      |    | who                  | 1SG  | see  | Q |  |    | where                 | 1PL | go | Q |
|      |    | 'Whom do/did I see?' |      |      |   |  |    | 'Where do/did we go?' |     |    |   |

As in Balanta, the *wh*-word may be followed by *ma*, as in the following examples from Hutchinson (1969: 62). (In examples (54b,d), *ma* has merged phonologically with a following pronoun):

- |      |    |                  |        |      |     |   |
|------|----|------------------|--------|------|-----|---|
| (54) | a. | kane             | ma     | nəŋk | mi  | a |
|      |    | who              | MA     | see  | 1SG | Q |
|      |    | 'Who sees me?'   |        |      |     |   |
|      | b. | kane             | mɛ     | nəŋk | a   |   |
|      |    | who              | MA+1SG | see  | Q   |   |
|      |    | 'Whom do I see?' |        |      |     |   |
|      | c. | kəŋ              | ma     | sə   | kɔ  | a |
|      |    | why              | MA     | 1PL  | go  | Q |
|      |    | 'Why do we go?'  |        |      |     |   |

- d.    thethe   mɔ       kɔ    a  
       when    MA+3SG   go    Q  
       ‘When does he go?’

It may be that the addition of *ma* to *wh*-words in Temne makes them more salient, although Hutchinson does not address this possibility.

Temne *ma* also seems to be connected with emphasis in the following examples taken from Hutchinson (1969: 56):

- (55) a.    ɔ-    tik        kɔɔɔ        ma    nəŋk    mi  
           CL1- stranger 3SG.EMPH MA    see    1SG  
           ‘It is the stranger who sees me’
- b.    mine        ma    der  
       1SG.EMPH MA    come  
       ‘It’s me who comes’

Here we have focused subjects, as demonstrated by the use of emphatic pronouns. Both the focused NP in (55a) and the focused pronoun in (55b) are followed by the *ma* clitic.

### 8.2.1 *Analysis*

So far we have seen that the Balanta clitic *ma* is a definite article, and that while it typically attaches to nouns, it may also cliticize to adjectives, pronouns, and *wh*-words to make them more emphatic. The Atlantic language Temne has a homophonous particle *ma*, which shares some of the characteristics of the Balanta enclitic, and possibly the same analysis. The data presented so far raise a number of questions. First, is Balanta *ma* simply a definite determiner with special attachment properties, or is its identity more complex? Second, how are its attachment properties best







- (61) a. yih 'this'  
this
- b. yih-u 'this same one'  
this-DEF(MASC)

The following examples, from Yimam (1996: 56ff.), show that the Amharic definite marker has a clear focal use:

- (62) a. ine i-sär-aw allä-hu  
I 1SG-do-3MASC.SG.OBJ AUX-1SG  
'I will do it'
- b. ine-u i-sär-aw allä-hu  
I-FOC 1SG-do-3MASC.SG.OBJ AUX-1SG  
'I *myself* will do it'
- (63) a. kasa ine-n säddäb-ä-nñ  
Kasa I-ACC insult-PERF-3MASC.SG-1SG.OBJ  
'Kasa insulted me'
- b. kasa ine-n-u säddäb-a-aññ  
Kasa 1-ACC-FOC insult-PERF-3MASC.SG-1SG.OBJ  
'Kasa insulted *me, myself*'

Yimam distinguishes the focal *-u* from the definite article on the basis of gender agreement. While the definite article agrees in gender with a head noun, the focal marker is invariable, as seen by the following example in which a demonstrative modifying a feminine noun appears with *-u* instead of the feminine *-wa*:

- (64) [ya-čči-u Aster] ti-sär-aw-all-äčč  
that-FEM-FOC Aster 2PL-do-3MASC.SG.OBJ-AUX-3FEM.SG.SUB  
lit. 'That *Aster* (she) will do it'

Yimam also sees the use of focal *-u* on pronouns as evidence that it is a focal marker, not simply a definite article, in this use, since pronouns are already definite.

Although Yimam presents no data that suggests that the position of the Amharic focal/definite marker can be exploited to emphasize various elements in the noun phrase, it appears to be similar enough to the Balanta definite determiner to motivate a similar analysis. Accordingly, I use the Amharic data, and particularly the lack of gender agreement between focal *-u* and the head noun, as support for the hypothesis that *ma* is not a mere definite determiner. Specifically, I propose that in its focal use, it is a focus head  $F^\circ$ , as the class marked pronouns were analyzed in 8.1.

Let us return to one fact noted above: even in its focal use, *ma* imparts definiteness to the noun phrase in which it occurs. It is impossible to have an indefinite reading in a noun phrase containing *ma*:

- (65) a.   biti   ma   undaj   umɔɔɛ  
           dog   DEF   big       black  
           ‘The big black dog’ (\*a big black dog)
- b.   biti   undaj   ma   umɔɔɛ  
           dog   big       DEF   black  
           ‘The BIG black dog’ (\*a BIG black dog)
- c.   biti   undaj   umɔɔɛ   ma  
           dog   big       black   DEF  
           ‘The big BLACK dog’ (\*a big BLACK dog)

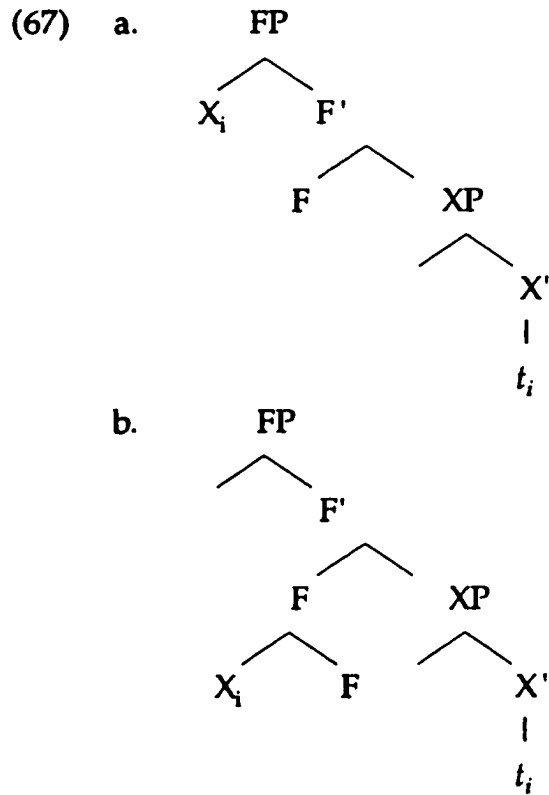
These data suggest that the focal *ma* must be coindexed with definiteness features in  $D^\circ$ , or that its own definiteness features can be transmitted to the DP as a whole, for example, by feature percolation. Note that

definiteness is connected with focus in a number of the world's languages, including Balanta and Amharic, as we have already seen, as well as Cape Verde and Saõ Tome Creole Portuguese (Lucchesi 1993) and Romanian (Manoliu-Manea 1989). In Cape Verde and Saõ Tome Creole Portuguese, the definite article, which is diachronically derived from a demonstrative, has emphatic and reinforcing functions. In Romanian, clitic copying of postverbal prepositional objects by a preverbal accusative pronoun originally expressed topicality and focus, but gradually took on the function of a definite article. The definite force of focal markers like *ma* could therefore be seen as a consequence of the history of such markers, or as a reflection of their tendency to become reinterpreted as indicators of definiteness.

As for the position of the Balanta focal marker within the DP and its attachment properties, I first consider two general possibilities. First, we might claim that there is a FP that has scope over the entire DP, in the same way that FP has been argued to have scope over CP at the clausal level (see discussion in 8.1):

(66) [FP [F°] [DP ]]

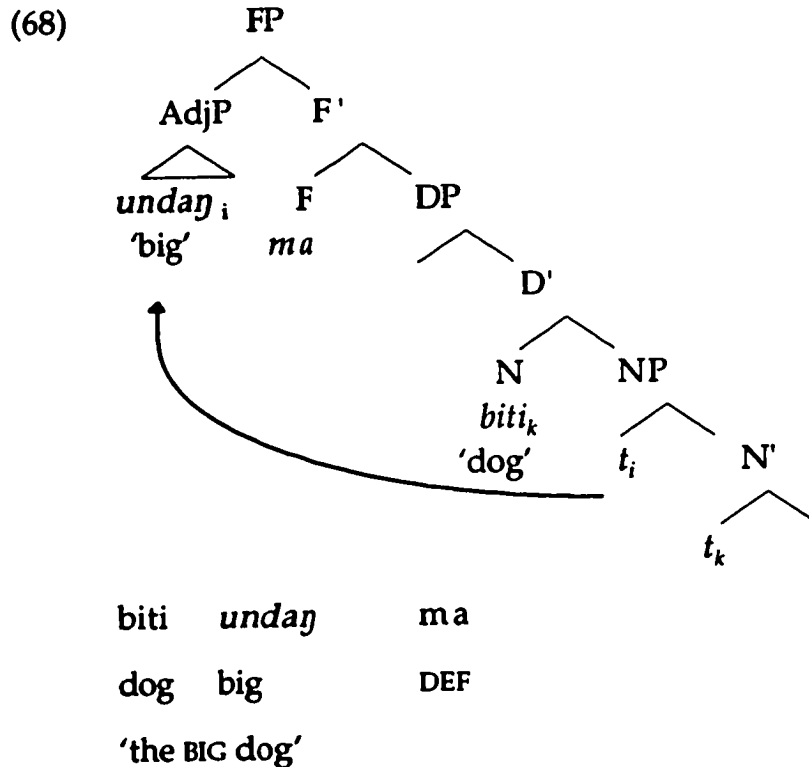
Another possibility is that FP dominates only the category that the focal marker attaches to. For example, if an adjective is to be focused, only the AdjP is dominated by FP. Adj° could then raise to [Spec, FP] or raise and adjoin to F° to check a [focus] feature, obtaining the order X° + *focus marker*. These possibilities are illustrated below:



At first glance, the proposal in (66) seems most satisfying. First, the fact that there is a strong preference for only one *ma* per noun phrase suggests that it has only one position. Given either structure in (67), there would be no structural source for the restriction on multiple *mas*. Second, the structure in (66) is more in line with what we would expect given the parallelism already noted between CP and DP (Abney 1986, 1987; Szabolcsi 1987, 1989, and subsequent work; see chapter 6). As for the connection between focal particles like the Balanta *ma* and Amharic *-u* and definiteness, we can claim that FP may be projected only if D° bears a null [definite] feature.<sup>10</sup>

<sup>10</sup> In the Minimalist Program, syntactic structures are built from the bottom up. In a top-down theory, we would say that F° selects a [definite] DP.

But explaining how *ma* attaches to various elements in the noun phrase given the structure in (66) turns out to be a challenge. We might expect  $F^\circ$  to attract a focused element to its specifier to check a [focus] feature, which is what I proposed in section 8.1 for  $F^\circ$  at the clausal level:



This approach clearly will not work, since even with  $N^\circ$  raising to  $D^\circ$ , it predicts focused elements to be fronted with respect to other elements of the DP.

At this point we can note an interesting parallelism between focus and *wh*-questions in Balanta. At the clausal level, both focused objects and *wh*-words undergo movement to a specifier at the front of the clause. For focused elements, the landing site is [Spec, FP]. For *wh*-words, it is either [Spec, CP] or [Spec, FP], depending on our approach to *wh*-movement, as mentioned in 8.1. But the fact that focused elements are cross-linguistically incompatible with *wh*-elements does suggest that we are dealing with a

single projection whose head may be specified as [wh] or [focus]. For our purposes, it is not crucial where wh-phrases raise to, but I call the position [Spec, FP] in the diagrams below:

- (69) a.  $[_{FP} w_i [_{F^o} ] [a- \quad biifa \quad t_i \quad Dakar ]]$   
           what 3SG.SUB- see           Dakar  
           ‘What did he see in Dakar?’
- b.  $[_{FP} saa_i [_{F^o} fi ] [alama womu \quad t_i ]]$   
           snake FOC king eat  
           ‘It was a snake the king ate’

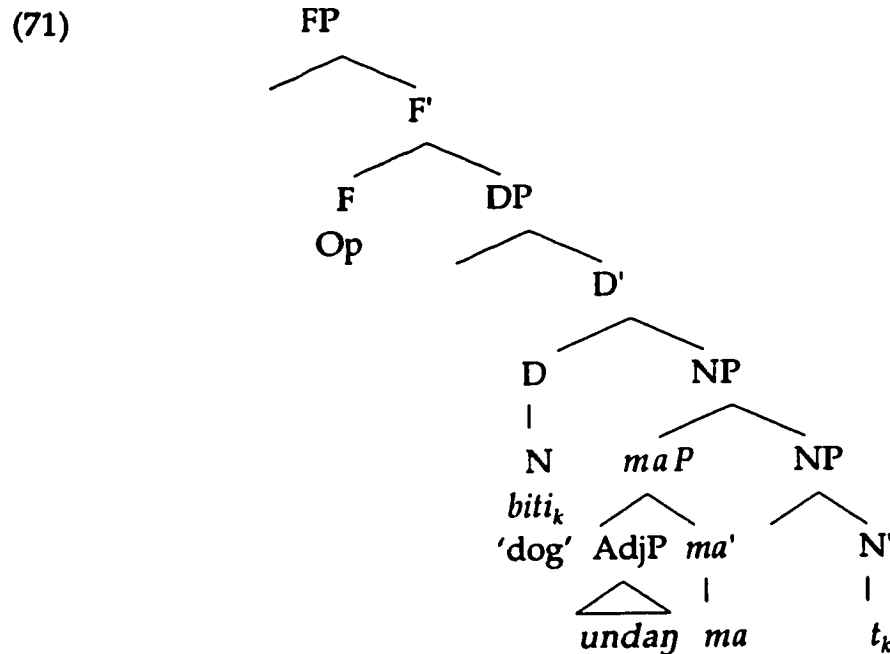
In noun phrases, however, neither interrogative pronouns nor the focus marker occur phrase-initially. Instead, they surface in a position that is descriptively adjacent to the word they modify. From this we might surmise that they do not undergo fronting prior to Spell-out:

- (70) a.  $[_{DP} [_{D^o} anin] [hila ]]$   
           woman which  
           ‘Which woman?’
- b.  $[_{DP} [_{D^o} biti] [umɔɔnɛ ma ]]$   
           dog black DEF/FOC  
           ‘The BLACK dog’

It is generally accepted by those working in the Principles and Parameters framework that languages do not differ in whether they have a rule of wh-movement. In languages where wh-phrases surface in situ, like Chinese or Japanese, wh-movement has been argued to take place at LF (Huang 1982, Lasnik and Saito 1984). It would seem that this should be extended to apparent differences in wh-movement across constructions,

and thus, we would like to say that the interrogative pronoun in (70a) is licensed by A'-movement at LF.

We can relate the parallelism between the examples in (70) to the analysis of the focal marker *ma* by proposing that *ma* is a focal polarity item that heads its own projection and is licensed at LF by a focal operator in  $F^\circ$ :



|               |       |     |
|---------------|-------|-----|
| biti          | undaj | ma  |
| dog           | big   | DEF |
| 'the BIG dog' |       |     |

We see in (71) that  $F^\circ$ , which is filled with an operator, and  $D^\circ$  are separate heads. Therefore, in principle, there is nothing to prevent  $D^\circ$  from being realized as the definite determiner *ma*, allowing *ma* to surface twice per DP. But we see in (72) that this is not what we find:

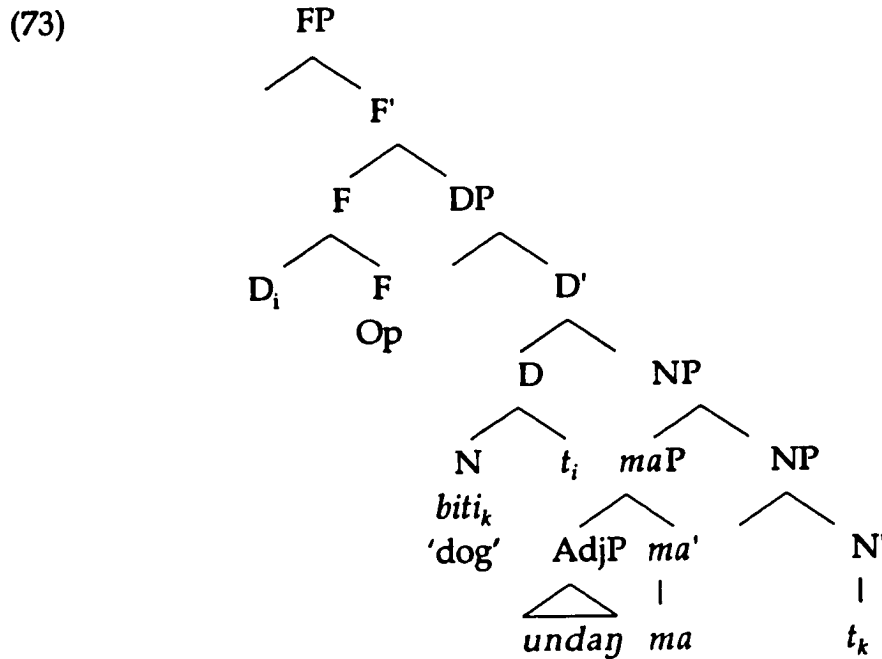
|      |                 |     |        |     |
|------|-----------------|-----|--------|-----|
| (72) | *biti           | ma  | umɔɔne | ma  |
|      | dog             | DEF | black  | FOC |
|      | 'the BLACK dog' |     |        |     |



*Ma*, which must be characterized as a portmanteau that expresses both definiteness and focus, appears only once per noun phrase. If the hierarchical arrangement present in the syntax always coincided with PF structure, there is a good chance that (72) is what we would find. But mismatches between syntactic structures and their phonological realization are common. We find, for example, suppletion and cumulative (e.g., portmanteau) or extended morphs (Hockett 1947; Matthews 1991; Anderson 1992; Halle and Marantz 1993; Beard 1995). Halle and Marantz (1993) examine such mismatches in great detail, and show that they result from the well-motivated operations of merger, fusion, and fission, with other types of featural interactions possible. Portmanteau morphs like *ma* are the consequence of fusion, which may be fed by head movement or merger. “[F]usion takes two terminal nodes that are sisters under a single category node and fuses them into a single terminal node” (Halle and Marantz 1993: 116). The resulting node contains the features from both of the original terminal nodes.

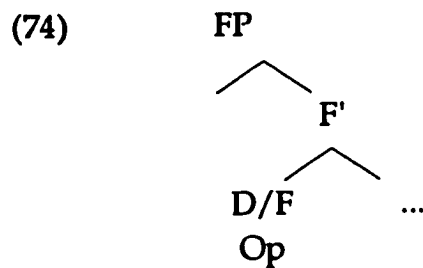
Applying this to Balanta, I propose that in the syntax or at the level of Morphological Structure (MS) (between Spell-out and PF) motivated by Halle and Marantz,  $D^\circ$  raises to  $F^\circ$ , forming the structure in (73). The movement may take place because both the  $F^\circ$  in Balanta DPs and  $D^\circ$  itself contain a [definite] feature which must be checked. In the following structure, I have shown  $D^\circ$  exorporating out of the adjunction structure it forms with  $N^\circ$ , but it is also possible that the entire adjunction structure

raises. I have chosen to illustrate the excorporation strategy because it is a more “minimal” operation, since it involves the raising of fewer features:<sup>11</sup>



biti    undaj    ma  
 dog    big        DEF  
 'the BIG dog'

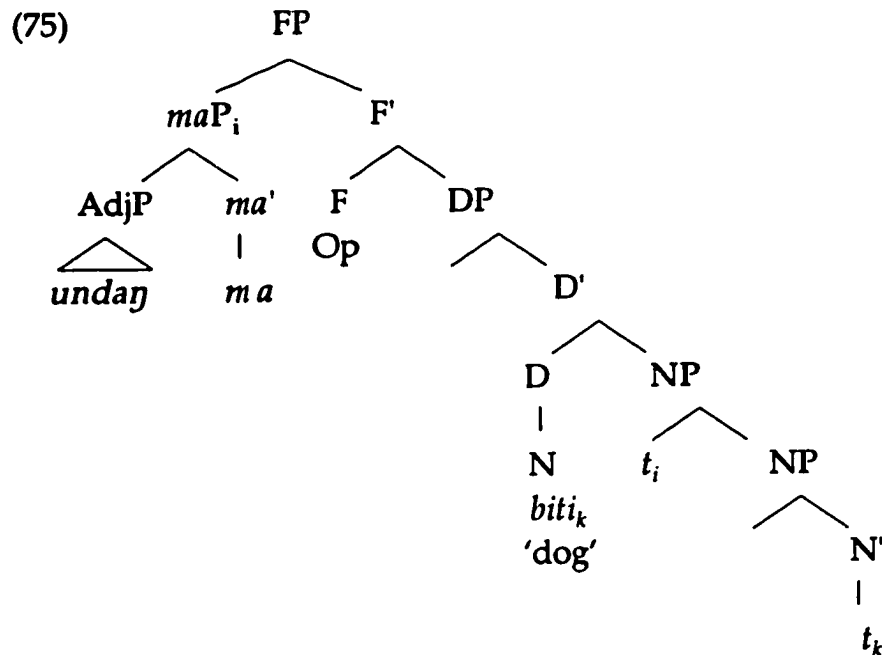
Fusion then takes  $D^\circ$  and  $F^\circ$ , sisters under the single category node  $F^\circ$ , and fuses them into a single terminal node, which is realized by the null focus operator:



<sup>11</sup> The fact that  $F^\circ$  has both [definite] and [focus] features is the result of *ma*'s history. I address this in greater detail below.

This explains why (72) is non-occurring.

At LF, *maP* raises to [Spec, FP] to check  $F^{\circ}$ 's focus feature. The feature [definite] has been checked and erased through the raising of  $D^{\circ}$  to  $F^{\circ}$ :



|               |       |     |
|---------------|-------|-----|
| biti          | undaj | ma  |
| dog           | big   | DEF |
| 'the BIG dog' |       |     |

A residual issue is how  $F^{\circ}$  came to be associated with an operator with both focus and definite features. Recall that Balanta is not alone in having a synchronic or diachronic link between the two types of features: structures in Amharic (Yimam 1996), Cape Verde and São Tome Creole Portuguese (Lucchesi 1993), and Romanian (Manoliu-Manea 1989) all reflect such a connection.

Cumulative morphs, including portmanteaux, most commonly spell out features that occur in close proximity in syntactic structures, such as tense and aspect. Latin and Greek verbal inflectional endings are clear

examples of this (cf. Matthews 1991). FP and DP are adjacent functional projections. This facilitates the operation of fusion, since it only takes place between two sister nodes dominated by a single category node. If fusion is fed by merger, then it will generally take place only between a head and the head of its complement XP. If fusion is fed by head movement, then it will take place only between heads that have become sisters under a single terminal node via head to head movement (Halle and Marantz 1993: 116).

### 8.2.2 *Summary*

The preceding analysis accounts for the fact that only one element may be focused with *ma* per DP. This follows from there being a single specifier position in which focused elements may be licensed. At the same time, it accounts for the position of *ma* with respect to other elements in the phrase and for the lack of co-occurrence between a definite *ma* and a definite/focal *ma*. Lastly, a couple of parallels were proposed. The claim that DP may be dominated by a focus projection, just like CP, furthers the parallelism already noted between CP and DP. And the claim that focus always involves movement to [Spec, FP], whether overtly or covertly, was related to the claim that wh-movement must apply in all languages. At the clausal level, Balanta wh-movement and focus-movement apply in the overt syntax; in the DP, they apply at LF.

## Appendix 1

### Noun classes

Examples of Ganja nouns collected in my own research are given in the lefthand column below and paired, wherever possible, with the cognates listed in N'Diaye-Corréard (1970) (in her transcription). The purpose is to give the reader a general overview of the content of Balanta noun classes, and to illustrate the type of variation in class affiliation found between dialects.

#### Class 1 (human singular, some animals)

##### *Gloss*

|                 |           |                 |    |
|-----------------|-----------|-----------------|----|
| 'person'        | hal       | hāl             | 1  |
| 'woman, wife'   | a-nin     | -nín (a-/bə-)   | 1  |
| 'man'           | a-laante  | -lāante (a-bə-) | 1  |
| 'child'         | mbuta     | mbūutā          | 6a |
| 'girl'          | a-fula    | -fūlá (a-/bə-)  | 1  |
| 'boy'           | a-faθa    | -θāsa (a-/bə-)  | 1  |
| 'husband'       | a-ntɔ     | -ntɔā (a-/bə-)  | 1  |
| 'mother'        | a-de      | -dēe            | 1  |
| 'father'        | fafa      | faa             | 1  |
| 'son, daughter' | mbi       | -mbēé (Ø/g-)    | 6a |
| 'brother'       | mbariŋke  |                 |    |
| 'sister'        | mbarimuso |                 |    |
| 'grandchild'    | ntjiitji  | njeji           | 6a |

|                      |           |                |   |
|----------------------|-----------|----------------|---|
| 'king, chief'        | a-lama    | -lámā (a-/bə-) | 1 |
| 'griot'              | a-dzala   |                |   |
| 'merchant'           | a-nkaandɛ |                |   |
| 'musician (balafon)' | a-singi   | sīnga (a-bə-)  | 1 |
| 'Mandinka person'    | a-mindi   |                |   |
| 'Joola person'       | a-dzuula  |                |   |

### Class 2 (plural)

#### Gloss

|                 |             |                   |    |
|-----------------|-------------|-------------------|----|
| 'people'        | bi-ɲaŋ      | -ɲāaŋ (bə-)       | 2  |
| 'women, wives'  | bi-nin      |                   | 2  |
| 'men'           | bi-laantɛ   |                   | 2  |
| 'children'      | bi-mbuta    |                   | 2  |
| 'grandchildren' | bi-ntfiitfi |                   | 7a |
| 'girl'          | bi-fula     |                   | 2  |
| 'boy'           | bi-faθa     |                   | 2  |
| 'king, chief'   | bi-lama     |                   | 2  |
| 'griot'         | bi-dzala    |                   |    |
| 'panthers'      | bi-solo     |                   |    |
| 'dogs'          | bi-bitɪ     | -biɪ (Ø/g-)       | 6b |
| 'boubous'       | bi-ndundugi | -ndogndogē (Ø/g-) | 6b |
| 'roads'         | bi-sin      | -sīnn (b-/Ø)      | 3  |

### Class 2b (plural) (=N'Diaye-Corréard's class 6b)

Most inanimate objects make their plural in this class.

**Class 3 (singular)***Gloss*

|               |          |                   |    |
|---------------|----------|-------------------|----|
| 'salt'        | tɔɔm     | -tɔɔmm (Ø/g-)     | 6b |
| 'boubou'      | ndundugi | -ndogndogē (Ø/g-) | 6b |
| 'road'        | sin      | -sīnn (b-/Ø)      | 3  |
| 'song'        | rip      | -rēb (g-)         | 6b |
| 'cooked rice' | suufi    | -soofi (f-/g-)    | 5  |

**Class 4 (singular)***Gloss*

|                        |          |                |    |
|------------------------|----------|----------------|----|
| 'calabash'             | gə-bele  | -belē (gə-/Ø)  | 4  |
| 'dead person'          | g-loode  | -lódē (gə)     | 4  |
| 'ear, ears'            | g-lɔ     |                |    |
| 'hair'                 | gi-hul   | -hūl (gə-/Ø)   | 4  |
| 'horse'                | gə-falas | -fālās (Ø/g-)  | 6b |
| 'kerchief'             | gə-faar  | -fāarr (gə-/Ø) | 4  |
| 'letter'               | gə-letar |                |    |
| 'money'                | gi-gudi  |                |    |
| 'night'                | gə-manda | -mandā (gə-/Ø) | 4  |
| 'pot'                  | g-ler    | -léerr (gə-/Ø) | 4  |
| 'rope'                 | gə-bɔs   | -bɔs (gə-/Ø)   | 4  |
| 'stick'                | gə-fala  | -falgīi        | 5  |
| 'table'                | gə-tabəl |                |    |
| 'eating'               | gə-fɔmte |                |    |
| 'putting on (clothes)' | gi-tumlu |                |    |
| 'seeing'               | gə-biifa |                |    |

'seeing each other'      gə-biifande

**Class 5 (singular)**

*Gloss*

|              |       |                |   |
|--------------|-------|----------------|---|
| 'nose'       | fum   | -fúnā (gə-/Ø)  | 4 |
| 'cloth'      | paj   | pāy (—> bāy)   | 5 |
| 'month'      | diin  | -déendē (b-/Ø) | 3 |
| 'hand'       | tʃif  | céf (—> jéf)   | 5 |
| 'year'       | rɛs   | -résē (b-/Ø)   | 3 |
| 'first name' | pɛtʃ  | péjē (—> béjē) | 5 |
| 'day'        | v-lej | -lēy (f-/g-)   | 5 |
| 'coal'       | sɔtʃi | -θɔkā (f-/g-)  | 5 |

**Class 6 (singular) (=N'Diaye-Corréard's class 6b)**

*Gloss*

|         |      |             |    |
|---------|------|-------------|----|
| 'thing' | wil  | wəl (Ø/g-)  | 6b |
| 'water' | wede | wedē (Ø/g-) | 6b |



## Appendix 2

### Texts

#### The death of Ngana Sira Banna

I recorded Abdoulaye Diatta's telling of this story, which describes the demise of a Bainouk king, on December 16, 1997. He subsequently helped me to transcribe and translate it. N'Diaye-Corréard (1970) relates a different version.

1. u-                    gio            suum juugi    bi-    tfaa        ŋgi  
INAN.SUB-        COP.PAST    war    between CL2- Balanta    with  
bi-    bajnuŋka    ma  
CL2- Bainouk    DEF

There was a war between the Balantas and the Bainouks.

2. wil    ma    wuflu    ndaani    waabo  
thing DEF    last        much        now

The situation lasted a long time.

3. wil    ma    gi    a-    hakilo    mbán    aŋ    wammɔ  
thing DEF    COP    LOC- memory    1PL.POSS    until    right.now

It is still in our memory.

4. alama bajnuŋka ma bin- jaa ma' ŋana sira banna  
 CL1.king Bainouk DEF 3PL.SUB- call 3SG.OBJ Ngana Sira Banna  
 The king of the Bainouks, they called him Ngana Sira Banna.
5. titi bə- tjaa ma gio a- suum ŋgi bajnuŋka,  
 since CL2- Balanta DEF COP.PAST LOC- war with Bainouk  
 hi gio a- lama  
 3SG COP.PAST CL1- king  
 As long as the Balantas had been at war with the Bainouks, he had  
 been king.
6. bə- tjaa ma mada bajnuŋka ma ma  
 CL2-Balanta DEF overpower Bainouk DEF CONS  
 bi- rao ŋgi a- lama mbaa kaatu hi dzanga  
 3PL.SUB- be.angry with CL1- king 3PL.POSS because 3SG must  
 gi a- giti- ŋ suum ma, a- giti- ŋ baama  
 COP LOC- front- GEN battle DEF LOC- front- GEN 3PL  
 sam bi- to suum ŋgi bə- tjaa ma  
 in.order.that 3PL.SUB- go battle with CL2- Balanta DEF  
 The Balantas beat the Bainouks, and they (the Bainouks) got angry  
 with their king because he is the one that should be at the head of  
 the battle, in front of them, in order that they might go to battle with  
 the Balantas.

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<sup>1</sup> The /n/ in *bin-jaa-ma* is epenthetic; this epenthetic nasal occurs between subject markers and verb stems beginning in /j/ (cf. chapter 2, example (2g)).

7. ma wil jao bə- tʃaa ma mada baa  
 CONS thing make CL2- Balanta DEF overpower 3PL.OBJ  
 But it happened that the Balantas beat the Bainouks.
8. ma bi- rao ŋgi ha- lama mbaa  
 CONS 3PL.SUB be.angry with CL1- king 3PL.POSS  
 And they got angry with their king.
9. bi- sog ma sam bi- rɛŋu, bi- naŋ  
 3PL.SUB- call 3SG.OBJ in.order.that 3PL.SUB- meet, 3PL.SUB- SBJC  
 sante  
 talk  
 They called him so that they could meet with him and talk together.
10. bi- gi ŋgi wil bi- dzanga ma sante  
 3PL.SUB- COP with thing 3PL.SUB- must 3SG.OBJ tell  
 They had something they needed to tell him.
11. ma a- jaa baa io i- m- bin- tɛ  
 CONS 3SG.SUB- say 3PL.OBJ yes 1SG.HYPO- IMP- come- DIR  
 And he told them, "yes, I'll come."
12. bini a- sant baa habo jaara bi- gi ŋgi  
 when 3SG.SUB- tell 3PL.OBJ like.that though 3PL.SUB- COP with  
 fɛɛɛ sam bi- hab ma  
 plan in.order.that 3PL.SUB- kill 3SG.OBJ  
 When he told them that, though, they came up with a plan to kill  
 him.
13. ma bi- meges fɛɛɛ mbaa, bi- hubut diŋko ndaŋ  
 CONS 3PL.SUB- prepare plan 3PL.POSS 3PL.SUB- open hole big  
 They prepared their plan, they dug a great hole.

14. bi- mēges hēdma wil umfanaj sam ni  
 3PL.SUB-prepare there thing good in.order.that if  
 a- lama bin- tē mō a- naj mēese hatfi  
 CL1- king come-DIR HYPO 3SG.SUB-SBJC sit there  
 And there they prepared something good so that the king would  
 come and sit there.
15. ma a- jaa baa i- m- bin- tē  
 CONS 3SG.SUB-say 3PL.OBJ 1SG.HYPO-IMP- come-DIR  
 And he said, "I will come."
16. bi- naj ma reju  
 CL2- people DEF meet  
 The people got together.
17. bini bi- kalfa bajnujka ma reju ma  
 when CL2- important.person Bainouk DEF meet CONS  
 a- gaf tē  
 3SG.SUB-arrive PAST  
 When the most important Bainouk men had gotten together, he  
 arrived.
18. ŋana sira banna gi a- lama dunia sum  
 Ngana Sira Banna COP CL1- king world please  
 Ngana Sira Banna was a king who loved life.
19. a- ŋge jantu a- tumlu wil umfanaj  
 3SG.SUB-NEG go.out 3SG.SUB-put.on thing(s) beautiful  
 He never went out unless he had put on beautiful clothes and  
 ornaments.

20. bini a- gaf mɔ ma bi- jaa ma mɛɛsu  
 when 3SG.SUB- arrive HYPO CONS 3PL.SUB- tell 3SG.OBJ sit  
 When he arrived, they told him, "sit down."
21. bini a- mɛɛs hedma ma untfugub ma gobu  
 when 3SG.SUB- sit there CONS chair DEF fall  
 a- dijko  
 LOC- hole  
 When he sat down there, then his chair fell into the hole.
22. ma bi- jaa ma mɔ u- sowlu  
 CONS 3PL.SUB- tell 3SG.OBJ today 2SG.SUB- finish  
 And they told him, "Today you are finished."
23. u- n- to loode  
 2SG.SUB- IMP- go die  
 "You are going to die."
23. ma a- jaa baa dzandi-ŋ n- loode mɔ,  
 CONS 3SG.SUB- tell 3PL.OBJ before- GEN 1SG- die- HYPO  
 i- n- sag bà sam bàà simli ni fɔlɔ  
 1SG.HYPO- IMP- ask 2PL.OBJ in.order.that 3PL listen 1SG.OBJ first  
 And he said to them, "Before I die, I will ask that you listen to me  
 first."
24. ŋ- gi ŋgi wil wini raa ni sant bà  
 1SG.SUB- COP with thing that please 1SG.OBJ tell 2PL.OBJ  
 "I have something that I want to tell you."
25. bi- jaa ma jo báj- simli na  
 3PL.SUB- tell 3SG.OBJ yes 1PL.SUB- listen 2SG.OBJ  
 They told him, "Yes, we're listening to you."

26. ma a- jaa bà ji bàà- dutur ti habo  
 CONS 3SG.SUB- say 3PL.OBJ 1SG 2PL.SUB- humiliate PAST like.this

And he said, "It's me that you humiliated like this."

27. ji raa bà hab ni habo  
 1SG please 2PL.SUB kill 1SG.OBJ like.this

"It's me that you want to kill in this way."

28. i- n- santə bà wili wolla  
 1SG.HYPO- IMP- tell 2PL.OBJ thing one

"And I will tell you one thing."

28. bàà bi- bajnuŋka dzandi dunia wəmmu sowlu  
 2PL CL2- Bainouk before world this finish

bàá- tiŋ gitilu mansake.

2PL.SUB- NEG.IMP have king

"You, the Bainouks, you will have no king before the world ends."

29. bàà - tiŋ gi ŋgi dardio  
 2PL.SUB- NEG.IMP COP with prestige

"You will have no prestige."

30. bàà - tiŋ gitu wil  
 2PL.SUB- NEG.IMP have thing

"You will have nothing."

31. hal á- t- ti bà hur  
 person 3SG.SUB- NEG- no.longer 2PL.OBJ know

"No one will recognize you anymore."

32. ma bi- beb ma  
 CONS 3PL.SUB- bury 3SG.OBJ

And they buried him.

## Mali

This story was elicited from Abdoulaye Diatta on January 30, 1998 and February 6, 1998. The story is called *Mali* after a song that relates the same story: a respected young man, Sadio, commits incest and then abandons his life for the watery world of the hippopotamus, which the Balanta call *malo*. Sadio's ruin is all the more tragic because of his great promise; he has the double quality of being both very good-looking and hard-working, and industriousness is greatly respected in Balanta culture. The story of Sadio has its origins in Mali, but it can be found in Senegal, Gambia, and Guinea Bissau.

1. Sadio gio a- laante uduulu ubontfe  
Sadio COP.PAST CL1- man small beautiful  
Sadio was a handsome young man.
2. a- gio meese ngi bi- de hilli, ngi  
3SG.SUB-COP.PAST sit with CL2- parent 3SG.POSS with  
mbarimuso woda  
sister one  
He lived with his parents and one sister.
3. Sadio gio a- faθa g- iaf sum te ndaani  
Sadio COP.PAST CL1- boy CL4- work please PAST a.lot  
Sadio was a boy who loved to work.
4. a- gi fanan a- laante ubontfe ndaani  
3SG.SUB-COP also CL1- man beautiful a.lot  
And he was also a very handsome young man.

5. amma Sadio gio a- gbaale  
 and.so Sadio COP.PAST LOC- house  
 And so it happened that Sadio was at home.
6. hidi ŋ- gi ŋgi to mɔ a- ŋtfigne  
 3SG IMP- COP with go HYPO LOC- fields  
 kaatu bi- de hilli gi bi- jolo  
 because CL2- parents 3SG.POSS COP CL2- old  
 He was the one who went out into the fields, because his parents were old.
7. vlej vlej ni Sadio ŋwood- tɛ a- ŋtfigne,  
 day day when Sadio return- DIR LOC- fields  
 mbarimuso hilli gimɔ naa mɔ suufi hilli,  
 sister 3SG.POSS HAB brought HYPO meal 3SG.POSS  
 a- na- ma- ŋ num- ud wɛɛ a- dʒōkō  
 3SG.SUB- SBJC- 3SG.OBJ- SBJC take- APP water LOC- toilette  
 Everyday when Sadio returned from the fields, his sister brought him his meal and water for him to wash.
8. jara hɛ wetu a- ful ma kano mbariŋke  
 because.of this it.happened CL1- girl DEF love brother  
 hilli  
 3SG.POSS  
 And so it happened that the girl fell in love with her brother.



9. ni a- ful ma num- te suufi a- hodi na Sadio,  
 when CL1- girl DEF bring- DIR meal LOC- room GEN Sadio  
 a- nge hale joom umfanan  
 3SG.SUB- NEG wear loincloth appropriate  
 When the girl brought the meal to Sadio's room, she did not dress  
 appropriately.

10. diin hilli bi- nan gi abiti  
 breasts 3SG.POSS 3PL.SUB- SBJC COP outside  
 As a result, her breasts weren't covered.

11. u- ki wil raa ma sam Sadio biifa gi  
 INAN.SUB- COP thing please 3SG.OBJ that Sadio see CL4  
 It was as if she wanted for Sadio to see them.

12. amma bi- gi a- gbaale an sentano ma  
 and.so 3PL.SUB- COP LOC- house until misfortune DEF  
 dij jaatu ajuugi baa  
 ASP enter between 3PL.OBJ  
 Like that they were at home until (one day) misfortune came  
 between them.

13. ma Sadio dan te mbarimuso hilli  
 CONS Sadio declare PAST sister 3SG.POSS  
 Sadio declared (his love) to his sister.

14. ma he nanu  
 CONS 3SG accept  
 And she accepted.

15. amma bi- jalu ndzanga  
and.so 3PL.SUB-begin love.involvement  
That was how they began their affair.
16. Sadio gaa ma riŋe doron aŋ a- ful ma  
Sadio PROG 3SG.OBJ go.to.bed INTENS until CL1- girl DEF  
mom  
be.pregnant  
Sadio went to bed with her a number of times until she was with  
child.
17. bini a- ful ma momu ma baal ma  
when CL1- girl DEF be.pregnant CONS house DEF  
jageru  
be.mixed.up  
When the girl became pregnant, the family was put in a real mess.
18. a- de na a- ful ma sobtale wil ma ma  
CL1- parent GEN CL1-girl DEF suspect thing DEF CONS  
a- sogu mbi hilli  
3SG.SUB-call daughter 3SG.POSS  
The mother of the girl suspected what was going on and called to her  
child.
19. a- gbaa ma hila mom na?  
3SG.SUB-ask 3SG.OBJ who make.pregnant 2SG.OBJ  
She asked her, "Who made you pregnant?"
20. a- ful ma a- n- naŋ sante  
CL1- girl DEF 3SG.SUB-NEG-accept talk  
The girl refused to tell.

21. ma a- gbaa ma aṅ jaabi  
 CONS 3SG.SUB-ask 3SG.OBJ until three  
 And she (the mother) asked three times.
22. a- ful ma a- n- naṅ sante  
 CL1- girl DEF 3SG.SUB-NEG- accept talk  
 The girl refused to tell.
23. a- de ma biifa-nde ṅgi fafa hilli  
 CL1- parent DEF see- SYM with father 3SG.POSS  
 ma sant ma wil ma  
 CONS tell 3SG.OBJ thing DEF  
 The mother met with her (the girl's) father and told him about the situation.
24. fafa hilli sog ma a- jaa ma mo  
 father 3SG.POSS call 3SG.OBJ 3SG.SUB-tell 3SG.OBJ today  
 u- sant ni hila mom na  
 2SG.SUB-tell 1SG.OBJ who make.pregnant 2SG.OBJ  
 Her father called her and said to her, "Today you tell me who made you pregnant."
25. ni u- tin- sant ni mo i- ṅ- gi  
 if 2SG.SUB-NEG.IMP- tell 1SG.OBJ today 1SG.HYPO- IMP- COP  
 na hap  
 2SG.OBJ kill  
 "If you don't tell me today, I'll kill you."

26. ma a- fula jaa ma mbɔ fafa wun ni an  
 CONS CL1- girl tell 3SG.OBJ well father give 1SG.OBJ until  
 lufi

tomorrow

And the girl said, "Okay, father, give me until tomorrow."

27. i- n- sant na hila mom ni  
 1SG.HYPO-IMP- tell 2SG.OBJ who make.pregnant 1SG.OBJ

"I will tell you who made me pregnant."

28. fafa hilli jaa ma to an lufi  
 father 3SG.POSS tell 3SG.OBJ go until tomorrow

Her father told her, "Go until tomorrow."

29. ni buf jani mɔ u- n- sant ni hila  
 when morning clean HYPO 2SG.SUB-IMP- tell 1SG.OBJ who  
 mom na

make.preganant 2SG.OBJ

"When it becomes daylight, you'll tell me who made you pregnant."

30. ma a- ful njwoode to biifa- nde ngi Sadio  
 CONS CL1- girl turn go see- SYM with Sadio

And the girl turned and went to meet with Sadio.

31. bini a- gafu ngi Sadio ma a- jaa ma  
 when 3SG.SUB-arrive with Sadio CONS 3SG.SUB-tell 3SG.OBJ

hã? wil ma dutale ngi nima

oh thing DEF be.complicated with 1SG

When she got to Sadio she told him, "Oh, things with me are complicated."

32. bi- de mbán sog ni ma fafa jaa ni  
 CL2- parent 1PL.POSS call 1SG.OBJ CONS father say if  
 i- m- ma- sant hila mom ni  
 1SG.HYPO- NEG- 3SG.OBJ- tell who make.pregnant 1SG.OBJ  
 a- ŋ- hab ni  
 3SG.SUB-IMP- kill 1SG.OBJ

Our parents called to me and father says that if I don't tell him who made me pregnant, he'll kill me.

33. ma Sadio jaa ma ente an lufi  
 CONS Sadio tell 3SG.OBJ wait until tomorrow  
 a- lufi  
 LOC- morning

And Sadio said to her, "Wait until tomorrow morning."

34. u- na- ma- ŋ sant hila mom na  
 2SG.SUB-SBJC- 3SG.OBJ-IMP tell who make.pregnant 2SG.OBJ  
 "You'll tell him who made you pregnant."

35. amma gi- dutur fagu Sadio  
 and.so CL4- shame take Sadio

And so shame took hold of Sadio.

36. a- ŋ- ŋome a- naŋ meesu a- gbaale  
 3SG.SUB-NEG- dare 3SG.SUB-SBJC sit LOC- house

He did not dare stay in the house.

37. bi- ŋaŋ bæ- tɕima hur wil hembɛ  
 CL2- people CL2- village know thing this

The people of the village knew about this thing.

38. hidi mom mbarimuso hilli  
 3SG make.pregnant sister 3SG.POSS  
 He's the one who made his sister pregnant.
39. a- gi ŋgi kɔ  
 3SG.SUB-COP with head  
 He has a good head on his shoulders.
40. amma Sadio luuse buf upane  
 and.so Sadio get.up morning clean  
 And so Sadio got up at dawn.
41. ma a- jobud to a- dzoge  
 CONS 3SG.SUB-walk go LOC- river  
 And he walked to the river.
42. bini Sadio gafu a- dzoge ma a- jelema.talu  
 when Sadio arrive LOC- river DEF 3SG.SUB-metamorphose  
 When Sadio arrived at the river, he changed shape.
43. a- bini gi malo  
 3SG.SUB-become COP hippopotamous  
 He became a hippopotamous.
44. amma a- jaatu a- dzoge  
 and.so 3SG.SUB- enter LOC- river  
 With that, he entered into the river.
45. amma bi- jante rip bo bini bi- jaabo Mali  
 and.so 3PL.SUB- create song this.CL3 that 3PL.SUB- call Mali  
 Sadio  
 Sadio  
 That is how they created the song called Mali Sadio.

**The griot who ran off with another man's wife**

This story tells of something that happened in the village of Mangarungu.

It was elicited from Abdoulaye Diatta on December 23, 1997.

1. mɔ́ báŋ- katfa wilna a- dzala-m bala  
today 1PL.SUB- chat things CL1- griot- GEN balafon  
Today we are going to talk about the story of the balafon griot.
2. wil- ma gitilu bɔ́tʃi bin- jaabɔ́ Maarungu  
thing-DEF happen village 3PL.SUB- call Maarungu  
The thing happened in a village they call Maarungu (Mangarungu).
3. a- dzal hɔ́ gio a- ndzanga ŋgi a- nin- iŋ hal  
CL1-griot this COP.PAST LOC- affair with CL1-woman-GEN person  
This griot was having an affair with another man's wife.
4. bi- gio a- kano  
3PL.SUB- COP.PAST LOC- love  
They were in love.
5. wil ma ta- wuflu ndaani  
thing DEF NEG- happen.in.past a.lot  
The thing didn't happen very long ago.
6. jaara a- wil wembɛ bi- gio kɛg- iŋ feere  
then LOC- thingCL6.DEM 3PL.SUB- COP.PAST look.for GEN plan  
sam bi- dogu  
in.order.that 3PL.SUB- flee  
So during this affair, they were looking for a way to run off together.

7. ma vlej folla paaj ma gitilu Maarungu  
 CONS day one event DEF happen Maarungu  
 And one day, an event was held in Maarungu.
8. bi- naŋ bɔtʃi fembe nduba tu reŋu  
 CL2- people village CL5.DEM all all meet  
 The people of that village got together.
9. bi- gi ŋgi ɲireɛ- m bala ndaŋ  
 3PL.SUB- COP with dance- GEN balafon big  
 They were having a big balafon dance.
10. bi- naŋ ma jalu ɲire  
 CL2- people DEF begin dance  
 The people began to dance.
11. bal ma dutale, bi- ɲire aŋ gə- manda  
 balafon DEF be.good 3PL.SUB- dance until CL4- night  
 The balafon music was very good, and they danced until nightfall.
12. ma bi- tɛg tɛ bala ma ma bi- jaa  
 CONS 3PL.SUB pause PAST balafon DEF CONS 3PL.SUB- tell  
 bi- dzala ma sam bi- to wɔmte bi- naŋ sige  
 CL2- griot DEF that 3PL.SUB- go eat 3PL.SUB- SBJC drink  
 sam bi- ŋwood- tɛ hatide  
 that 3PL.SUB- return- DIR again  
 They stopped the balafon music and told the griots to go home to eat  
 and drink and return again.



13. jaara a- dzal ma sante te ngi a- nin ma  
 but CL1- griot DEF talk PAST with CL1- woman DEF  
 sam bi- to reju a- dzoge  
 so.that 3PL.SUB-go meet LOC- river  
 But the griot had already talked with the woman so that they would  
 meet by the river.
14. bini bi- dzal ma jantu a- jire ma bi- nwoode  
 when CL2- griot DEF go.out LOC- dance CONS 3PL.SUB- return  
 a- gbaale, bi- womte aj bi- mom  
 LOC- house, 3PL.SUB- eat until 3PL.SUB- be.full  
 When the griots left the dance, they returned home and ate until  
 they were full.
15. ma a- dzal hembɛ jantu a- biti  
 CONS CL1- griot CL1.DEM go.out LOC- outside  
 But the griot we've been talking about went outside.
16. ma a- jaa ngi bi- mfid hilli i- n- to  
 CONS 3SG.SUB- say with CL2- friend 3SG.POSS 1SG.SUB-IMP- go  
 jobde nduulu  
 walk a.little  
 And he said to his friends, "I'm going to go take a little walk."
17. ma bi- jaa ma, io, bari nwood- te wammɔ  
 CONS 3PL.SUB- say 3SG.OBJ yes but return- DIR immediately  
 And they told him, "Fine, but come back right away."

18. bin a- toge a- dzogɛ, a- weet hɛdma  
 when 3SG.SUB-leave LOC- river 3SG.SUB- find there  
 a- nin ma  
 CL1- woman DEF  
 When he left for the river, he found the woman there.
19. bin bi- santu aŋ bi- sowlu ma bi- to  
 when 3PL.SUB- talk until 3PL.SUB- finish CONS 3PL.SUB- go  
 When they had finished talking, they left.
20. ma bi- jobudu aŋ a- bɔtʃi bin- jaabɔ Samin  
 CONS 3PL.SUB- walk until LOC- town 3PL.SUB- call Samin  
 They walked to the town called Samin.
21. ma bi- tʃɛd hoto diisɛ to Sigtʃor  
 CONS 3PL.SUB- take car continue go Ziguinchor  
 Then they rented a car, continuing on to Ziguinchor.
22. ma bi- diisu to Sigtʃor  
 CONS 3PL.SUB- continue go Ziguinchor  
 They went on to Ziguinchor.
23. Sigtʃor hɛdma buf ma ɲanu  
 Ziguinchor there morning DEF clean  
 It was beginning to get light in Ziguinchor.
24. ma bi- tʃɛd hatide hoto to Gambi  
 CONS 3PL.SUB- take again car go Gambia  
 And they again rented a car to go to Gambia.
25. ma bi- dzal ma mɛɛsɛ  
 CONS CL2- griot DEF sit  
 And the griots sat down.

26. bi- m- ma biifa  
3PL.SUB- NEG- 3SG.OBJ- see  
They didn't see him.
27. bi- dzal ma radgradzli a- botfi fembe ndubatu  
CL2- griot DEF look.while.walking LOC- village that all all  
The griots looked around the entire village.
28. bi- m- ma- biifa  
3PL.SUB- NEG- 3SG.OBJ-see  
They didn't see him.
29. bi- kɛg ma  
3PL.SUB- look.for 3SG.OBJ  
They looked for him.
30. bi- gbaandɛ ma bi- ɲaŋ  
3PL.SUB- ask.for 3SG.OBJ CL2- people  
They asked people for him.
31. bi- m- ma- biifa  
3PL.SUB-NEG- 3SG.OBJ-see  
They didn't see him.
32. bi- ɲwoodu to siŋ bala  
3PL.SUB- return go play balafon  
They went back to play the balafon.
33. alaante ma a- p- piifa a- nin hilli bini  
man DEF 3SG.SUB-NEG- see CL1- woman 3SG.POSS when  
buf ɲanu  
dawn clean  
The man still hadn't seen his wife when it had gotten light.

34. a- kɛg a- nin hilli  
 3SG.SUB-look.for CL1-woman 3SG.POSS  
 He looked for his wife.
35. a- m- ma- biifa  
 3SG.SUB-NEG- 3SG.OBJ-see  
 He didn't find her.
36. ma a- dzahalo  
 CONS 3SG.SUB-be.bewildered  
 And he was bewildered.
37. ma a- sogu bi- ɲaŋ ma ma sant baa  
 CONS 3SG.SUB-call CL2- people DEF CONS tell 3PL.OBJ  
 wil ra ma  
 thing upset 3SG.OBJ  
 Then he called the people together and told them about the thing  
 that was upsetting him.
37. a- sant baa wil ra ma ma jaa baa  
 3SG.SUB-tell 3PL.OBJ thing upset 3SG.OBJ CONS tell 3PL.OBJ  
 i- p- piifa a- nin hinda titi sɔ  
 1SG.SUB-NEG-see CL1- woman 1SG.POSS since yesterday  
 He told them, "I haven't seen my wife since yesterday."
38. a- to- gɛ ɲiri- m bala  
 3SG.SUB-go- PAST dance- GEN balafon  
 "She went to dance the balafon-dance."
39. a- ɲ- ɲwood- te  
 3SG.SUB-NEG-return- DIR  
 "She didn't come back."

40. wil raa ni sam bá- dang ni ŋgi  
 thing please 1SG.OBJ that 2PL.SUB- help 1SG.OBJ with  
 kɛg ma  
 look.for 3SG.OBJ  
 "What would make me happy is if you would help me look for her."
41. mbole a- to a- bɔtʃi hɔlla  
 maybe 3SG.SUB-go LOC-village other  
 "Maybe she is in another village."
42. ma bi- dzal ma fanɔŋ gafu  
 CONS CL2- griot DEF also arrive  
 Then the griots also arrived.
43. ma bi- santu ŋgi bi- kalfa ma  
 CONS 3PL.SUB- talk with CL2- important.person DEF  
 And they talked with the most important men of the village.
44. a- mfida mbàŋ, bàŋ- (m-)ma- biifa titi sɔ  
 CL1- friend 1PL.POSS 1PL.SUB- NEG- 3SG.OBJ- see since yesterday  
 a- g- manda aŋ wammɔ  
 LOC- CL4- night until now  
 "Our friend, we haven't seen him since yesterday night."
45. bi- kɛg ma  
 3PL.SUB- look.for 3SG.OBJ  
 They looked for him.
46. bi- gbaandɛ ma bi- ɲaŋ  
 3PL.SUB- ask.for 3SG.OBJ CL2- people  
 They asked people for him.

47. ni bà- biifa ma mɔ sam bà- sant mbá  
 if 2PL.SUB-see 3SG.OBJ HYPO that 2PL.SUB-tell 1PL.OBJ  
 "If you see him, tell us."
48. ma bɛb jaa baa hal a- hondi bin- ti gɛ  
 CONS 3PL tell 3PL.OBJ personCL1- certain come-DIR PAST  
 ando  
 here  
 Then some people told them, "A guy came by here."
49. a- gaa kɛg- ij a- nin hilli  
 3SG.SUB-PROG look.for-GEN CL1- woman 3SG.POSS  
 "He's looking for his wife."
50. bààba fanɔj bin- tɛ  
 2PL also come-DIR  
 "You came too."
51. bàà- gaa kɛg a- mfida mbàà  
 2PL.SUB-PROG look.for CL1- friend 2PL.POSS  
 "You're looking for your friend."
52. mboɛ bi- gi a- bɔtʃi hòlla  
 maybe 3PL.SUB-COP LOC- village other  
 "Maybe they're in some other village."
53. ni bà- mada to birkama ŋgi dzattakunda  
 if 2PL.SUB- can go Birkama with Diattacounda  
 bà- naɲ gbaandɛ hɛdma.  
 2PL.SUB- SBJC ask there  
 "Why don't you go to Birkama and Diattacounda and ask there?"

54. mbole bi- ŋgi gembe  
 maybe 3PL.SUB- COP there  
 "Maybe they are there."
55. ma bi- lusterhal sam a- to jinbi- botfi bembe  
 CONS 3PL.SUB- get person that 3SG.SUB- go see CL2- village CL3.DEM  
 And they got someone to go and look in those villages.
56. a- gbaande bari hal a- p- paa- biifa  
 3SG.SUB- ask but person 3SG.SUB- NEG- 3PL.OBJ- see  
 He asked, but no one had seen them.
57. ma a- faθa ma ŋwoodu  
 CONS CL1- boy DEF return  
 And the boy came back.
58. a- to bà jaa a- p- paa- biifa  
 3SG.SUB- go 2PL.OBJ tell 3SG.SUB- NEG- 3PL.OBJ- see  
 He went to tell them that he hadn't seen them.
59. ma bi- dzal ma tfige  
 CONS CL2- griot DEF leave  
 Then the griots left.
60. alaante ma fanəŋ ŋwoodu a- gbaale hilli  
 man DEF also return LOC- house 3SG.POSS  
 The man went back to his house, too.
61. wil a- m- ma- tanat  
 thing 3SG.SUB- NEG- 3SG.OBJ- remain  
 Nothing was left for him.

62.   **fo**           **fag-**   **ij**       **haala**

**this.CL5**   **take-**   **GEN**   **God**

**He returned to God (in his heart).**

**(There was nothing left but to turn to God.)**



## Appendix 3

### Ganja-English Lexicon

#### a

|                      |                                                                                  |
|----------------------|----------------------------------------------------------------------------------|
| <b>a<sup>1</sup></b> | cl. 1 noun prefix (also <b>ha-</b> )                                             |
| <b>a<sup>2</sup></b> | <i>prep</i> locative prefix (not used with names of towns or cities): in, at, to |
| <b>a<sup>3</sup></b> | <i>pron</i> 3sg. sub.                                                            |
| <b>abiti</b>         | <i>adv</i> outside                                                               |
| <b>afere</b>         | <i>adv</i> outside [ <i>a-</i> loc. + <i>ferε</i> 'outside']                     |
| <b>alwurara</b>      | evening greeting (more than one person)                                          |
| <b>alla</b>          | <i>adv</i> how (also <b>halla</b> )                                              |
| <b>amma</b>          | <i>adv</i> and so, in that way (also <b>hamma</b> )                              |
| <b>ando</b>          | <i>adv</i> here                                                                  |
| <b>an</b>            | <i>prep</i> until (allomorphs <b>am</b> , <b>an</b> )                            |

#### b

|                         |                                                                        |
|-------------------------|------------------------------------------------------------------------|
| <b>ba<sup>1</sup></b>   | <i>pron</i> 3 pl. independent human (also <b>bεb</b> )                 |
| <b>-ba<sup>2</sup></b>  | <i>pron</i> 2 pl. obj. (low-toned)                                     |
| <b>baa<sup>1</sup></b>  | <i>pron</i> 2 pl. independent (low-toned)                              |
| <b>-baa<sup>2</sup></b> | <i>pron</i> 3 pl. obj.                                                 |
| <b>baa<sup>3</sup></b>  | <i>pron</i> 1 pl. sub. (high-toned) (also <b>baba-</b> , <b>baŋ-</b> ) |
| <b>baa<sup>4</sup></b>  | <i>pron</i> 2 pl. sub. (low-toned)                                     |
| <b>baba-</b>            | <i>pron</i> 1 pl. sub. (high-toned) (also <b>baa-</b> , <b>baŋ-</b> )  |
| <b>baaba</b>            | <i>pron</i> 2 pl. independent emphatic (first syllable low-toned)      |

|                         |                                                                                                                                                                                                                                                                                                                    |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>baama</b>            | <i>pron</i> 3 pl. independent emphatic                                                                                                                                                                                                                                                                             |
| <b>-bag-</b>            | <i>neg</i> negative marker in imperatives                                                                                                                                                                                                                                                                          |
| <b>bajnujka (a-)</b>    | <i>n</i> Bainouk person                                                                                                                                                                                                                                                                                            |
| <b>baal</b>             | <i>n</i> house                                                                                                                                                                                                                                                                                                     |
| <b>bala</b>             | <i>n</i> balafon, a percussion instrument consisting of a row of flat wooden bars and calabashes that resonate. The Balanta version is very large and requires two players, each with two mallets ( <i>sindi</i> ), who usually wear a bracelet of iron bells ( <i>sigir</i> ). They adopted it from the Mandinka. |
| <b>baali</b>            | <i>n</i> goat                                                                                                                                                                                                                                                                                                      |
| <b>baan</b>             | <i>pron</i> 1 pl. independent (high-toned)                                                                                                                                                                                                                                                                         |
| <b>baanba</b>           | <i>pron</i> 1 pl. independent emphatic (first syllable high-toned)                                                                                                                                                                                                                                                 |
| <b>baŋ<sup>1</sup></b>  | <i>pron</i> 1 pl. sub. (high-toned) (also <i>baa-</i> , <i>baba-</i> )                                                                                                                                                                                                                                             |
| <b>-baŋ<sup>2</sup></b> | <i>pron</i> 1 pl. obj.                                                                                                                                                                                                                                                                                             |
| <b>baŋko</b>            | <i>n</i> sand                                                                                                                                                                                                                                                                                                      |
| <b>bari</b>             | <i>conj</i> but                                                                                                                                                                                                                                                                                                    |
| <b>basan (gi-)</b>      | <i>n</i> mat                                                                                                                                                                                                                                                                                                       |
| <b>be</b>               | <i>dem</i> this (of objects that no longer exist) cl. 3                                                                                                                                                                                                                                                            |
| <b>beb<sup>1</sup></b>  | <i>v</i> bury                                                                                                                                                                                                                                                                                                      |
| <b>beb<sup>2</sup></b>  | <i>pron</i> 3 pl. independent (also <i>ba</i> )                                                                                                                                                                                                                                                                    |
| <b>bege</b>             | <i>dem</i> this (of deceased people) cl. 2                                                                                                                                                                                                                                                                         |
| <b>bel (gə-)</b>        | <i>n</i> spoon                                                                                                                                                                                                                                                                                                     |
| <b>bele (gə-)</b>       | <i>n</i> calabash                                                                                                                                                                                                                                                                                                  |
| <b>bembe</b>            | <i>dem</i> that (not in view) cl. 2 (human), 3                                                                                                                                                                                                                                                                     |

|                        |                                                                                                                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>bɛsɔ</b>            | <i>v</i> chase, pursue [ <i>bɛθu</i> 'chase' + <i>ndɛ</i> recip.]                                               |
| <b>bɛθu</b>            | <i>v</i> chase                                                                                                  |
| <b>beeŋ</b>            | <i>n</i> domestic animal                                                                                        |
| <b>bi-<sup>1</sup></b> | cl. 2 noun prefix                                                                                               |
| <b>bi-<sup>2</sup></b> | <i>pron</i> 3 pl. sub.                                                                                          |
| <b>biifa</b>           | <i>v</i> see                                                                                                    |
| <b>biifa (gə-)</b>     | <i>n</i> (act of) seeing <b>gəbiifa mbuta ma raama</b> 'he wants to see the child'                              |
| <b>biifandɛ</b>        | 1. <i>vi</i> see each other 2. <i>vt</i> meet with 3. <i>vi</i> meet [ <i>biifa</i> 'see' + <i>-ndɛ</i> recip.] |
| <b>biifandɛ (gə-)</b>  | <i>n</i> (act of) seeing each other, meeting                                                                    |
| <b>bigila</b>          | <i>adv</i> who?                                                                                                 |
| <b>bikte</b>           | <i>v</i> surround                                                                                               |
| <b>bin</b>             | <i>v</i> come (see <b>bintɛ</b> )                                                                               |
| <b>bini</b>            | <i>conj</i> when                                                                                                |
| <b>bintɛ</b>           | <i>v</i> come [ <i>bin</i> 'come' + <i>tɛ</i> dir.]                                                             |
| <b>biraso</b>          | Balanta ethnic and dialectal group                                                                              |
| <b>biti</b>            | <i>n</i> dog                                                                                                    |
| <b>bɔ</b>              | <i>dem</i> this cl. 2, 3                                                                                        |
| <b>bɔgi</b>            | <i>dem</i> this cl. 2                                                                                           |
| <b>bɔmmu</b>           | <i>dem</i> this emphatic cl. 3                                                                                  |
| <b>bɔntʃɛ</b>          | <i>adj</i> beautiful, nice                                                                                      |
| <b>bɔntʃɛ (a-)</b>     | <i>n</i> beautiful or nice person                                                                               |
| <b>bɔntʃu</b>          | <i>v</i> be beautiful                                                                                           |
| <b>bɔs (gə-)</b>       | <i>n</i> rope, cord                                                                                             |
| <b>bɔtʃa</b>           | <i>n</i> 1. earth, dirt 2. <b>bɔtʃiŋ dʒoge</b> sand at river or sea, beach                                      |

|                |                                                                                                            |
|----------------|------------------------------------------------------------------------------------------------------------|
| <b>bɔtʃi</b>   | <i>n</i> 1. village, town, city, country <b>bijaŋ bɔtʃi</b> people of the village, citizens 2. earth, dirt |
| <b>bol</b>     | <i>n</i> bowl (< Fr. <i>bol</i> )                                                                          |
| <b>bombɔgi</b> | <i>dem</i> this emphatic cl. 2 (people only)                                                               |
| <b>brassa</b>  | <i>n</i> Balanta ethnic and dialectal group                                                                |
| <b>buf</b>     | <i>n</i> morning <b>buf jaŋe</b> 'dawn'                                                                    |
| <b>bug</b>     | <i>n</i> book (< Engl. <i>book</i> )                                                                       |
| <b>-bul</b>    | <i>v</i> pull                                                                                              |
| <b>bulu</b>    | <i>adj</i> blue (< Fr. <i>bleu</i> )                                                                       |

## d

|                    |                                                                        |
|--------------------|------------------------------------------------------------------------|
| <b>daafen</b>      | <i>n</i> forest animal                                                 |
| <b>daali</b>       | <i>n</i> cat                                                           |
| <b>dan</b>         | <i>v</i> declare, announce                                             |
| <b>dante</b>       | <i>v</i> declare, announce to [ <i>dan</i> 'declare' + <i>tɛ</i> dir.] |
| <b>dangu</b>       | <i>v</i> help                                                          |
| <b>dardio</b>      | <i>n</i> prestige                                                      |
| <b>daslu</b>       | <i>vi</i> 1. break 2. tear [ <i>dasu</i> 'break' + <i>-lu</i> ]        |
| <b>dasu</b>        | <i>vt</i> 1. break 2. tear                                             |
| <b>datfo</b>       | <i>v</i> be far away                                                   |
| <b>de</b>          | 1. <i>vt</i> bear (children) 2. <i>vi</i> be born                      |
| <b>de (a-)</b>     | <i>n</i> one who bears, i.e., parent                                   |
| <b>de'en (bi-)</b> | <i>n</i> parents                                                       |
| <b>delu</b>        | <i>vi</i> be born [ <i>de</i> 'bear' + <i>-lu</i> ]                    |
| <b>demo</b>        | <i>v</i> hunt (< Mdk.)                                                 |
| <b>dete (gə-)</b>  | <i>n</i> (act of) running                                              |

|                            |                                                                                                                                                     |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>detu</b>                | <i>v</i> run                                                                                                                                        |
| <b>dima</b>                | <i>pron</i> your (sg.) (also <i>idma</i> )                                                                                                          |
| <b>dimbaja</b>             | <i>n</i> 1. family 2. ceremony in which old women lead a name-changing ritual which includes incantations, baths, etc.                              |
| <b>diin(i)<sup>1</sup></b> | <i>n</i> 1. milk 2. yogurt                                                                                                                          |
| <b>diin<sup>2</sup></b>    | <i>n</i> breast(s)                                                                                                                                  |
| <b>diin<sup>3</sup></b>    | <i>n</i> month                                                                                                                                      |
| <b>dini</b>                | <i>n</i> father                                                                                                                                     |
| <b>diŋ<sup>1</sup></b>     | <i>adj</i> short                                                                                                                                    |
| <b>diŋ<sup>2</sup></b>     | aspect marker? (verb affix) <b>habo agi nyobodu aŋ adin giti samte</b> 'like that, he walked (his shoes to their soles) until he got new shoes'     |
| <b>diisu</b>               | <i>v</i> 1. pass <b>diinu diisu mbo</b> 'last month' 2. continue                                                                                    |
| <b>diŋko</b>               | <i>n</i> hole                                                                                                                                       |
| <b>dogu</b>                | <i>v</i> flee, go away                                                                                                                              |
| <b>dog</b>                 | <i>v</i> look for                                                                                                                                   |
| <b>doron</b>               | <i>intens</i> indicates that something happened repeatedly                                                                                          |
| <b>du</b>                  | <i>adv</i> where <b>Sadio ma du?</b> 'where is Sadio?', <b>binaŋ baal ma du</b> 'where are the people of the house?' i.e., 'How are those at home?' |
| <b>duulu (a-)</b>          | 1. <i>adj</i> young 2. <i>n</i> younger sibling                                                                                                     |
| <b>duulu (u-)</b>          | <i>adj</i> little, small                                                                                                                            |
| <b>dum</b>                 | <i>v</i> bite                                                                                                                                       |
| <b>dunia</b>               | <i>n</i> world                                                                                                                                      |
| <b>dutale</b>              | <i>v</i> 1. be complicated (of a situation) 2. be good (of music)                                                                                   |

|                    |                            |
|--------------------|----------------------------|
| <b>dudur (gi-)</b> | <i>n</i> shame             |
| <b>dudur</b>       | <i>v</i> be ashamed        |
| <b>dudurli</b>     | <i>vt</i> humiliate, shame |

**dz**

|                    |                          |
|--------------------|--------------------------|
| <b>dzabi</b>       | <i>v</i> respond         |
| <b>dzahalo</b>     | <i>v</i> be bewildered   |
| <b>dzala (a-)</b>  | <i>n</i> griot           |
| <b>dzandi</b>      | <i>conj</i> before       |
| <b>dzanga</b>      | <i>v</i> must            |
| <b>dzato</b>       | <i>n</i> lion            |
| <b>dzoko</b>       | <i>n</i> toilette        |
| <b>dzoge</b>       | <i>n</i> 1. river 2. sea |
| <b>dzuula</b>      | <i>n</i> Jóola language  |
| <b>dzuula (a-)</b> | <i>n</i> Jóola person    |
| <b>dzulo (a-)</b>  | <i>n</i> merchant        |

**ε**

|             |               |
|-------------|---------------|
| <b>ente</b> | <i>v</i> wait |
|-------------|---------------|

**f**

|                     |                                           |
|---------------------|-------------------------------------------|
| <b>f-</b>           | cl. 5 noun class marker (also <b>v-</b> ) |
| <b>fafa</b>         | <i>n</i> dad, daddy                       |
| <b>fagu</b>         | <i>v</i> 1. take 2. take hold of          |
| <b>fal(a) (gə-)</b> | <i>n</i> stick                            |
| <b>falas (gə-)</b>  | <i>n</i> horse                            |

|                       |                                                                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>fanəŋ</b>          | <i>adv</i> too, also                                                                                                                                      |
| <b>faar (gə-)</b>     | <i>n</i> kerchief (e.g., to wear on head)                                                                                                                 |
| <b>fasu</b>           | <i>v</i> (of sun) go in <b>jagej, lej ma fasu</b> 'hurry, the sun went in, it's getting late'                                                             |
| <b>faθa (a-)</b>      | <i>n</i> boy                                                                                                                                              |
| <b>fal</b>            | 1. <i>v</i> select, for 2. <i>n</i> selection, voting                                                                                                     |
| <b>faatf</b>          | 1. <i>adj</i> six 2. <i>inv</i> six                                                                                                                       |
| <b>faatf n'gɔda</b>   | <i>inv</i> seven                                                                                                                                          |
| <b>faatf ŋgi sibi</b> | <i>inv</i> eight                                                                                                                                          |
| <b>fɛ</b>             | <i>dem</i> this (of objects, animals that no longer exist) cl. 5                                                                                          |
| <b>fembe</b>          | <i>dem</i> 1. that (not in view) cl. 5 2. (with time expressions) past, last <b>diin/res fembe</b> 'last month/year', <b>vlej fembe</b> 'that day (past)' |
| <b>fere</b>           | <i>adv</i> outside                                                                                                                                        |
| <b>feere</b>          | <i>n</i> plan, ruse                                                                                                                                       |
| <b>fi</b>             | <i>pron</i> it cl. 5                                                                                                                                      |
| <b>fila</b>           | <i>adj</i> which cl. 3, 5                                                                                                                                 |
| <b>filu</b>           | <i>v</i> forget                                                                                                                                           |
| <b>finda</b>          | <i>pron</i> my (also <b>hinda</b> )                                                                                                                       |
| <b>fiŋkinte (a-)</b>  | <i>n</i> blind person                                                                                                                                     |
| <b>fiis</b>           | <i>vt</i> tear                                                                                                                                            |
| <b>fiislu</b>         | <i>vi</i> tear [ <i>fiis</i> 'tear' + <i>-lu</i> ]                                                                                                        |
| <b>fiislu (gi-)</b>   | <i>n</i> 1. tear 2. fissure, crack                                                                                                                        |
| <b>fit</b>            | <i>n</i> attack                                                                                                                                           |
| <b>fɔ</b>             | <i>dem</i> this cl. 5                                                                                                                                     |
| <b>fɔɔ</b>            | <i>adv</i> 1. first 2. yet <b>atinjaa fɔɔ</b> 'he hasn't told me yet'                                                                                     |

|                  |                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------|
| <b>folla</b>     | <i>dem</i> another cl. 3-5 <b>vlej folla</b> 'another day', <b>gəbele folla</b> 'another calabash' |
| <b>fommu</b>     | <i>dem</i> this emphatic cl. 5                                                                     |
| <b>fom</b>       | <i>v</i> sleep profoundly                                                                          |
| <b>fomte</b>     | 1. <i>n</i> food 2. <i>n, ptcp</i> eating                                                          |
| <b>ftan</b>      | <i>adv</i> behind <b>aftan</b> 'from behind, in the back'                                          |
| <b>fude</b>      | <i>adj</i> tall                                                                                    |
| <b>fude (a-)</b> | <i>n</i> giant                                                                                     |
| <b>fula (a-)</b> | <i>n</i> girl                                                                                      |
| <b>fum</b>       | <i>n</i> nose                                                                                      |
| <b>fur</b>       | <i>prep</i> for                                                                                    |
| <b>furo</b>      | <i>n</i> type of fish                                                                              |

## g

|                |                                                                                                                                                          |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>gə-</b>     | cl. 4 noun class marker (also <b>gi-</b> )                                                                                                               |
| <b>ga</b>      | question marker                                                                                                                                          |
| <b>gaa</b>     | <i>v</i> progressive auxiliary                                                                                                                           |
| <b>gaadu</b>   | <i>v</i> have                                                                                                                                            |
| <b>gafu</b>    | <i>v</i> arrive (of people)                                                                                                                              |
| <b>gai</b>     | <i>adv</i> fast, quickly                                                                                                                                 |
| <b>gandza</b>  | Balanta ethnic and dialectal group of Casamance                                                                                                          |
| <b>garaj</b>   | <i>v</i> read                                                                                                                                            |
| <b>garandi</b> | <i>v</i> teach; infinitive <b>kungarandi</b> [ <b>garaj</b> 'read']                                                                                      |
| <b>gatf</b>    | <i>v</i> to be in a place <b>bigatf</b> 'they are there (i.e., they are well)' (answer to the question <b>bijan baal ma du</b> 'how are those at home?') |



|                          |                                                                    |
|--------------------------|--------------------------------------------------------------------|
| <b>gatʃe</b>             | <i>n</i> well                                                      |
| <b>-ge<sup>1</sup></b>   | past tense marker                                                  |
| <b>ge<sup>2</sup></b>    | <i>dem</i> this (of objects that no longer exist) cl. 4            |
| <b>gele (bi-)</b>        | <i>n</i> people over there                                         |
| <b>gembe<sup>1</sup></b> | <i>dem</i> that (not in view) cl. 4                                |
| <b>gembe<sup>2</sup></b> | <i>adv</i> there                                                   |
| <b>gete</b>              | <i>v</i> take                                                      |
| <b>gi-<sup>1</sup></b>   | cl. 4 noun class marker (also <b>gə-</b> )                         |
| <b>gi-<sup>2</sup></b>   | <i>pron</i> it cl. 4                                               |
| <b>gi<sup>3</sup></b>    | <i>v</i> 1. be 2. progressive auxiliary                            |
| <b>gi ŋgi</b>            | <i>v</i> have                                                      |
| <b>gila</b>              | <i>adj</i> which cl. 4                                             |
| <b>gilla</b>             | <i>adv</i> where?                                                  |
| <b>gimɔ</b>              | <i>v</i> habitual auxiliary                                        |
| <b>gio</b>               | <i>v</i> 1. be (past tense) 2. progressive auxiliary (past tense)  |
| <b>git</b>               | <i>n</i> pl. of kit 'eye'                                          |
| <b>giti</b>              | <i>adv</i> in front                                                |
| <b>giti (a-)</b>         | <i>n</i> one who is in front (e.g., of army)                       |
| <b>gitu</b>              | <i>v</i> get, obtain                                               |
| <b>gitilu</b>            | <i>v</i> happen [ <i>giti</i> 'have' + <i>-lu</i> ]                |
| <b>gɔ</b>                | <i>dem</i> this cl. 4                                              |
| <b>gobu</b>              | <i>v</i> 1. fall 2. make fall                                      |
| <b>gudi (gi-), gudin</b> | <i>n</i> money                                                     |
| <b>gunu</b>              | <i>n</i> poison <b>saa ma gi ŋgi gunu</b> 'the snake is poisonous' |

## gb

|                |                                                           |
|----------------|-----------------------------------------------------------|
| <b>gbaa</b>    | <i>v</i> ask (a question)                                 |
| <b>gbaale</b>  | <i>n</i> house                                            |
| <b>gbaandε</b> | <i>v</i> ask for [ <i>gbaa</i> 'ask' + <i>ndε</i> recip.] |

## h

|                  |                                                                                                          |
|------------------|----------------------------------------------------------------------------------------------------------|
| <b>ha-</b>       | cl. 1 noun class marker (also a-)                                                                        |
| <b>haao</b>      | <i>v</i> break                                                                                           |
| <b>habo</b>      | <i>adv</i> like that, in that way                                                                        |
| <b>habu</b>      | <i>v</i> kill                                                                                            |
| <b>hakilo</b>    | <i>n</i> mind, memory (< Ar. <i>ʕql</i> 'mind, intelligence', possibly through an intermediate language) |
| <b>hal</b>       | <i>n</i> 1. person 2. somebody, someone 3. (with negative verb) nobody, no one                           |
| <b>haai</b>      | 1. <i>v</i> break (past tense <b>hao</b> ) 2. <i>ptcp</i> breaking                                       |
| <b>haala</b>     | <i>n</i> 1. God 2. rain <b>haala ma gaa tub</b> 'it is raining'                                          |
| <b>halla</b>     | <i>adv</i> how? (also <b>alla</b> )                                                                      |
| <b>hale</b>      | <i>v</i> wear                                                                                            |
| <b>haam</b>      | <i>v</i> be new                                                                                          |
| <b>haame</b>     | <i>adj</i> new                                                                                           |
| <b>hamma</b>     | <i>adv</i> like that, in that way (also <b>amma</b> )                                                    |
| <b>hani?</b>     | <i>adv</i> no                                                                                            |
| <b>hao</b>       | <i>v</i> break ( <i>ptcp</i> <b>haai</b> )                                                               |
| <b>hara (a-)</b> | <i>n</i> goat                                                                                            |
| <b>hatide</b>    | <i>adv</i> again                                                                                         |
| <b>hatji</b>     | <i>adv</i> there                                                                                         |

|                       |                                                                     |
|-----------------------|---------------------------------------------------------------------|
| <b>hε</b>             | <i>dem</i> this (of deceased people or characters in stories) cl. 1 |
| <b>hedma</b>          | <i>adv</i> there                                                    |
| <b>hembe</b>          | <i>dem</i> that not in view cl. 1                                   |
| <b>hembele</b>        | <i>dem</i> that not in view cl. 1 emphatic                          |
| <b>hewo</b>           | <i>n</i> event with many people                                     |
| <b>hi<sup>1</sup></b> | <i>pron</i> 3 sg. human independent (also <b>hidi</b> )             |
| <b>hi<sup>2</sup></b> | <i>adj</i> white                                                    |
| <b>hi (gə-)</b>       | <i>n</i> white                                                      |
| <b>hidi</b>           | <i>pron</i> 3 sg. human independent (also <b>hi</b> )               |
| <b>hidima</b>         | <i>pron</i> 3 sg. human independent emphatic (also <b>hima</b> )    |
| <b>hila</b>           | <i>adj</i> which cl. 1, cl. 2 (human)                               |
| <b>hilli</b>          | <i>pron</i> 3 sg. possessive <i>pron.</i> (also <b>ndilli</b> )     |
| <b>hima</b>           | <i>pron</i> 3 sg. human independent emphatic (also <b>hidima</b> )  |
| <b>hinda</b>          | <i>pron</i> my (also <b>finda</b> )                                 |
| <b>hinoo</b>          | <i>adj</i> each                                                     |
| <b>hit</b>            | <i>v</i> hit                                                        |
| <b>hiti(r)</b>        | <i>v</i> send                                                       |
| <b>hiil</b>           | <i>v</i> learn                                                      |
| <b>hɔ</b>             | <i>dem</i> this cl. 1                                               |
| <b>holla</b>          | <i>dem</i> another, one cl. 1 <b>alaante holla</b> 'another man'    |
| <b>hɔmmu</b>          | <i>dem</i> that cl. 1                                               |
| <b>hode (gə-)</b>     | <i>n</i> return                                                     |
| <b>hodi</b>           | <i>n</i> room                                                       |
| <b>hool</b>           | <i>v</i> share                                                      |
| <b>hondi</b>          | <i>adj</i> certain <b>vlej hondi</b> 'a certain day'                |
| <b>hoto</b>           | <i>n</i> car (< Fr. <i>auto</i> ) (also <b>oto</b> )                |

|                  |                                                                                                |
|------------------|------------------------------------------------------------------------------------------------|
| <b>h u</b>       | <i>v</i> hit                                                                                   |
| <b>h u</b>       | <i>pron</i> 2 sg. independent (also <b>wɔ</b> , <b>wu</b> )                                    |
| <b>hu (a-)</b>   | <i>n</i> bee                                                                                   |
| <b>hubutu</b>    | <i>vt</i> 1. open 2. dig                                                                       |
| <b>hul (gi-)</b> | <i>n</i> hair (sg. <b>huli</b> )                                                               |
| <b>huli</b>      | <i>n</i> hair (sg.) (pl. <b>gihul</b> )                                                        |
| <b>huma</b>      | <i>pron</i> 2 sg. independent emphatic                                                         |
| <b>hur</b>       | <i>v</i> know                                                                                  |
| <b>hurnde</b>    | <i>v</i> 1. know each other 2. get to know each other [ <i>hur</i> 'know' + <i>nde</i> recip.] |

## i

|                |                                                                       |
|----------------|-----------------------------------------------------------------------|
| <b>i-</b>      | <i>pron</i> 1 sg. sub. (before negative, future or connective marker) |
| <b>idma</b>    | <i>pron</i> your (sg.) (also <b>dima</b> )                            |
| <b>-io</b>     | past tense marker                                                     |
| <b>isama</b>   | morning greeting                                                      |
| <b>itijəŋ</b>  | greeting when sun is at its zenith                                    |
| <b>iwurara</b> | evening greeting (one person)                                         |

## j

|                 |                                         |
|-----------------|-----------------------------------------|
| <b>jaa</b>      | <i>v</i> say, tell                      |
| <b>jabi</b>     | <i>v</i> answer, respond                |
| <b>jaabi</b>    | 1. <i>adj</i> three 2. <i>inv</i> three |
| <b>jaabo</b>    | <i>v</i> call by name                   |
| <b>jaf (g-)</b> | <i>n</i> work                           |

|                          |                                                          |
|--------------------------|----------------------------------------------------------|
| <b>jage</b>              | <i>v</i> hurry                                           |
| <b>jalu</b>              | <i>v</i> begin                                           |
| <b>jantu</b>             | <i>v</i> create                                          |
| <b>jaantu</b>            | <i>v</i> 1. go out 2. take out                           |
| <b>jao</b>               | <i>v</i> make                                            |
| <b>jaara</b>             | <i>conj</i> though, although                             |
| <b>jaatu</b>             | <i>v</i> enter                                           |
| <b>jelema</b>            | <i>v</i> change, metamorphose                            |
| <b>jem (v-)</b>          | <i>n</i> theft                                           |
| <b>jeɲu</b>              | <i>vt</i> marry                                          |
| <b>jeɲde<sup>1</sup></b> | <i>vi</i> marry each other                               |
| <b>jeɲde<sup>2</sup></b> | <i>n</i> home                                            |
| <b>jiifa</b>             | <i>n</i> donkey                                          |
| <b>-jo</b>               | past tense marker                                        |
| <b>jo</b>                | <i>adv</i> yes                                           |
| <b>jobde</b>             | <i>v</i> walk <i>v</i> walk (also jobodu, jobu, jobudu)  |
| <b>jobodu</b>            | <i>v</i> walk (also jobde, jobu, jobudu)                 |
| <b>jobu</b>              | <i>v</i> walk (also jobde, jobodu, jobudu)               |
| <b>jobudu</b>            | <i>v</i> walk (also jobde, jobu, jobodu)                 |
| <b>jolo</b>              | <i>adj</i> old                                           |
| <b>jool</b>              | <i>n</i> west, place where sun sets                      |
| <b>joolu</b>             | <i>v</i> set (of sun)                                    |
| <b>jor</b>               | <i>v</i> happen <i>wi jorma?</i> 'What happened to him?' |
| <b>julu</b>              | <i>v</i> be over (e.g., day)                             |

## k

|                   |                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------|
| <b>kaero</b>      | <i>n</i> peace                                                                            |
| <b>kaldu</b>      | <i>n</i> type of stew eaten in the Casamance                                              |
| <b>kalfa (a-)</b> | <i>n</i> important person                                                                 |
| <b>kaande</b>     | <i>v</i> sell                                                                             |
| <b>kandzu</b>     | <i>n</i> okra                                                                             |
| <b>kano</b>       | <i>v</i> love                                                                             |
| <b>karo</b>       | <i>n</i> moon                                                                             |
| <b>kato</b>       | <i>n</i> effort                                                                           |
| <b>kaatu</b>      | <i>conj</i> because                                                                       |
| <b>katja</b>      | <i>v</i> chat                                                                             |
| <b>keg</b>        | <i>v</i> look for                                                                         |
| <b>kembo</b>      | <i>n</i> coal                                                                             |
| <b>keme</b>       | <i>inv</i> hundred                                                                        |
| <b>keke</b>       | <i>n</i> unfermented milk                                                                 |
| <b>kibir</b>      | <i>n</i> noise                                                                            |
| <b>kit</b>        | <i>n</i> eye (pl. git)                                                                    |
| <b>kɔ</b>         | <i>n</i> head Solo gi ŋgi kɔ 'Solo has a good head on his shoulders'                      |
| <b>kolja</b>      | <i>n</i> problems                                                                         |
| <b>kontanu</b>    | <i>v</i> be happy (< Fr. <i>content</i> 'happy', possibly via Wolof or Mandinka)          |
| <b>kuudi</b>      | <i>n</i> life Dženaba gi ŋgi kuudi 'Dieynaba is with life, i.e., she has had a long life' |

**kunda** *n* land of, house of **tubab kunda** 'regional capital' (< *toubab* 'white person'), **dzatta kunda** (Diattacounda) 'town founded by the Diattas'

**kungarandi** *v* infinitive of **garandi** 'teach'

**kp**

**kpɔɲa** *n* beehive

**kpu** *v* sleep

**l**

**laafa** *n* hat

**laafe** *n* baobab

**lafu** *v* 1. smile 2. make smile,

**lagi (gə-)** *n* stone, rock

**lama (a-)** *n* king, president

**laante (a-)** *n* 1. man 2. used to indicate that an epicene noun is male  
**andaŋ hinda alaante** 'my older brother'

**latf** *n* act of telling lies

**latfu** *v* tell a lie, lie

**ler (gə-)** *n* pot

**letar (gə-)** *n* letter

**lej** *n* sun

**lej (u-)** *adv* today

**lej (v-)** *n* day

**liisa** *n* 1. wine **liisa tʃij** 'palm wine' 2. alcoholic drink

**lɔ (g-)** *n* ear

|                         |                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>lɔlɔ (gə-), lɔlɔ</b> | <i>n</i> star (pl. <b>lɔlɔ</b> or <b>bilɔlɔ</b> )                                                                                              |
| <b>loptan</b>           | <i>n</i> hospital                                                                                                                              |
| <b>lɔrɛ</b>             | <i>adj</i> dirty <b>agi ulɔrɛ</b> 'he is dirty' (lit. sense)                                                                                   |
| <b>lɔrɛ (g-)</b>        | <i>n</i> something that is dirty, unclean <b>agi glɔrɛ</b> 'he is unclean (fig. sense), unlucky', subject needs to undergo ritual purification |
| <b>lɔtte</b>            | <i>v</i> cook                                                                                                                                  |
| <b>loode (a-)</b>       | <i>n</i> corpse                                                                                                                                |
| <b>loode (g-)</b>       | <i>n</i> 1. death 2. funeral                                                                                                                   |
| <b>loodu</b>            | <i>v</i> die                                                                                                                                   |
| <b>lof (gə-)</b>        | (act of) building                                                                                                                              |
| <b>lofu</b>             | <i>v</i> construct, build                                                                                                                      |
| <b>low</b>              | <i>v</i> refuse <b>anin ma low lɔtte</b> 'the woman refused to cook'                                                                           |
| <b>-lu</b>              | detransitivizer (verb affix)                                                                                                                   |
| <b>luufa</b>            | <i>v</i> travel                                                                                                                                |
| <b>lufi</b>             | 1. <i>adv</i> morning 2. <i>adv</i> tomorrow <b>lufi alufi</b> 'tomorrow morning'                                                              |
| <b>luur (v-)</b>        | <i>n</i> arrow                                                                                                                                 |
| <b>lusa</b>             | <i>n</i> pants                                                                                                                                 |
| <b>luusu</b>            | <i>v</i> get out of bed                                                                                                                        |
| <b>luster</b>           | <i>v</i> get <b>biluster hal sam ato jin bibɔtʃi bembe</b> 'they got someone to go to those villages'                                          |

## m

**ma<sup>1</sup>** definite article



|                       |                                                                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>ma<sup>2</sup></b> | <i>pron</i> 3 sg. obj.                                                                                                                |
| <b>ma<sup>3</sup></b> | <i>conj</i> clausal conjunction                                                                                                       |
| <b>ma<sup>4</sup></b> | attaches to pronouns and adjectives to make them more emphatic <b>fi</b> 'it, cl. 5', <b>fima</b> 'it (emphatic), cl. 5'              |
| <b>mada</b>           | <i>v</i> 1. be able to 2. overpower, beat (an opponent) <b>wili jao bitfaa ma madabaa</b> 'nature had it that the Balantas beat them' |
| <b>malo</b>           | <i>n</i> hippopotamous                                                                                                                |
| <b>maalu</b>          | <i>n</i> rice                                                                                                                         |
| <b>manda (gə-)</b>    | <i>n</i> night                                                                                                                        |
| <b>mansake</b>        | <i>n</i> king                                                                                                                         |
| <b>mansal</b>         | <i>n</i> story <b>mə insantna mansal na mali Sadio</b> 'Today I will tell you the story of "Mali Sadio"'                              |
| <b>maara</b>          | <i>v</i> participate ... <b>sam amaara akonferens</b> '... in order to participate in a conference'                                   |
| <b>marijer</b>        | <i>n</i> a type of traditional garment                                                                                                |
| <b>marse</b>          | <i>n</i> market (< Fr. <i>marché</i> )                                                                                                |
| <b>masa</b>           | <i>v</i> go fishing, fish                                                                                                             |
| <b>matir</b>          | 1. <i>v</i> be better 2. <i>adj</i> better (health)                                                                                   |
| <b>matiru</b>         | <i>v</i> get better                                                                                                                   |
| <b>megesu</b>         | <i>v</i> 1. construct, build 2. put in order, furnish 3. prepare, make                                                                |
| <b>meesu</b>          | <i>v</i> 1. sit 2. live (in a place) 3. remain, stay                                                                                  |
| <b>mindī</b>          | <i>n</i> Mandinka language                                                                                                            |
| <b>mindī (a-)</b>     | <i>n</i> Mandinka person                                                                                                              |
| <b>mirag (gi-)</b>    | <i>n</i> calabash (< Mdk.)                                                                                                            |

|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| <b>misir</b>          | <i>n</i> mosque                                                        |
| <b>mɔ<sup>1</sup></b> | <i>adv</i> today                                                       |
| <b>mɔ<sup>2</sup></b> | hypothetical mood marker                                               |
| <b>mɔɔnɛ</b>          | <i>adj</i> black                                                       |
| <b>mɔɔnɛ (gə-)</b>    | <i>n</i> black                                                         |
| <b>mɔɔnlu</b>         | <i>vi</i> blacken [mɔɔnɛ 'black' + -lu]                                |
| <b>mɔɔnɛ</b>          | <i>adj</i> wet <b>ɲomu umɔɔnɛ</b> 'a wet loincloth'                    |
| <b>mog</b>            | <i>n</i> fistful of (e.g. rice)                                        |
| <b>mom</b>            | <i>v</i> 1. be pregnant 2. make pregnant 3. be satisfied (from eating) |

**mb**

|                         |                                               |
|-------------------------|-----------------------------------------------|
| <b>mbaa<sup>1</sup></b> | <i>pron</i> their (also mbogi)                |
| <b>mbaa<sup>2</sup></b> | <i>pron</i> your (pl.) (low-toned)            |
| <b>mbantʃɛ</b>          | <i>n</i> knife                                |
| <b>mbaŋ</b>             | <i>pron</i> our                               |
| <b>mbaangara</b>        | <i>n</i> thunder                              |
| <b>mbarimuso</b>        | <i>n</i> sister                               |
| <b>mbarinɛ</b>          | <i>n</i> brother                              |
| <b>mbatu</b>            | <i>n</i> sauce <b>mbatu tʃin</b> 'palm sauce' |
| <b>mbi</b>              | <i>n</i> son, daughter                        |
| <b>mbitaŋ</b>           | <i>n</i> in-laws                              |
| <b>mbɔ</b>              | <i>interj</i> well                            |
| <b>mbogi</b>            | <i>pron</i> their (also mbaa)                 |
| <b>mbole</b>            | <i>adv</i> maybe, perhaps, possibly           |
| <b>mbontoolo</b>        | <i>n</i> story                                |

|                |                                                                                    |
|----------------|------------------------------------------------------------------------------------|
| <b>mboŋ</b>    | <i>n</i> termite                                                                   |
| <b>mbufore</b> | <i>n</i> product from a type of tree from which a powder like that of okra is made |
| <b>mbuta</b>   | <i>n</i> child                                                                     |

**mf**

|                    |                                         |
|--------------------|-----------------------------------------|
| <b>mfananŋ</b>     | <i>adj</i> 1. nice, good 2. appropriate |
| <b>mfere</b>       | <i>adv</i> outside                      |
| <b>mfid, mfida</b> | <i>n</i> friend                         |
| <b>mfila</b>       | <i>adv</i> when?                        |

**n**

|                       |                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------|
| <b>n-<sup>1</sup></b> | <i>pron</i> 1 sg. sub.                                                                |
| <b>n-<sup>2</sup></b> | future marker (verb affix)                                                            |
| <b>n-<sup>3</sup></b> | continuous aspect marker (verb affix)                                                 |
| <b>na<sup>1</sup></b> | genitive marker                                                                       |
| <b>na<sup>2</sup></b> | <i>n</i> mom, mommy                                                                   |
| <b>-na</b>            | <i>pron</i> 2 sg. obj.                                                                |
| <b>nafa</b>           | <i>n</i> pleasantness <b>gi ŋgi nafa</b> 'be pleasant'                                |
| <b>nafulo</b>         | <i>n</i> riches, wealth                                                               |
| <b>naga</b>           | Balanta ethnic and dialectal group in Guinea Bissau                                   |
| <b>naamo</b>          | <i>n</i> taxes                                                                        |
| <b>naani</b>          | <i>n</i> baby                                                                         |
| <b>-na-ŋ</b>          | subjunctive marker: <b>abinte sam ananŋ biifa Mariama</b><br>'he came to see Mariama' |
| <b>nanɗe</b>          | <i>v</i> agree with each other [ <i>nagu</i> 'accept' + <i>-nde</i> recip.]           |

|                     |                                                                                                                        |
|---------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>naju</b>         | <i>v</i> accept                                                                                                        |
| <b>ndaani</b>       | <i>n</i> a lot                                                                                                         |
| <b>ndante</b>       | <i>n</i> description [ <i>n</i> - nominalizer + <i>dan</i> 'declare, announce']                                        |
| <b>nduulu</b>       | <i>n</i> a little bit [ <i>n</i> - nominalizer + <i>duulu</i> 'small']                                                 |
| <b>nkaande (a-)</b> | <i>n</i> merchant [ <i>n</i> - nominalizer + <i>kaande</i> 'sell']                                                     |
| <b>-ni</b>          | <i>pron</i> 1 sg. obj.                                                                                                 |
| <b>ni</b>           | <i>conj</i> if, when                                                                                                   |
| <b>nin (a-, u-)</b> | <i>n</i> 1. woman 2. wife 3. used to indicate that an epicene noun is female <b>andaŋ hinda anin</b> 'my older sister' |
| <b>nōkō</b>         | <i>n</i> marriage                                                                                                      |
| <b>nra</b>          | <i>n</i> harm ( <i>v</i> ra)                                                                                           |
| <b>num</b>          | <i>v</i> 1. bring 2. carry                                                                                             |
| <b>numale (a-)</b>  | <i>adj</i> poor                                                                                                        |
| <b>numale (u-)</b>  | <i>adj</i> busy                                                                                                        |

## nd

|                  |                                                                                             |
|------------------|---------------------------------------------------------------------------------------------|
| <b>ndage</b>     | <i>v</i> do laundry                                                                         |
| <b>ndagi</b>     | <i>n</i> laundry <b>lufi ŋgi ŋgi ndagi</b> 'today I have laundry (to do)'                   |
| <b>ndaŋ</b>      | <i>adj</i> 1. big, great 2. old                                                             |
| <b>ndaŋ (a-)</b> | 1. <i>adj</i> old 2. <i>n</i> older sibling                                                 |
| <b>ndaŋ (u-)</b> | <i>adj</i> big                                                                              |
| <b>ndilli</b>    | <i>pron</i> his, her, its (also hilli)                                                      |
| <b>-nde</b>      | symmetrical or reciprocal affix                                                             |
| <b>ndeeme</b>    | <i>adv</i> how much? <b>ndeeme uwuste paj fɔmmu?</b> 'how much did you pay for this cloth?' |

|                 |                                                           |
|-----------------|-----------------------------------------------------------|
| <b>nduba</b>    | 1. <i>n</i> all 2. <i>adj</i> all                         |
| <b>ndundugi</b> | <i>n</i> boubou (article of clothing worn in West Africa) |

**ndʒ**

|                |                                                                                                                                       |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>ndzaal</b>  | <i>n</i> manner                                                                                                                       |
| <b>ndzanga</b> | 1. <i>v</i> be engaged <b>bigi ndzanga</b> 'they are engaged' 2. <i>n</i> love affair, relationship, engagement 3. <i>n</i> fiancé(e) |
| <b>ndzɛg</b>   | <i>n</i> chicken                                                                                                                      |

**ns**

|            |                                                |
|------------|------------------------------------------------|
| <b>nse</b> | 1. <i>n</i> truth 2. <i>interj</i> right, true |
|------------|------------------------------------------------|

**nt**

|                 |                                                                                                                    |
|-----------------|--------------------------------------------------------------------------------------------------------------------|
| <b>ntande</b>   | <i>n</i> bed                                                                                                       |
| <b>ntiibale</b> | <i>n</i> soul taken away by spirits <b>agi untiibale</b> 'he is sick because the spirits have taken away his soul' |
| <b>ntiitil</b>  | <i>adj</i> first                                                                                                   |
| <b>ntiitio</b>  | <i>n</i> beginning <b>antiitio</b> 'at the beginning'                                                              |
| <b>ntɔ (a-)</b> | <i>n</i> 1. husband 2. master                                                                                      |
| <b>ntuunda</b>  | <i>n</i> dust                                                                                                      |

**ntʃ**

|                 |                        |
|-----------------|------------------------|
| <b>ntʃabra</b>  | <i>n</i> crocodile     |
| <b>ntʃignɛ</b>  | <i>n</i> field, fields |
| <b>ntʃiitʃi</b> | <i>n</i> grandchild    |
| <b>ntʃugub</b>  | <i>n</i> chair         |

|                     |                  |
|---------------------|------------------|
| <b>ntjugub (u-)</b> | <i>n</i> chair   |
| <b>ntfuma</b>       | <i>n</i> evening |

### ŋ

|             |                                                                                                                                         |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>-ŋ</b>   | genitive linking particle (allomorphs <b>-m, -n</b> ) <b>adzalam bala</b> 'balafon griot', <b>halij birkama</b> 'a person from Birkama' |
| <b>ŋatu</b> | <i>v</i> cry out, say loudly <b>bigatu asij</b> 'they cried out in song'                                                                |

### ŋg

|                      |                                                                             |
|----------------------|-----------------------------------------------------------------------------|
| <b>ŋgarandi</b>      | <i>n</i> instruction, teaching [ <b>garaj</b> 'read']                       |
| <b>ŋgarandi (a-)</b> | <i>n</i> teacher [ <b>garaj</b> 'read']                                     |
| <b>ŋge</b>           | <i>v</i> negative auxiliary <b>binge naŋ...</b> 'they do not accept, allow' |
| <b>ŋgetta</b>        | <i>adv</i> not <b>ŋgetta Mariama</b> 'not Mariama'                          |
| <b>ŋgi</b>           | <i>conj</i> with, and                                                       |

### ŋw

|                |                                                 |
|----------------|-------------------------------------------------|
| <b>ŋwoodte</b> | <i>v</i> come back [ <b>ŋwoodu + -te dir.</b> ] |
| <b>ŋwoodu</b>  | <i>v</i> return (motion)                        |

### ɲ

|               |                                       |
|---------------|---------------------------------------|
| <b>ɲa</b>     | <i>v</i> 1. give 2. give back, return |
| <b>ɲageru</b> | <i>v</i> be mixed up, confused        |
| <b>ɲagi</b>   | <i>n</i> grass, flowers               |
| <b>ɲaagi</b>  | <i>adj</i> not smart                  |

|                  |                                                                                                                                                                    |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ɲal</b>       | <i>v</i> have just <b>aɲal gafu</b> 'he just arrived'                                                                                                              |
| <b>ɲan (bi-)</b> | <i>n</i> people <b>abiɲan</b> 'in front of people, in public'                                                                                                      |
| <b>ɲanɛ</b>      | <i>adj</i> clean <b>buf ɲanɛ</b> 'early morning, dawn'                                                                                                             |
| <b>ɲani</b>      | <i>n</i> (act of )cleaning (also <b>gɲani</b> )                                                                                                                    |
| <b>ɲanu</b>      | <i>v</i> clean                                                                                                                                                     |
| <b>ɲaatu</b>     | <i>v</i> 1. remain, stay 2. enter                                                                                                                                  |
| <b>ɲɛfɛ</b>      | <i>n</i> 1. stomach 2. pregnancy <b>agi ɲgi ɲɛfɛ</b> 'she is pregnant'                                                                                             |
| <b>ɲɛg</b>       | <i>n</i> chicken                                                                                                                                                   |
| <b>ɲi</b>        | <i>pron</i> 1 sg. independent (also <b>ɲo</b> )                                                                                                                    |
| <b>ɲima</b>      | <i>pron</i> 1 sg. independent emphatic                                                                                                                             |
| <b>ɲinu</b>      | <i>v</i> look at                                                                                                                                                   |
| <b>ɲir</b>       | <i>n</i> dance                                                                                                                                                     |
| <b>ɲirɛ (a-)</b> | <i>n</i> dancer                                                                                                                                                    |
| <b>ɲiru</b>      | <i>v</i> dance                                                                                                                                                     |
| <b>ɲo</b>        | <i>pron</i> 1 sg. independent (also <b>ɲi</b> )                                                                                                                    |
| <b>ɲobu</b>      | <i>v</i> be numerous                                                                                                                                               |
| <b>ɲoom</b>      | <i>n</i> loincloth                                                                                                                                                 |
| <b>ɲome</b>      | <i>v</i> not be afraid, dare <b>uɲome mɛɛɛɛ agbaale ga?</b> 'do you dare stay in the house?', <b>aɲɲome anan mɛɛsu agbaale</b> 'he did not dare stay in the house' |
| <b>ɲuugi</b>     | <i>prep</i> between                                                                                                                                                |
| <b>ɲuj</b>       | <i>v</i> be hot <b>lej ma ɲuj</b> 'it is hot' (lit. 'the sun is hot')                                                                                              |
| <b>ɲuw</b>       | <i>adj</i> hot <b>wede uɲuw</b> 'hot water'                                                                                                                        |

## o

**hoto** *n* car (< Fr. *auto*) (also **oto**)

## P

|                 |                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------|
| <b>paj</b>      | <i>n</i> cloth                                                                                |
| <b>paaj</b>     | 1. <i>v</i> play 2. <i>n</i> event (e.g., baptism)                                            |
| <b>palanter</b> | <i>n</i> window                                                                               |
| <b>paanfe</b>   | <i>n</i> type of tree of average size that produces an inedible fruit; <i>paftan</i> in wolof |
| <b>petf</b>     | <i>n</i> name (with special cultural significance)                                            |
| <b>pin</b>      | <i>n</i> (act of) coming <b>pini agbaale</b> 'coming home'                                    |
| <b>pitila</b>   | <i>n</i> dew                                                                                  |
| <b>portale</b>  | <i>n</i> photograph(s)                                                                        |

## R

|                   |                                                                                                                 |
|-------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>ra</b>         | <i>v</i> harm <b>kibir ma ra-ni glo</b> 'the noise hurt my ears' (see <b>ra</b> )                               |
| <b>raa</b>        | <i>v</i> please; used to express wanting <b>toi raani</b> 'I want to go', <b>bimalo raani</b> 'I like hippos'   |
| <b>radzradzli</b> | <i>v</i> look while walking around                                                                              |
| <b>raale</b>      | 1. <i>adj</i> angry 2. <i>ptcp.</i> of <b>rao</b>                                                               |
| <b>rao</b>        | <i>v</i> be angry ( <i>ptcp.</i> <b>raale</b> )                                                                 |
| <b>reŋu</b>       | <i>v</i> meet                                                                                                   |
| <b>res</b>        | <i>n</i> year                                                                                                   |
| <b>resores</b>    | <i>adv</i> every year                                                                                           |
| <b>resu</b>       | <i>n</i> age [ <b>&lt; res</b> 'year'] <b>agi ngi resu ntjimin haabi ngi tfif</b> 'he is thirty-five years old' |
| <b>rifi</b>       | <i>n</i> 1. shaving 2. baptism (babies are shaved)                                                              |



|                    |                                                   |
|--------------------|---------------------------------------------------|
| <b>riɟu</b>        | <i>v</i> 1. go to bed 2. put (e.g. a baby) to bed |
| <b>rip</b>         | 1. <i>v</i> sing 2. <i>n</i> song                 |
| <b>rip (a-)</b>    | <i>n</i> singer                                   |
| <b>riitʃu</b>      | <i>v</i> cry                                      |
| <b>riitʃ (gə-)</b> | <i>n</i> 1. mourning 2. funeral                   |
| <b>rɔɟ</b>         | 1. <i>vt</i> marry 2. <i>n</i> marriage           |
| <b>rɔɟɛ</b>        | <i>vt</i> marry [rɔɟ 'marry' + -ndɛ recip.]       |
| <b>rum</b>         | <i>n</i> fog                                      |

## S

|                        |                                                                       |
|------------------------|-----------------------------------------------------------------------|
| <b>saa</b>             | <i>n</i> snake                                                        |
| <b>saa (gə-)</b>       | <i>n</i> snake                                                        |
| <b>saf<sup>1</sup></b> | <i>v</i> write                                                        |
| <b>saf<sup>2</sup></b> | <i>v</i> fire at (with arrow, pistol) asaf dzato 'he fired at a lion' |
| <b>saf (k-)</b>        | <i>n</i> (act of) writing                                             |
| <b>sag</b>             | <i>v</i> ask                                                          |
| <b>saage</b>           | <i>v</i> be sick                                                      |
| <b>saage (a-, u-)</b>  | <i>n</i> sick person                                                  |
| <b>sam</b>             | <i>conj</i> in order to                                               |
| <b>samba</b>           | <i>adj</i> red                                                        |
| <b>samba (gə-)</b>     | <i>n</i> red                                                          |
| <b>samte</b>           | <i>n</i> shoes                                                        |
| <b>sant</b>            | <i>v</i> talk, tell (ptcp. <i>santɛ</i> )                             |
| <b>saati</b>           | <i>n</i> village, town                                                |
| <b>saun</b>            | <i>v</i> jump                                                         |

|                      |                                                                                                     |
|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>sɛb</b>           | <i>v</i> harvest                                                                                    |
| <b>sɛd</b>           | <i>v</i> burn                                                                                       |
| <b>sɛl (gə-)</b>     | <i>n</i> fish (general)                                                                             |
| <b>sɛle</b>          | <i>n</i> fish (general)                                                                             |
| <b>sɛmbe</b>         | <i>n</i> strength <b>alaante hembɛ gi ŋgi sɛmbe</b> 'that man is with strength, i.e., he is strong' |
| <b>sɛntano</b>       | <i>n</i> Satan, misfortune                                                                          |
| <b>sibi</b>          | 1. <i>adj</i> two 2. <i>inv</i> two                                                                 |
| <b>sibil</b>         | <i>adj</i> second                                                                                   |
| <b>siibow</b>        | 1. <i>v</i> dream 2. <i>n</i> dream                                                                 |
| <b>sige</b>          | <i>v</i> drink                                                                                      |
| <b>sigi (a-)</b>     | <i>n</i> traditional healer                                                                         |
| <b>sigtfor</b>       | <i>n</i> Ziguinchor                                                                                 |
| <b>siim</b>          | <i>v</i> 1. hear 2. understand                                                                      |
| <b>siman</b>         | <i>n</i> food                                                                                       |
| <b>simli</b>         | <i>v</i> listen [ <i>siim</i> 'hear']                                                               |
| <b>sin</b>           | <i>n</i> road                                                                                       |
| <b>sinsin</b>        | <i>n</i> basket                                                                                     |
| <b>siŋ</b>           | 1. <i>v</i> play music 2. <i>n</i> melody                                                           |
| <b>siŋ (gə-)</b>     | <i>n</i> (act of) playing instrument)                                                               |
| <b>singi (a-)</b>    | <i>n</i> balafon musician                                                                           |
| <b>sinta butfora</b> | <i>n</i> time of slavery                                                                            |
| <b>sir</b>           | <i>v</i> be smart                                                                                   |
| <b>sire</b>          | <i>adj</i> smart                                                                                    |
| <b>siraŋ</b>         | <i>n</i> bench                                                                                      |
| <b>sis</b>           | <i>n</i> chair (< Fr. <i>chaise</i> )                                                               |

|                        |                                                              |
|------------------------|--------------------------------------------------------------|
| <b>sɔ</b>              | <i>adv</i> yesterday                                         |
| <b>sobtale</b>         | <i>v</i> suspect                                             |
| <b>sogu</b>            | <i>v</i> call                                                |
| <b>soi</b>             | <i>v</i> laugh                                               |
| <b>solo</b>            | <i>n</i> panther                                             |
| <b>sɔtʃi</b>           | <i>n</i> hot coal                                            |
| <b>sɔɔntʃe</b>         | <i>adj</i> thin, slender                                     |
| <b>sɔɔntʃu</b>         | <i>v</i> be thin, slender                                    |
| <b>sow</b>             | <i>v</i> finish ugarandi usow ga? 'did you finish teaching?' |
| <b>sowlu</b>           | <i>v</i> be (completely) finished [sow 'finish' + -lu]       |
| <b>suufi</b>           | <i>n</i> cooked rice, rice meal                              |
| <b>sulni</b>           | <i>prep</i> next to                                          |
| <b>sum<sup>1</sup></b> | <i>n</i> mouth                                               |
| <b>sum<sup>2</sup></b> | 1. <i>v</i> please 2. <i>adj</i> tasty, delicious            |
| <b>suum</b>            | 1. <i>v</i> fight, make war 2. <i>n</i> war, battle          |
| <b>sumbuta</b>         | <i>n</i> door                                                |
| <b>sup</b>             | <i>n</i> soup supu jɛg 'chicken soup'                        |

## t

|                    |                                       |
|--------------------|---------------------------------------|
| <b>ta</b>          | <i>neg</i> not, not yet, no longer    |
| <b>taa</b>         | <i>n</i> big stick                    |
| <b>taa (f-)</b>    | <i>n</i> tree                         |
| <b>tabəl (gə-)</b> | <i>n</i> table                        |
| <b>tala</b>        | 1. <i>adj</i> four 2. <i>inv</i> four |
| <b>taɲat</b>       | <i>v</i> be left over                 |
| <b>tardelu</b>     | <i>v</i> be late                      |

|                       |                                                                                                                                                                                                                                                                               |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>tɛ<sup>1</sup></b> | directional (verb affix)                                                                                                                                                                                                                                                      |
| <b>tɛ<sup>2</sup></b> | past tense (verb affix) (also -ti)                                                                                                                                                                                                                                            |
| <b>tɛɛgu</b>          | <i>v</i> 1. pause, stop 2. arrive (of a moment) <b>vaatu vila teegu</b> 'What time is it?', <b>toi ma tɛɛgu</b> 'it is time to leave'                                                                                                                                         |
| <b>tɛf</b>            | <i>v</i> dig                                                                                                                                                                                                                                                                  |
| <b>tɛŋ (a-)</b>       | <i>n</i> owner, caretaker <b>atɛŋ bɔtʃi</b> 'caretaker of the country, leader, president'                                                                                                                                                                                     |
| <b>telefon</b>        | <i>n</i> telephone (< Fr. <i>téléphone</i> )                                                                                                                                                                                                                                  |
| <b>-ti</b>            | past tense (verb affix) (also -tɛ)                                                                                                                                                                                                                                            |
| <b>tilo</b>           | <i>n</i> sun (< Mdk.)                                                                                                                                                                                                                                                         |
| <b>tiro</b>           | <i>adv</i> day before yesterday                                                                                                                                                                                                                                               |
| <b>titi</b>           | <i>adv</i> since                                                                                                                                                                                                                                                              |
| <b>tɔm</b>            | <i>n</i> salt                                                                                                                                                                                                                                                                 |
| <b>to</b>             | <i>v</i> go                                                                                                                                                                                                                                                                   |
| <b>tobo</b>           | <i>v</i> go <b>intobo</b> 'I'm leaving' (said upon departure)                                                                                                                                                                                                                 |
| <b>toi</b>            | <i>n</i> 1. (act of) going 2. departure                                                                                                                                                                                                                                       |
| <b>tod</b>            | <i>v</i> bring                                                                                                                                                                                                                                                                |
| <b>toge</b>           | <i>v</i> leave                                                                                                                                                                                                                                                                |
| <b>tol (f-)</b>       | <i>n</i> garden                                                                                                                                                                                                                                                               |
| <b>tu</b>             | <i>intens</i> used in expression <b>nduba tu</b> 'all, everything': <b>abalanta kunda nduba tu</b> 'in all of the land of the Balantas' [this looks as if were from French <i>tout</i> or <i>tous</i> 'all', but in N'Diaye-Corréard (1970:117), we find <i>nduuba duus</i> ] |
| <b>tub</b>            | <i>v</i> rain <b>atub sɔ</b> 'it rained yesterday'                                                                                                                                                                                                                            |

|                    |                                                                                                         |
|--------------------|---------------------------------------------------------------------------------------------------------|
| <b>tubab</b>       | <i>n</i> white person                                                                                   |
| <b>tubab kunda</b> | <i>n</i> regional capital, e.g. Ziguinchor                                                              |
| <b>tuf</b>         | <i>n</i> name                                                                                           |
| <b>tum</b>         | <i>v</i> put                                                                                            |
| <b>tum (gi-)</b>   | <i>n</i> (act of) putting                                                                               |
| <b>tumlu</b>       | <i>v</i> put on, wear [ <i>tum</i> 'put' + <i>-lu</i> ]                                                 |
| <b>tumlu (gi-)</b> | <i>n</i> (act of) putting on, wearing <b>gitumlu na Sibow raani</b><br>'I like Sibow's way of dressing' |

### tʃ

|                            |                                                            |
|----------------------------|------------------------------------------------------------|
| <b>tʃaa (a-)</b>           | <i>n</i> Balanta person                                    |
| <b>tʃaa (f-)</b>           | <i>n</i> Balanta language                                  |
| <b>tʃaja</b>               | <i>n</i> type of loose-fitting, billowy pants              |
| <b>tʃala</b>               | <i>n</i> type of fish                                      |
| <b>tʃɛd</b>                | <i>v</i> 1. stop (motion) 2. get ready 3. take (of a road) |
| <b>tʃɛŋ</b>                | <i>n</i> palm tree (also <b>tʃiŋ</b> )                     |
| <b>tʃif</b>                | <i>n</i> hand                                              |
| <b>tʃiif</b>               | 1. <i>adj</i> five 2. <i>inv</i> five                      |
| <b>tʃige</b>               | <i>v</i> leave (motion)                                    |
| <b>tʃil</b>                | <i>n</i> cow                                               |
| <b>tʃima</b>               | <i>n</i> village                                           |
| <b>tʃimin</b>              | <i>inv</i> ten                                             |
| <b>tʃimin ŋgi wɔda</b>     | <i>inv</i> eleven                                          |
| <b>tʃimin sibi</b>         | <i>inv</i> twenty                                          |
| <b>tʃimin jaabi</b>        | <i>inv</i> thirty                                          |
| <b>tʃimin faatʃ n'wɔda</b> | <i>inv</i> sixty-one                                       |

|                  |                                                                                                                                                                 |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>tjim tala</b> | <i>inv</i> nine                                                                                                                                                 |
| <b>tjiŋ</b>      | <i>n</i> 1. palm tree (also tʃɛŋ) 2. palm oil 3. palm wine                                                                                                      |
| <b>tfole</b>     | <i>n</i> peace <b>bigi utfole ga?</b> 'are they in peace?' (question asked about family as part of greeting), <b>bigi utfole</b> 'they are in peace' (response) |
| <b>tfoole</b>    | <i>n</i> fire                                                                                                                                                   |
| <b>tfoolu</b>    | <i>v</i> be cool, cold                                                                                                                                          |

**u**

|                       |                                                 |
|-----------------------|-------------------------------------------------|
| <b>u<sup>-1</sup></b> | <i>pron</i> 3 sg. inanimate sub.                |
| <b>u<sup>-2</sup></b> | <i>pron</i> 2 sg. sub.                          |
| <b>u<sup>-3</sup></b> | adjective marker (occurs occasionally on nouns) |

**v**

|                  |                                                          |
|------------------|----------------------------------------------------------|
| <b>v-</b>        | cl. 5 noun class marker (< f-)                           |
| <b>vaatu</b>     | <i>n</i> time <b>vaatu vila teegu</b> 'What time is it?' |
| <b>ver</b>       | <i>n</i> glass (< Fr. <i>verre</i> )                     |
| <b>vlej vlej</b> | <i>adv</i> every day [ <b>lej</b> 'day']                 |

**w**

|              |                                                                |
|--------------|----------------------------------------------------------------|
| <b>waabo</b> | <i>adv</i> now                                                 |
| <b>wala</b>  | <i>conj</i> or <b>ngi hoto wala dzoge</b> 'by car or by river' |
| <b>wammo</b> | <i>adv</i> right now, immediately                              |
| <b>waase</b> | <i>n</i> sacred wood                                           |
| <b>watf</b>  | <i>v</i> reduce, lower                                         |
| <b>watfu</b> | <i>n</i> reduction (e.g. of taxes)                             |

|                        |                                                                                            |
|------------------------|--------------------------------------------------------------------------------------------|
| <b>wε</b>              | <i>dem</i> this cl. 6 (of objects that no longer exist)                                    |
| <b>wede</b>            | <i>n</i> water                                                                             |
| <b>wede (a-)</b>       | <i>n</i> white person                                                                      |
| <b>wembe</b>           | <i>dem</i> that (not in view) cl. 6, those                                                 |
| <b>wembele</b>         | <i>dem</i> that (not in view) emphatic cl. 6                                               |
| <b>wetu</b>            | <i>v</i> happen                                                                            |
| <b>weetu</b>           | <i>v</i> find                                                                              |
| <b>wi<sup>1</sup></b>  | <i>pron</i> cl. 6                                                                          |
| <b>wi<sup>2</sup></b>  | <i>pron</i> what?                                                                          |
| <b>wil<sup>1</sup></b> | <i>n</i> thing                                                                             |
| <b>wil<sup>2</sup></b> | <i>inv</i> thousand                                                                        |
| <b>wil sibi</b>        | <i>inv</i> two thousand                                                                    |
| <b>wila</b>            | <i>adj</i> which cl. 6                                                                     |
| <b>wilna</b>           | <i>n</i> things, story                                                                     |
| <b>wilu</b>            | <i>n</i> clothing, jewelry                                                                 |
| <b>wini</b>            | <i>pron</i> what <b>waabo hal atingur wini gi nse</b> 'now no one knows what the truth is' |
| <b>wɔ<sup>1</sup></b>  | <i>pron</i> 2 sg. independent (also <b>hu, wu</b> )                                        |
| <b>wɔ<sup>2</sup></b>  | <i>dem</i> this cl. 6                                                                      |
| <b>wɔɔ</b>             | <i>adj</i> spoiled (e.g. of food) [ <b>wow</b> 'worsen, spoil]                             |
| <b>wɔda</b>            | 1. <i>adj</i> one 2. <i>inv</i> one                                                        |
| <b>wɔlla</b>           | <i>dem</i> another, one cl. 6 <b>wil wɔlla</b> 'another thing'                             |
| <b>wɔmmu</b>           | <i>dem</i> this emphatic cl. 6, these                                                      |
| <b>wɔse</b>            | <i>v</i> wash                                                                              |
| <b>wɔj</b>             | <i>n</i> soul                                                                              |
| <b>wom (g-)</b>        | <i>n</i> food                                                                              |

|               |                                                                                         |
|---------------|-----------------------------------------------------------------------------------------|
| <b>womu</b>   | <i>v</i> eat (ptcp. <i>fomtε</i> )                                                      |
| <b>wote</b>   | <i>n</i> election, voting                                                               |
| <b>wotelu</b> | <i>v</i> elect                                                                          |
| <b>wow</b>    | <i>v</i> 1. worsen (e.g. health) 2. spoil                                               |
| <b>wu</b>     | <i>pron</i> 2 sg. independent (also <i>hu</i> , <i>wɔ</i> )                             |
| <b>wufale</b> | <i>adj</i> long-lasting                                                                 |
| <b>wuflu</b>  | <i>v</i> 1. last a certain amount of time 2. occur a certain amount of time in the past |
| <b>wun</b>    | <i>v</i> give                                                                           |
| <b>wusu</b>   | <i>v</i> buy, pay for                                                                   |

## V-

|            |                                 |
|------------|---------------------------------|
| <b>-Vd</b> | applicative marker (verb affix) |
|------------|---------------------------------|



## Appendix 4

### Atlantic Bibliography

I include this bibliography here in the hope that it will be useful to others working on languages from the Atlantic family. I have made an effort to list sources here that would otherwise be difficult to track down because of their age or because they do not appear in computerized databases. I have included only published sources.

Section I contains general works on Atlantic and is divided into subsections: Classification and Geographical Distribution, Comparative and Historical Studies, Lexical Material, Orthography and Transcription, Sociolinguistics, and Bibliography. Some works are listed under more than one category. Section II contains works that treat one or a few particular languages, with subsections ordered alphabetically by language. I have not actively set out to find texts written in Atlantic languages, but some are listed here.

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