VALENCE CHANGE AND OROKO VERB MORPHOLOGY (MBONGE DIALECT)

by

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This thesis meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

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ABSTRACT

This thesis explores the valence changing processes that are indicated by Mbonge verbal morphology. Mbonge (Mbɔŋgɛ) is a dialect of Oroko (Orɔkɔ), an agglutinative Bantu A language of Cameroon with very rich morphology. After a brief overview of the structure of Mbonge verbs, attention is concentrated on the verbal suffixes which affect valence. Five suffixes—passive, stative, reflexive, reciprocal, and anticausative—are used to decrease valence. Five other suffixes—causative, indirect agent causative, indirect effector causative, applicative, and instrumental—are used to increase valence, as is the syntactic combination of *bola* '*do/make*' plus another verb.

Suffixes which do not affect valence are also briefly discussed, followed by a chapter on combinations of verb suffixes. This paper also discusses the grammatical status of double objects, making the claim that Mbonge is a symmetrical object system in which both objects appear to have equal status.

CHAPTER 1

INTRODUCTION

This chapter explains the purpose of this study and gives background information on Oroko. Language classifications and previous linguistic work are also described.

1.1 Purpose of This Study

The primary purpose of this thesis is to explore the valence changing processes that are indicated by Mbonge verbal morphology. Mbonge (Mbɔŋgɛ) is one dialect of Oroko (Orɔkɔ), an agglutinative Bantu language with very rich morphology. There are five different position classes for verb suffixes and ten different suffixes which affect valence and/or grammatical relations. Five suffixes decrease valence and five increase valence. In addition, there are at least four frozen suffixes and three productive suffixes that do not affect valence.

The interaction of these suffixes plus the interplay of pronominals, tense, aspect, and mood makes for some very complex combinations. Since, to the best of my knowledge, this study is the first description of Oroko which focuses on grammar, all verb suffixes are included, even those which do not affect verb valence. To limit the scope of this paper, verb prefixes (which deal with subject agreement, tense, negation, aspect and object marking) are not examined except for a brief description in section 2.1.

Some of the characteristics of Mbonge that are featured in this paper include the treatment of double objects, the application of multiple derivational suffixes to a single

verb root, and the complex morphological and phonological processes which take place when suffixes are combined.

To investigate the above issues, I examine data collected during the three years my husband Dan and I lived in a Mbonge village (May 1998 through April 2001). This corpus consists of four data notebooks and corresponding recordings of phrases, sentences, and short texts (over 3000 sentences), as well as about 25 longer texts.

The complex Mbonge verbs, when fully inflected, are often considerably longer than their roots.

Verb	Gloss	Root	Gloss
mgbanaka	*I am dying with it*	*w*	*die*
ofokondimbisɛkɛlɛ	*you will cause it to be returning to me*	*timb*	*return*
motelamisɛbɛ	*was caused to be closed*	*telɛ*	*close*

For the portion of the verb after the root, it is not always obvious how it divides into suffixes. For example, there are numerous similar suffixal patterns like *-eli*, *-eleli*, *-ɛli*, *-ɛlɛli*, *-ɛlɛ*, *-ɛlɛlɛ*, *-isɛ*, *-isɛlɛ*, and *-isɛkɛlɛ*. With so many similar "endings", it has been a challenge to identify the different suffixes, their underlying forms, and the phonological and grammatical processes that produce so many surface forms.

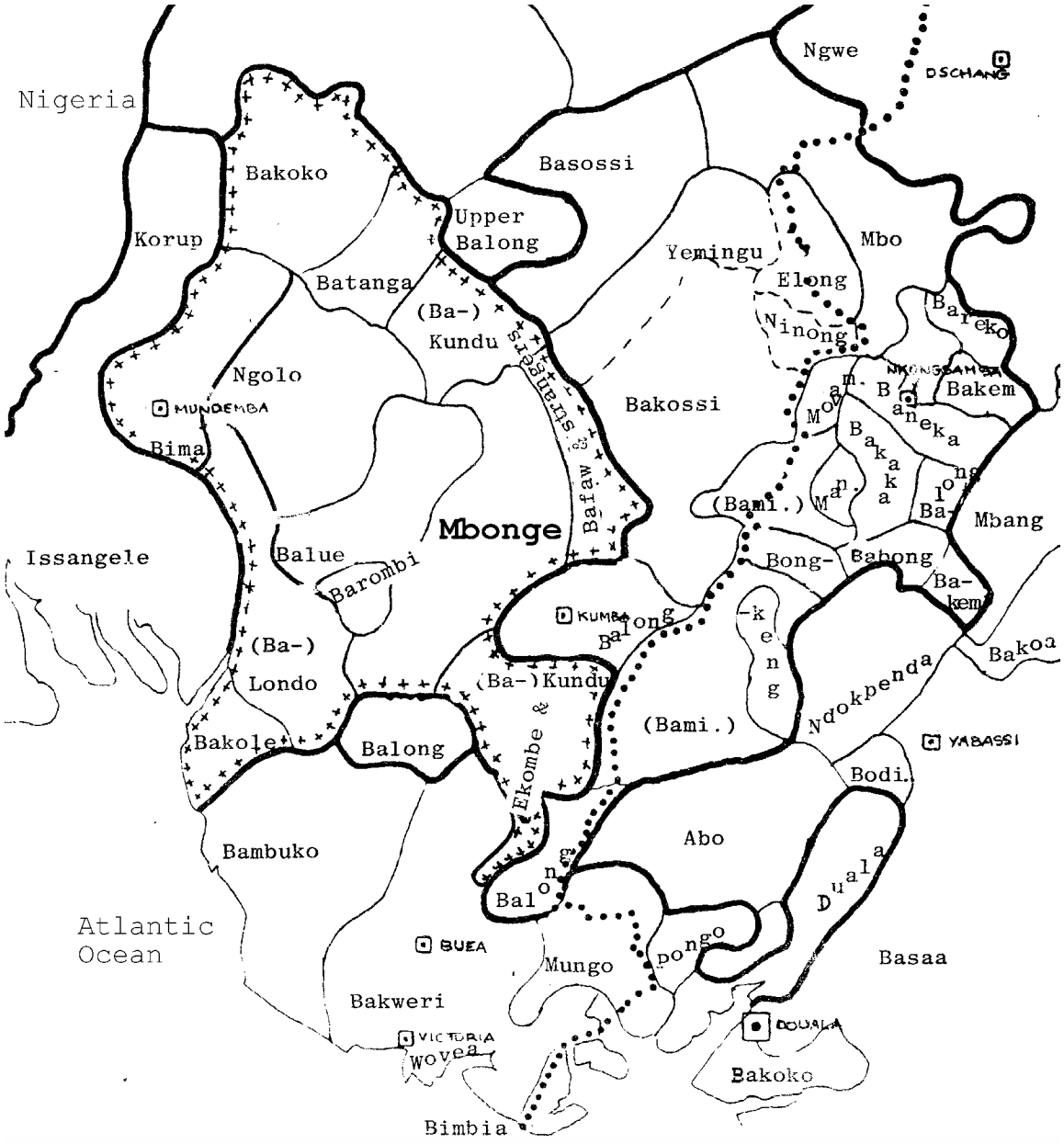
1.2 Language Information

The Oroko people are located in the Southwest province of Cameroon, Africa, covering a large portion of the Meme and Ndian divisions (see Figure 1). There are 244 Oroko villages with an estimated population of 120,000-140,000. The Oroko are made up of ten clans, each speaking their own dialect (noted in parenthesis):

- Bakoko (Lokoko)
- Bakundu (Lokundu)
- Balondo ba Diko (Londo/Bima[1])
- Balondo ba Nanga (Londo)
- Balue (Lolue)
- Batanga (Lotanga)
- Bima (Bima)
- Ekombe (Ekombe)
- Mbonge (Mbonge)
- Ngolo (Longolo)

This paper examines the verb morphology of the Mbonge dialect, one of the largest dialects. There are 44 Mbonge villages with an estimated population of 30-35,000 (Mbongue 2000:5). The Mbonge area stretches in a line running southwest to northeast from Mbonge Marumba to Konye. Located in the foothills of the Rumpi hills, the Mbonge people farm the rich productive soil found inside the thick rainforest. The climate is warm and humid with heavy rainfalls, resulting in good growing conditions for cocoa and coffee which are their main cash crops.

[1] The speech of this small clan (3 remote villages, approximately 1800 people) is reportedly more like Bima than Londo (Friesen 2001:6)



Plus signs (+) encircle the Oroko dialects.
Thick dots divide west (anglophone) and east (francophone) Cameroon.
The thick lines show Guthrie's zones and the thinner lines divide languages or dialects.
Cities are designated by square dots, with the city name in small caps.

Figure 1. Oroko Dialects (adapted from Kuperus 1985:15)

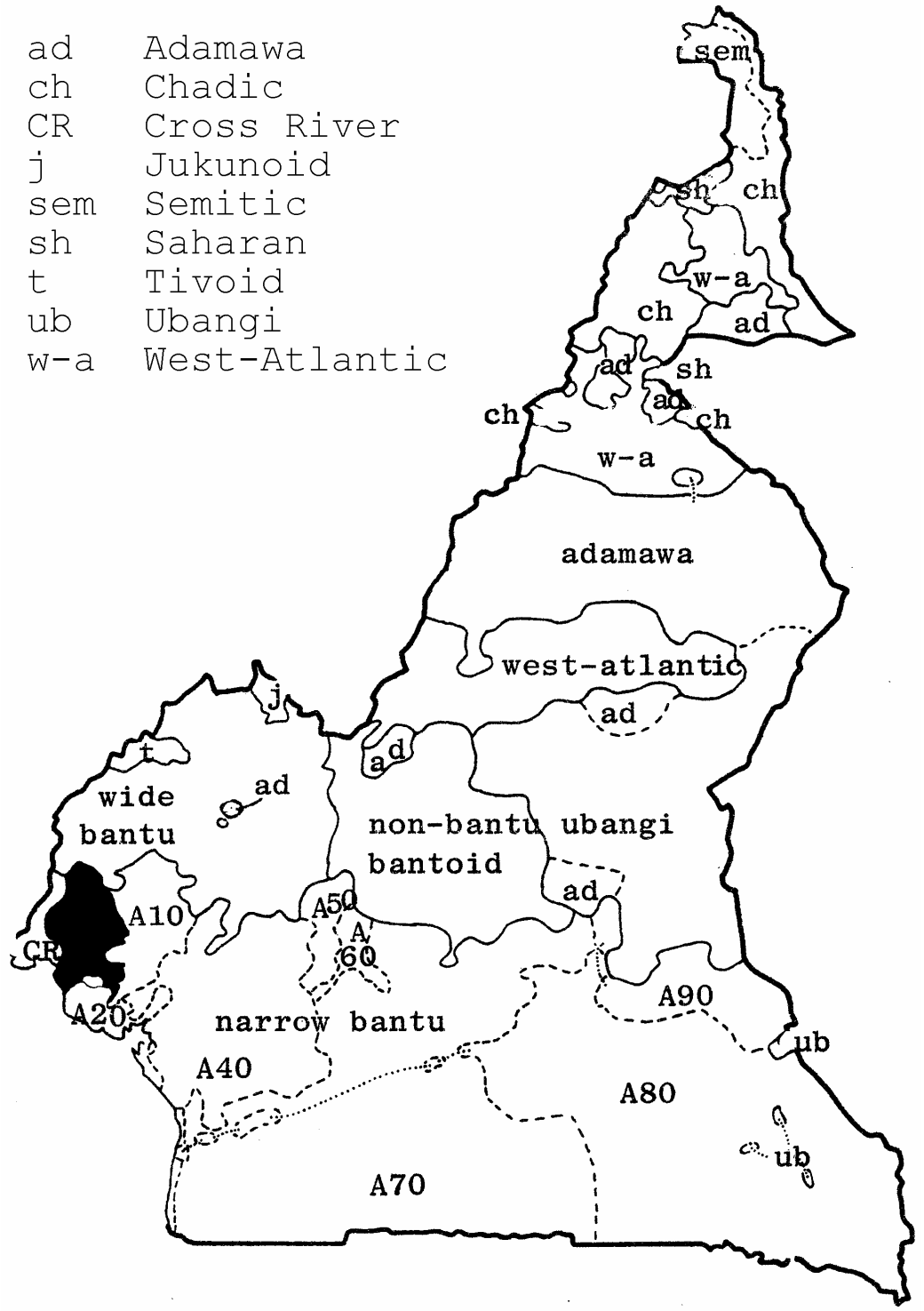
Oroko, which has been classified in several ways, is geographically the northwestern-most African language of those which are considered “narrow” or “proper” Bantu. Guthrie (1953:15, 20) classified the various Oroko dialects under A.10 Lundu-Mbo group, dividing them between A.11 and A.12. Mbonge is identified as A.11e.

Kuperus (1979) conducted a lexicostatistical study in which she concluded the existence of an Oroko group composed of two subgroups: Oroko A (including Bima, Batanga, Ngolo, and Londo) and Oroko B (including Mbonge, Ekombe, Balue, and Bakundu).

The Atlas Linguistique du Cameroun (ALCAM) lists Oroko under the branch: Niger-Kordofan, Niger-Congo, Bénoué, Bantoïde, Bantou, Equatorial, Equatorial-Nord, B, Côtier (A.10). It breaks Oroko into two sections: Oroko-west and Oroko-east following Kuperus’ sub-groups (Dieu and Renaud 1983).

The Ethnologue, following the division in ALCAM, lists two separate languages: Bakundu-Balue (Oroko-east) [BDU] and Balundu-Bima (Oroko-west) [NGO] (Grimes 2000). Recent survey work identified four language clusters but found no basis for an east-west division and thus, made a recommendation to the Ethnologue to collapse these into one entry (Mbongue 2000, Friesen 2001).

The following map (see Figure 2) shows the language families of Cameroon.



Oroko, part of A10, is blackened on the above map.

Figure 2. Language Families of Cameroon (adapted from Kuperus 1985:13)

The Oroko dialects shown in Figure 1 occupy the blackened area in Figure 2, which is nearly half of the "A10" area. The other major A.10 languages include Balong (A.13), Bafaw (A.15a), and Akoose (A.15b). Despite the geographical proximity and linguistic classification of these groups, Oroko actually seems to share more similarities with A.20 languages like Duala (Jacquot and Richardson 1956:20-23, Richardson 1955:7-28). Numerous comparisons are made to Duala throughout this paper. When comparing Oroko with other Bantu languages of Cameroon, Guthrie's classifications are indicated to show their linguistic proximity.

Previous linguistic work on Oroko includes the following:

- Word lists in Koelle's *Polyglotta Africana* (1854) and Johnston's *Comparative Study of the Bantu and Semi-Bantu Languages* (1919, 1921)

- *A Grammar of Lundu* by Father A. Bruens, an unpublished typescript of 51 pages dated 1937 (and an abbreviated, revised version published in *Kongo-Overzee* in 1948). I have been unable to review either version.

- *The Londo Word: Its Phonological and Morphological Structure* by Julianna Kuperus in 1985. This is Kuperus' doctoral dissertation and is a thorough examination of the phonology of Londo (A.11a). Her discussion of morphology focuses on its form and not its meaning. She discusses derivational suffixes and gives examples, but only briefly touches on their grammatical implications.

- *The Morphology of (Ba-)Londo Verb Tenses* by Julianna Kuperus in 1982. This article examines a portion of the same material covered in *The Londo Word*.

- Unpublished documents:
  - Roberts, James. 1991. *Grammar Sketch of Lolue (A.12)*. This informal sketch was written by Roberts after repeatedly meeting with Mr. Okole Shadrack Sakwe, a Lolue speaker, during December 1991.
  - Friesen, Dan. Forthcoming. *Oroko Orthography Standardization: Linguistic and Sociolinguistic Factors.* Master's thesis in progress, University of North Dakota.

- Friesen, Dan and Lisa Friesen. 2001. *Extendibility survey of Oroko (Orɔkɔ)*.
- Friesen, Dan and Rebecca Scott and Michael Scott. 2001. *Tone Description of Mbɔŋgɛ*.
- Friesen, Lisa. 2000. *Discourse Features Outline of Oroko*.

CHAPTER 2

STRUCTURE OF THE MBONGE VERB

This chapter describes the complex structure of Mbonge verbs including the position classes for prefixes and suffixes, as well as a brief summary of some affixes which are not otherwise covered in this paper. The basic phonological and tonal processes which affect verbs are also discussed.

2.1 Position Classes

The Mbonge verb is a complex structure of prefixes and suffixes attached to a verb root. The following tables show the parts of a Mbonge verb. Table 1 shows the prefixes and Table 2 shows the suffixes.

The abbreviations that are used for glossing examples in this paper have been indicated in square brackets[2]. The glosses for some groups of affixes have been collapsed into one gloss for the purpose of this paper (e.g. all five negative prefixes have been glossed 'Neg').

[2] See Appendix 1 for a list of other abbreviations used.

Table 1. Verbal Prefixes

Mood	Subject Agreement	Negative	Tense	Aspect 1	Object Marker
´ (high tone) [Md]	N` /ǹa- 1s [1s]	s̀a- present negative [Neg]	Ø present [Pres]	ka- durative past [Dur]	n` - 1s [1sO]
	o̍- 2s [2s]	sɪ́- recent past negative, [Neg]	´ mo̍- recent past [Pst/Pst.Nr]	(tone unknown)	o̍- 2s [2sO]
Marked on:	a̍- 3s (cl 1) [3s]	future negative,	mo̍- distant past [Pst/Pst.Far]	ma- perfect [Pft]	mo̍- 3s [3sO]
Perfective focus	ɗo̍- 1p [1p]	timeless negative	kô - near future [Fut]	(double polar tone)	ɗo̍- 1p [1pO]
Subjunctive	ɗó- 2p [2p]	sé- distant past negative, [Neg]	fo k̀o- distant future [Fut.Far]		ɗo̍- 2p [2pO]
Go-tense	bá- 3p (cl 2) [3p]	never	fo kó- greeting [Gr]		bá- 3p [3pO]
	à- cl 1 [1]	k̀a- negative imperative [Neg]	e- following tense [RT]		mo̍- cl 1 [1O]
	bá- cl 2 [2]	ké̀ - negative subjunctive [Neg]	(tone unknown)		bá- cl 2 [2O]
	mó- cl 3 [3]		k̀a- preceeding tense [RT2]		ŋ́a- cl 3 [3O]
	mé- cl 4 [4]		a- narrative [Nar]		má- cl 4 [4O]
	ɗɪ- cl 5 [5]		(tone unknown)		ɗa- cl 5 [5O]
	má- cl 6 [6]		k̀a- go do [Go]		má- cl 6 [6O]
	é- cl 7 [7]				yá- cl 7 [7O]
	bé- cl 8 [8]				bá- cl 8 [8O]
	è- cl 9 [9]				yá- cl 9 [9O]
	ɪ́- cl 10 [10]				yá- cl 10 [10O]
	ɗo̍- cl 11 [11]				ɗa- cl 11 [11O]
	bó- cl 14 [14]				wá- cl 14 [14O]
	ɪ- cl 19 [19]				yá- cl 19 [10O]
	ɗɪ- infinitive [Inf]				á- reflexive reciprocal [RO]

Table 2. Verbal Suffixes

Derivation 1	Aspect 2	Derivational 2	Final Vowel -Aspect/ Tense/Mood/Focus	2p
-am stative [Stat]	-à k imperfective [Impf]	-eɛ applicative [Appl]	-á (-ɔ, -ɛ) default final vowel [FV]	-ni [2p]
-isɛ causative [Caus]	(with present	-eɛ anticausative [AntiC]	-à (-ɔ, -ɛ) default final vowel [FV]	
-elɛ indirect causative [Caus2]	& near past)	-eɛ (lexicalized) [Lex]	for imperfective,	
-ab passive [Pass]	-á k imperfective [Impf]	-ɛ reflexive [Rfx]	distant past &	
-an accompaniment, [Inst]	(with negative,	-(isɛ)lɛ causative [Caus3]	negative	
instrumental	preceeding tense,		-̀ ɪ timeless [Tmls]	
-ɛn reciprocal [Rec]	& distant past)		-́ɪ negative timeless [Tmls]	
-ɛn intensive [Int]	-Ø perfective [Pftv]		-i negative present [Tmls]	
-ɛn relative time ‘since’ [RT]			-̀e subjunctive [Subj]	
			-́e neg subjunctive [Subj]	
			-́ɛ imperfective focus [Foc]	

The position classes in Table 1 and Table 2 correspond as follows to Meeussen's structural labels (1967:108-111):

Meeussen	This Study
Pre-Initial	Mood
Initial	Subject Agreement
Post-Initial	Negative
Formative	Tense
Limitative	Aspect 1
Infix	Object Marker
Radical	Root (appears between prefix and suffix charts)
Suffix	Derivation 1 and 2
Pre-Final	Aspect 2
Final	Final Vowel
Post-Final	2nd person plural

As is characteristic of Bantu languages, verbs in all tenses have a minimum of a root and a final vowel. The final vowel may indicate tense, aspect, mood or focus. Otherwise, a default final vowel is required to complete the CV syllable template. The simplest, shortest verbal form is the singular imperative which consists of a root and a final vowel[3] as in the following example:

(1) ak-a!
go-FV
Go!

All other moods and tenses require a subject agreement marker prefix to indicate the person or class of the subject. Infinitives take the class 5 agreement marker *di-*.

[3] There may also be a floating tone preceeding the verb root like in Londo (see Kuperus 1985:145, Friesen et al. 2001:13).

Verbs can potentially select one affix from each of the above position classes, but the affixes must appear in the order given above. Except for derivational suffixes, only one affix may appear per position class. The ordering of multiple derivational suffixes is discussed in section 6.4 (see Table 9, p. 98). The various tense and aspect markers generally act independently of derivational suffixes, but may affect their surface form in some cases. For example, a derivational suffix may have a different form for the past tense than for the present. These individual variations are discussed in the sections on the affected suffix.

The focus of this paper is on the derivational suffixes found in the position classes labeled Derivation 1 and 2. A brief description of some of the other affixes is given here.

The subject agreement prefix is obligatory except in imperatives. Mbonge has a typical Bantu concord system with thirteen distinct classes of nouns, seven which are singular and six which are plural. Distinctions for person and number are also made for humans in classes 1 and 2. The subject prefix on the verb must agree with the class (and person and number when applicable) of the subject of the clause. Demonstratives, associative markers, and relativizers must also carry a prefix which agrees with the noun they are modifying. Concord markers are indicated in the glosses in this paper by the class number followed by a dash.

The object prefix in Mbonge is not clearly an agreement marker as found in some Bantu languages. In Mbonge, an object can be expressed as a lexical noun phrase (including pronominals) following the verb or it can be referenced on the verb with the object prefix, but never both.

According to Hyman and Duranti (1982:230), only a few Bantu languages have "true" object agreement in which a noun can co-occur with a coreferential object marker clitic without right dislocation of the noun. However, many languages have restricted object agreement. Some of the restrictions that have been described include the following: obligatory agreement with human objects (Givón 1979), obligatory agreement with definite animate objects (Hualde 1989), agreement with definite, identified objects whether animate or inanimate (Port 1991), and obligatory object agreement when the noun phrase object is an independent pronoun (Bresnan and Moshi 1990).

Mbonge object markers are not used in any of these circumstances. Instead, the object prefix in Mbonge is employed in the same way as Meeussen (1967:109) described the "infix" in Proto-Bantu:

"The infix is used as a substitute of a noun which, in fuller but otherwise comparable constructions, occurs after the verb (object relationship); the replaced noun is not present in the context in the case of personal infixes."

Mbonge's use of an object prefix at all is somewhat surprising, because many North-West Bantu languages do not have an object marker in the verb form (Hyman and Duranti 1982:229, Kuperus 1985:145). Akoose (A.15b, Hedinger 1985:3) and even Londo (A.11a, Kuperus 1985:145) and Lokundu (A.11c, Hyman and Duranti 1982:237) do not have object prefixes.

The object prefix in Mbonge can refer to various types of objects including direct objects, benefactives[4] and recipients, but only one object prefix can appear on a verb at a time. The status of multiple objects and their control over the object prefix are discussed further in section 4.2 and Chapter 7.

Imperfective aspect is marked by adding the inflectional suffix *-ak* to a verb of any tense. Perfective aspect is the unmarked default. The suffix *-ak* occurs between the two causative suffixes *-isɛ* and *-elɛ* when they combine to form *-isɛlɛ*. It also separates the lexicalized suffix *-eɛ* from the root. This ordering is represented in Table 2 by providing two derivational suffix position classes with the imperfective aspect between them. The occurence of the imperfective suffix between two derivational suffixes seems to be unique to Oroko. See section 6.2 for examples and further explanation.

The "final vowel" in Bantu languages performs a variety of functions. Every verb requires a final vowel, which may indicate mood, tense, aspect, or focus. In Mbonge, the final vowel *-ɛ̀* is used for subjunctive and also for far past in subordinate clauses. Final vowel *-ɛ́* is used for negative subjunctives and negative imperatives. Final vowel *-ɛ* is used to indicate focus in imperfective clauses. (In perfective clauses, a floating high tone prefix marks focus.)

The final vowel *-i* indicates "timeless". It becomes *-ì* when co-occurring with the present negative prefix *sà-*, *-í* when co-occurring with the negative prefix *sí-*, and *-ɨ́ ɨ̀* in all other "timeless" situations. The label "timeless" has been tentatively selected for this

---

[4] Unless otherwise noted, thematic roles will be used as described in Van Valin and LaPolla (1997:85).

suffix, because it is not clear whether it is a tense or an aspect, and the suffix gives no indication of when an action has occurred. Instead, it emphasizes the current state of a situation, regardless of when or how the action took place. In Roberts' (1991:10) cursory examination of Balue, another Oroko dialect, he called this suffix "simple present". Kuperus (1985:149) has called this suffix "non-past perfect" in Londo, although she acknowledges that "this label can be demonstrated to cover a wide variety of notions". Ittmann (1978:181) also uses the label "perfect" for this same suffix in Duala.

While the suffix *-i* in Mbonge may have some characteristics of a "perfect," this label is better used for the prefix *ma-*, which fits the classical description of a "perfect," emphasizing completed action with ongoing results. Here are some examples which illustrate the function of the final vowel *-i* (and its variants *-li* and *-eli* which are discussed in section 6.1):

(2) toko e-bɛ-li o eluŋga.
7-spoon 7-be-Tmls Prep 7-basket
The spoon is in the basket.

(3) n-diŋg-i mbolo.
1s-like-Tmls 10-banana
I like bananas.

(4) a-fɔ-li.
3s-come-Tmls
He has come. (He is here.)

Unlike perfect aspect (*ma-*), there is not necessarily completion of an action in order to get present results. Contrast the following two examples:

(5) moto a-ma-kɔl-ɔ.
3s-man 3s-Pft-grow-FV
The man has grown (action of growth has given current results).

(6) moto wa a-kɔl-i
3s-man Rel 3s-grow-Tmls
the man who is big (current status, doesn't matter how it happened)

Because time is unimportant when the timeless suffix is used, no other tense markers co-occur with it even if the event happened in the past. In addition, the perfect aspect prefix *ma-* never co-occurs with *-i*. The imperfect suffix *-ak* generally does not co-occur with the timeless suffix as it indicates a process rather than the state. However, there are a few isolated examples of *-ak* and *-i* together.

The timeless suffix is also employed for the second (and following) of two consecutive verbs with the same subject, as in the following example:

(7) ak-ak-a ma o-fɔ-li fɛ.
go-Impf-FV Conj 2s-come-Tmls again
Go, then come again.

Finally, if no other final vowel has been added to a verb, the default final vowel *-á* is used. For imperfective, distant past and negative verbs, the default final vowel has a low tone (*-à*).

The second person plural marker *-ni* follows the final vowel and obligatorily co-occurs with the second person agreement prefix *lo-*. This corresponds with Meeussen's (1967:111) identification of *-ni* as the Proto-Bantu plural of the imperative. Schadeberg (1980:507) says that Ewondo, Noho, and Benga also use *-n(i)* for plural.

2.2 Phonological Processes

There are two main environments in which verbs undergo significant phonological change: 1) When two vowels from separate morphemes come together within a verb and 2) When a verb contains vowels of differing ATR features.

A number of phonological processes are potentially triggered when two vowels from separate morphemes come together, including vowel deletion and change from vowel to glide. Here are the basic rules:

> *Identical Vowel Deletion:* When two identical vowels of the same tone are adjacent at a morpheme boundary, one is deleted.
>
> *Affix Vowel Deletion:* When two different vowels are adjacent at a morpheme boundary, the vowel farthest from the root is deleted.
>
> *Vowel to Glide:* When /*i*/ or /*e*/ precedes another vowel at a prefix boundary, it becomes /*y*/. When /*u*/ or /*o*/ precedes another vowel at a prefix boundary, it becomes /*w*/.
>
> The *Vowel to Glide* rule needs to be ordered before the vowel deletion rules, otherwise the vowels would disappear before they can become a glide.

Since all Mbonge suffixes start with vowels, the significance of the above phonological processes is most noticeable in the following environments: 1) suffixes added to verb stems which end in a vowel, 2) suffixes following other suffixes which end in a vowel and 3) final vowels added to stems or suffixes which end in a vowel. When a final vowel is deleted under the *Affix Vowel Deletion* rule, the underlying final vowel must be determined by context.

The other major phonological process that verbs undergo is vowel harmonization in words containing the [-ATR] vowels /*ɛ*/ and /*ɔ*/. When /*a*/ follows /*ɛ*/ or /*ɔ*/, it becomes /*ɛ*/ or /*ɔ*/, respectively. In some cases, other vowels such as /*e*/ are also affected. Those situations are dealt with in the sections on the suffixes affected.

2.3 Verb Tones

Because of their complexity, verb tones are not examined in this paper. Derivational suffixes, which are the focus of this paper, appear to be toneless, and are conditioned by their environment. The rules of tone assignment are still under investigation and further work is needed. The following observations capture the most important tone processes in Mbonge:

1) There are two underlying tones: High and Low. Contour tones are only found where two vowels are found next to each other.
2) Nasals are not syllabic and do not carry surface tone.
3) Both automatic downstep and nonautomatic downstep occur regularly.
4) The Obligatory Contour Principle (OCP) applies whenever possible.
5) Tone spreads to a following toneless tone-bearing unit (TBU).
6) High tone spreads one TBU, delinking a following Low unless blocked by a High immediately following the Low.
7) If no other processes have assigned a tone to a toneless TBU, it receives a default Low tone.
8) Floating High tones will associate (dock) towards the root, onto the next TBU. (Friesen et al. 2001:2-3)

Because of these complexities, tone has not been marked in this document except in lists of verb roots and derivations (only high tones have been indicated). However, tone has been taken into account when deciding whether or not certain derived verbs had identifiable roots.

CHAPTER 3

VALENCE DECREASING DERIVATIONAL SUFFIXES

This chapter discusses the five Mbonge valence-decreasing derivations that I have identified. These include passive, stative, reflexive, reciprocal and anticausative suffixes. Each is discussed in turn, taking note of the treatment of agent, the role of the subject, the function of the derivation (when not completely lexicalized), and any of its characteristics unique to Mbonge.

3.1 Passive (*-ab*)

Mbonge (Bantu A.11e) has a very productive passive construction which can occur with any tense or aspect. Several geographically and linguistically close Bantu languages such as Duala (Bantu A.24, Ittmann 1978), Nugunu (Bantu A.62, Orwig 1989), Basaa (Bantu A.43, Bitjaa Kody 1990), and Tunen (Bantu A.60, Dugast 1971) also have passive constructions. However, Hedinger reports that Akoose, the language that is closest both geographically and in Guthrie's linguistic classification, does not have a passive suffix (Bantu A.15b, Hedinger 1992:248).

The passive is formed in Mbonge by adding the suffix *-ab* to the verb root. In the most basic and common passive, the object of a transitive clause is the subject of the passive and the subject of the transitive clause is not a complement of the passive. That is, the subject of the passive clause typically has the thematic role of patient and the agent is not mentioned.

Active Clause:

(8) bato ba-mo-sos-a beboki.
2-people 2-Pst-wash-FV 6-dish
People washed the dishes.

Corresponding Passive Clause:

(9) beboki be-mo-sos-ab-a.
6-dish 6-Pst-wash-Pass-FV
The dishes were washed.

However, it is also possible for the agent to be named in an instrumental prepositional phrase.

(10) bɔŋgɔ bo-bok-ab-ak-a na bana.
14-fear 14-feel-Pass-Impf-FV with/by 2-child
Fear is being felt by the children.

Kuperus (1985:201) says that the agent cannot be mentioned in Londo and there seems to be some language shift occurring in Mbonge with regard to the above construction. Older Mbonge speakers are more likely to name the agent in an instrumental prepositional phrase where younger speakers would not. The following passive clauses were recognized as grammatically correct by older Mbonge speakers, but they acknowledged that the construction is no longer common and is not used by youth.

(11) muna mo-mo-ma-dib-ab-a na Dan.
3-door 3-Pst-Pft-close-Pass-FV with/by Dan.
The door had already been closed by Dan.

(12) Santana a-m-ob-ab-a na Rachel.
Santana 3s-Pst-hit-Pass-FV with/by Rachel.
Santana was hit by Rachel.

In other cases, even the older Mbonge speakers claimed that the agent could not be stated as in the following example:

(13) *mgbi i-m-ib-ab-a na ŋana ndɛmbe.
10-corn 10-Pst-steal-Pass-FV with/by 1-child small
The corn was stolen by a small child (agent not allowed here).

It is unclear what restriction makes (13) ungrammatical. Further study is needed in the areas of topicalization, definiteness, and animacy.

The addition of the passive extension *-ab* reduces the valence of the verb by one. However, this does not mean that all passive clauses are intransitive. Once the object moves to subject, a new object can be incorporated into the clause as long as it is marked appropriately on the verb. For example, if the agent from the active clause has been retained as an oblique, it can be promoted to direct object by the addition of the instrumental/accompaniment suffix *-an* (see section 4.3)[5]. Compare the following sentence to (12):

(14) Santana a-m-ob-ab-an-a Rachel na ŋele.
Santana 3s-Pst-hit-Pass-Inst-FV Rachel with/by stick
Santana was hit by Rachel with a stick.

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[5] Examples (14), (17), and (18) look like "tertiary passives." Bickford (1987:72) claims that "there are no clear attestations of tertiary passives in any language" and, indeed, I do not have adequate data to prove that these examples are tertiary passives. I do claim in Chapter 7, however, that the applicative suffix promotes benefactives and recipients to direct object, and the instrumental suffix promotes instrumental and accompaniment noun phrases to direct object, so these sentences are problematic and need further investigation. Example (14) also seems to violate the RG Chômeur Advancement Ban (Perlmutter 1983:117), but I do not have adequate data to verify other structures like this one.

A passive clause may also have an object if the applicative suffix (see section 4.2) is used. Sentences (15) and (16) are both active sentences. In (16), the applicative suffix *-eɛ* has been added to the verb to indicate the addition of an object to the clause.

(15) Zachs a-mo-til-a mgbɛli.
Zachs 3s-Pst-write-FV letter
Zachs wrote a letter.

(16) Zachs a-mo-til-eɛ isɛ mgbɛli.
Zachs 3s-Pst-write-Appl-(FV) us letter
Zachs wrote us a letter

In (17) below, the passive suffix *-ab* has been added to the verb and the object closest to the verb has become the subject of passive. The second object has been retained as the object of the passive sentence but the verb must still be marked with the applicative suffix (*-ɛl* is an alternate form of the suffix *-eɛ*, see section 4.2).

(17) lo-mo-til-ab-ɛl-ɛ mgbɛli.
2p-Pst-write-Pass-Appl-FV 9-letter
We were written a letter.

It is also possible to passivize the second object as in (18). Again, the applicative suffix is kept.

(18) mgbɛli e-mo-lo-til-ab-ɛl-ɛ.
9-letter 9-Pst-2pO-write-Pass-Appl-FV
The letter was written to us.

The *-an* and *-eɛ* suffixes and other valence increasing derivations are discussed in Chapter 4.

The fact that an agent of a passive clause can be deleted or demoted to an instrumental oblique corresponds with Giv́on's hierarchy. He proposes a case-hierarchy of SUBJ>DO>OBLIQUE for the extent to which the agent of a passive clause can be

demoted (1984:574). After a clause is passivized, it can undergo additional derivations which sometimes result in a transitive clause.

While agents are not frequently expressed in passive constructions, Mbonge does allow for a great deal of flexibility in what can be promoted to the subject of a passive clause. Patients are most commonly promoted from object to subject, but it is also possible to promote recipients (as in (17) above). For verbs that already take two objects, either object can be passivized as in the following examples:

(19) Dan a-ma-nyɛŋg-ɛ Manfred mgbɛli.
Dan 3s-Pft-give-FV Manfred 9-book
Dan has given Manfred a book.

(20) Manfred a-ma-nyɛŋg-ɛb-ɛ mgbɛli.
Manfred 3s-Pft-give-Pass-FV 9-book
Manfred was given a book.

(21) mgbɛli e-ma-nyɛŋg-ɛb-ɛ (Manfred).
9-book 9-Pft-give-Pass-FV (Manfred)
A book has been given (to Manfred).

(22) ba-bok-ak-a mgba bɔŋgɔ.
3p-feel-Impf-FV 9-dog 14-fear
They are fearing the dog. (lit. They are feeling the dog fear.)

(23) mgba e-bok-ab-ak-a bɔŋgɔ.
9-dog 9-feel-Pass-Impf-FV 14-fear
The dog is being feared (lit. The dog is being felt fear.)

(24) bɔŋgɔ bo-bok-ab-ak-a.
14-fear 14-feel-Pass-Impf-FV
Fear is being felt.

(25) *? bɔŋgɔ bo-bok-ab-ak-a mgba.
14-fear 14-feel-Pass-Impf-FV 9-dog
Fear of the dog is being felt.

In example (21) above, the recipient may be included in the clause but is more commonly left out. Sentence (25) is only marginally acceptable to Mbonge speakers, if at all, who say this ordering is seldom used and does not sound right. Here is another set of examples which shows that both objects of a verb can be passivized:

(26) Dan a-m-ɔk-isɛ ŋana mosoa.
Dan 3s-Pst-rub-Caus-(FV) 1-child 3-oil
Dan rubbed oil on the child.

(27) ŋana a-m-ɔk-is-ɛb-ɛ mosoa.
1-child 3s-Pst-rub-Caus-Pass-FV 3-oil
The child was rubbed with oil.

(28) mosoa mo-m-ɔk-is-ɛb-ɛ ŋana.
3-oil 3-Pst-rub-Caus-Pass-FV 1-child
Oil was rubbed on the child.

It seems that even oblique noun phrases can be passivized in some cases. In the active sentence below, "house" is in a locative prepositional phrase. In the passive example which follows it, the subject "they" (noted only by the verb agreement) has been deleted, "paint" remains the object, and "house" becomes the new subject.

(29) ba-mo-l-ɔk-isɛ lɔki o ndabo.
3p-Pst-2pO-apply-Caus-(FV) 5-paint Prep 9-house
They painted (lit. caused paint to be applied to) the house for us.

(30) n-dabo e-mɔ-ɔk-is-ɛb-ɛ lɔki.
9-house 9-Pst-apply-Caus-Pass-FV 5-paint
The house was painted.

One characteristic of Mbonge passives is that the existence of an intentional agent is assumed even if it is not overtly stated in the clause. This is consistent with the following observation by Comrie (1985:326): "Passive and anticausative differ in that, even where the former has no agentive phrase, the existence of some person or thing

bringing about the situation is implied, whereas the anticausative is consistent with the situation coming about spontaneously." In Mbonge, when a passive verb is used as in (31) below, it is assumed that someone has done the stated action. In order to express an accidental or uncaused event (such as being hit by a stone flying out from under a vehicle tire), an active sentence must be used as in (32).

(31) Santana a-m-ob-ab-an-a bolalɛ.
Santana 3s-Pst-hit-Pass-Inst-FV 14-stone
Santana was hit by a stone (that someone threw at her).

(32) bo-lalɛ bo-m-ob-a Santana.
14-stone 14-Pst-hit-FV Santana
A stone hit Santana (maybe by accident).

Finally, an unusual characteristic of the Mbonge passive is that it can co-occur with the stative suffix, as discussed in the following section.

3.2 Stative (*-am*)

The suffix *-am* can be added to certain verbs to indicate the state or condition of the subject. Here are some examples of stative clauses which illustrate that the state or condition of the subject is central to the meaning of the sentence:

(33) ekpokolo e-fot-am-i.
7-table 7-wide-Stat-Tmls
The table is wide.

(34) eluŋga e-fu-am-i fuwe.
7-basket 7-light-Stat-Tmls very-light
The basket is light.

(35) Rachel a-lu mbɔ ya i-fot-am-i.
Rachel 3s-has(-Tmls) 10-feet 10-Rel 10-wide-Stat-Tmls
Rachel has wide feet.

(36) ŋga a-toko, a-ko-fɔ oni
if 3s-wake.up(-Tmls) 3s-Fut-come(-Tmls) Dem-Loc,
If she wakes up, she will come here

lo muna mo-tel-<u>am</u>-i.
because 3-door 3-open-Stat-Tmls
because the door is open.

When added to a transitive verb, the object of the transitive becomes the subject of the stative form and the original subject is omitted. The stative is similar to the passive, in that the subject is typically a patient, not an agent. However, the passive describes the action being done to the subject while the stative indicates the state of the subject. In addition, while the passive may retain the agent in an oblique clause, the stative never does. Compare the following sentences:

Active Sentence:

(37) Dan a-mo-dib-a muna.
Dan 3s-Pst-close-FV 3-door
Dan closed the door.

Passive Sentence:

(38) muna mo-mo-ma-dib-<u>ab</u>-a na Dan.
3-door 3-Pst-Pft-close-Pass-FV by Dan
The door had been closed by Dan.

Stative Sentence:

(39) muna mo-mo-ma-dib-<u>am</u>-a.
3-door 3-Pst-Pft-close-Stat-FV
The door was already closed (e.g. before I came).

Mchombo (1993:7) writes extensively about the stative. He describes the Bantu stative construction as normally being derived through the suffixation of *-ik* or *-ek* on a transitive verb, "with the result that the object of the transitive sentence becomes the

subject of the stative construction. The subject of the transitive sentence is simply not expressed at all, and, unlike in the passive construction which closely resembles the stative, it is not expressible." He also says the following (p. 8):

> The stative appears to have, as its core meaning, the attribution of certain qualities or state, inherent or acquired, to the subject. It also has the meaning of the subject's entering a particular state or condition but such that there is no implication of agency responsible for such a state or condition.[6]

The above description fits Mbonge stative constructions like (36) and (39), in which the suffix *-am* has been applied to transitive verbs. However, in (33)-(35) *-am* is added to verbs which already seem to be intransitive. These stative verbs do attribute inherent qualities to the subject, as suggested by Mchombo, but the subject is not "entering" that state or condition.

Another difference between Mbonge and Mchombo's description is that he identifies the stative suffix as *-ik* or *-ek*. Schadeberg (1980:503), on the other hand, identifies *-am* as the stative suffix for Common Bantu, which is the form it has in Mbonge.

Kimenyi (1978:37) adds another aspect in his examination of stativization in Kinyarwanda. He defines it as "a process that gives a passive reading to a sentence by putting a definite or a generic object in the subject position". In Mbonge the stative subject is also definite or generic, but there is no specific grammatical marking to distinguish between definite and indefinite nouns. However, from the context it can almost always be determined whether a noun phrase is definite or indefinite.

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[6] Dugast (1971:236) and Givoàn (1984:618) make similar observations.

The Mbonge stative construction has two additional characteristics worth noting: the stative suffix can only be applied to a small subset of verbs and seems to be highly lexicalized and minimally productive, and the stative can co-occur with more derivational suffixes than allowed by other Bantu languages. I consider these points in turn.

First of all, while the stative suffix seems to be fairly productive in Tunen (Dugast 1971:236-237), in Mbonge it can only be applied to a few words. Listed below are the only unsuffixed verb roots for which a stative derivation has been attested so far. (The last root in this list is not transitive and it is unclear what difference *-am* makes.)

Root		Derived Verb	
kak	*promise to do something*	*kak-am*	*be boastful, be arrogant*
lib	*close*	*lib-am*	*be closed*
m	*stop*	*m-am*	*be finished*
ind	*be black*	*ind-am*	*be black*

The following stative verbs have identifiable roots which have incorporated the frozen suffix *-ɛ* (see section 5.3). Since the *-ɛ* is not maintained in the derived form, it is likely that both the stative derivation and the current root were originally derived from another form which has been lost. (Again, the last root in this list is not transitive and it is unclear what difference *-am* makes.)

Root		Derived Verb	
kolɛ	*ignite, light with match*	*kol-am*	*be on, be burning*
telɛ	*open a container, pot, door*	*tel-am*	*be open*
fuɛ	*be light in weight*	*fu-am*	*be light in weight*

The majority of stative verbs seem to be in the process of becoming completely lexicalized. Many no longer have an identifiable bare root, with the *-am* suffix being

integrated into the root and the verb's simplest meaning. The following verbs have a stative form but the bare root does not exist:

Root	Derived Verb	
---	*bɛ́ nj-ɛ́ m*	*be concave or dish shaped*
---	*fa nd-á m*	*be smart*
---	*fɛ ny-ɛ́ m*	*be still uncooked, not done yet*
---	*fɛl-am*	*be K-shaped, knock-kneed*
---	*fot-am*	*be wide*
---	*kaf-am*	*be busy, occupied*
---	*kas-am*	*be elevated*
---	*kó b-á m*	*be narrow*
---	*kɔ́ t-ɔ́ m*	*be bent, crooked or curved*
---	*kɔw-ɔm*	*be curved*
---	*kú n-á m*	*be bent with age, stooped*
---	*lif-am*	*be thick*
---	*lɔt-ɔm*	*be very powerful*
---	*nyɛ́f-á m*	*be stiff*
---	*nyó ŋg-á m*	*be in a crouched position, almost sit*
---	*sá l-á m*	*be transparent, loosely packed*
---	*sú nj-á m*	*be bushy (a tail)*
---	*sut-am*	*be hazy, foggy, smoky*
---	*wɔl-ɔm*	*be slow*

Presumably, the above verbs had unsuffixed roots at one time, which have since been lost as distinct stems in the language. Some of these roots are still apparent in other derived forms; for example, the nouns *e-fota* '*width*', *ma-kafakafa* '*busyness*', and *ma-nyó ŋgá* '*crouching position*' are good examples of a nominalization from original roots *fot, kaf,* and *nyó ŋg*.

The lexicalization of the stative suffix is not entirely surprising since many of the Bantu languages in Cameroon either do not have a stative form or, if they do, it is no longer very productive. Kuperus (1985:194) calls this suffix "positional" in Londo (A.11a) and says the following:

> All the present examples of this suffix are either ones for which no underived counterpart could be given, or where the *-àm-* derivation was lexicalized, that is, the meaning of the derived verb was not predictable, though there is some element of intensivization associated with the suffix.

While Akoose (A.15b) does not have a stative form (Hedinger 1992: 248), Schadeberg (1980:504) notes that Duala (Bantu A.24) and Benga (A.34) do have attested stative forms, *-àmɛ* and *-amaka* respectively. Nugunu (A.64), Nɔmaantɛ (A.40) and Basaa (A.43) also have identifiable stative forms. However, Nugunu's stative suffix *-ɛm/-im* is non-productive. The verbs with this suffix have no corresponding bare root, but they are mostly verbs of state or position (Orwig 1989:295, 301).

Secondly, the lexicalization of *-am* in Mbonge may also account for its ability to co-occur with other derivational suffixes. According to Mchombo (1993:9), "the stative does not readily co-occur" with most suffixes. He says (p. 25), " ... in its interaction with other morpholexical operations, the stative has been seen to be rather finicky, applying only to basic transitive verbs or to causatives".

In Mbonge, the stative suffix is always closer to the root than other derivational suffixes, so it is never applied to verbs that are already causative. However, a stative verb can be made causative or passive. In the following series of examples, (40) is transitive, (41) is the stative construction, (42) combines stative and causative, and (43) combines stative, causative and passive.

(40) a-mo-telɛ muna.
3s-Pst-open-(FV) 3-door
He opened the door.

(41) muna mo-tel-am-i.
3-door 3-open-Stat-Tmls
The door is open.

(42) a-mo-tel-am-isɛ muna.
3s-Pst-open-Stat-Caus-(FV) 3-door
He caused the door to be open.

(43) muna mo-tel-am-isɛ-b-ɛ.
3-door 3-open-Stat-Caus-Pass-FV
The door has been caused to be open.

In example (41), the stative suffix *-am* has been added to a transitive root, the patient appears as subject, and the verb is intransitive. In (42), the addition of the causative suffix *-isɛ* makes the sentence transitive again and the patient returns to the position of object despite the presence of the stative suffix. The semantic value of a state (being open), however, is retained. In this construction, the subject is an agent, unlike the typical stative construction where the naming of an agent is not even allowed. Finally, in (43) the passive suffix *-ab* is added and the patient once again becomes the subject, the verb is intransitive, and no agent is named. However, unlike the stative example (41), it is clear that an intentional agent has caused the situation even though he is not named.

Finally, there is a small subset of words which have *-am-eɛ* added to the root and whose resulting meaning cannot be predicted from the individual morphemes. These words may have originally been derivations using the stative suffix *-am* plus the applicative suffix *-eɛ*, but the connection is no longer clear:

Root		Derived Verb	
ɛ́ kɛ̀	*catch water*	*ɛ́ kɛ̀ -m-ɛ́ɛ*	*lean against*
fenj	*be early, before another*	*fenj-am-eɛ*	*tiptoe*
imb	*press down*	*imb-am-eɛ*	*press down w/force, emphasize*
nyɔ́ ŋg	*disappear*	*nyɔŋg-ɔm-eɛ*	*be shiny*
sɔl	*go to farm*	*sɔl-ɔm-eɛ*	*slink away (to a location)*
sɔnj	*dissolve, reduce*	*sɔnj-ɔm-eɛ*	*wander far from*
sɔsɔ	*talk, say, speak*	*sɔs-ɔm-eɛ*	*apologize to*
--	*(no root remains)*	*lɛ́ ŋg-ɛ́ m-eɛ*	*bend over*
--	*(no root remains)*	*lɔt-ɔm-ɔ*	*be very powerful*
		lɔt-ɔm-eɛ	*lift something with others*

Here are some sentences using these verb forms:

(44) etanda ene e-ma-sɔl-ɔmeɛ ose bo-lale.
7-insect Dem 7-Pft-go.to.farm-?-(FV) under 14-rock
That insect has slinked under the rock.

(45) Dan a-mo-sɔsɔ-(a)meɛ Mosoŋgo.
Dan 3s-Pst-talk-?-(FV) Mosongo
Dan apologized to Mosongo.

(46) ŋga bo-lale bo-lit-ak-a, isɛ ba-susu ba o ndabo
if 14-rock 14-heavy-Impf-FV, 1pPro 3p-all 3p-Rel Prep 9-house
If the stone is very heavy, all of us who are in the house

wani lo-ko-lɔt-ɔmeɛ bolale.
here 1p-Fut-be.powerful-?-(FV) 14-rock.
here will lift the stone together.

In (44) *-eɛ* could indicate the addition of a locative, but the reason for *-am* is unclear and seems to give the root an entirely different meaning. For the verb "apologize" in (45), *-eɛ* could easily be the applicative suffix since the idea of doing something "to" or "for the benefit of someone else" is present in the sentence and the recipient of the action does appear as the direct object. However, the *-am* suffix is definitely not a typical usage of the stative suffix and seems instead to completely change the lexical meaning of the root *sɔsɔ 'talk'*. In (46), there is clearly a semantic connection between "*be*

powerful" and "*lift*", but there is no obvious need for the applicative suffix *-eɛ*. In all the cases, the *-am* seems to have become completely lexicalized as it does not act like a stative suffix and should just be considered as part of the root now.

In summary, the Mbonge stative suffix *-am* is fairly typical of Bantu statives but it seems to be largely lexicalized and restricted to a small set of words. As a result, it can co-occur with more verbal derivations than one would expect.

3.3 Reflexive (*-ɛ* with *a-*)

Reflexive verbs require both a prefix and a suffix. The prefix *á-* is added to the verb in the same position as the object prefix and *-ɛ* is added as a suffix. The addition of these two affixes forms the reflexive and reduces the valence of the verb by one. Compare the following sentences:

(47) a-ma-lol-a munde.
3s-Pft-insult-FV friend
He has insulted his friend.

(48) a-ma-a-lol-ɛ.
3s-Pft-RO-insult-Rfx-(FV)
He has insulted himself.

(49) a-mo-sos-a e-boki.
3s-Pst-wash-FV 7-dish
He washed a dish.

(50) a-ma-a-sos-ɛ.
a-mo-a-sos-ɛ
3s-Pst-RO-wash-Rfx-(FV)
He washed himself.

(51) dikake dine d-a-tiŋgɛn-ɛ.
5-promise 5-Dem 5-RO-be.sufficient-Rfx-(FV)
That promised time came (lit. That promise satisfied itself).

This combination of a prefix and a suffix used simultaneously to form the reflexive is unusual. Givón (1984:632) states, "In Bantu languages, reflexives are marked by an invariant object pronoun, while reciprocals are marked by a derivational verb suffix." In Mbonge, both the reflexive and reciprocal (see section 3.4) verb forms are marked by an invariant object prefix. The reciprocal is marked by a derivational verb suffix (*-ɛn*) as would be expected, but the reflexive also requires a suffix (*-ɛ*).

Orwig (1989:290) writes that the reflexive extension in Bantu languages is often a suffix, but that Nugunu (A.62) and Nomaante (A.40) reflexives are prefixes. Tunen combines the passive prefix with the applicative suffix to form a reflexive sense and is the only other Cameroonian Bantu language (that I could verify) which uses both a suffix and a prefix. Dugast (1971:251, my translation) calls this form "middle voice," and she describes it as follows: "The action is accomplished for the benefit or detriment of the actor himself." It seems that many of the Bantu languages in Cameroon have a morphological reciprocal form but not a morphological reflexive.

Reflexive morphology is not the only way to indicate coreference of subject and direct object. In Mbonge, it is also possible for an unmarked transitive verb to express reflexive action by referring back to the subject with a pronoun plus the word *mɛnɛ* '*self*'. This second strategy would fit with what Whaley (1997:188) says about analytic (syntactic) reflexives: "languages that employ an analytic approach to reflexivization do not usually appear to decrease verb valence in reflexive constructions". Compare the following three sentences to see how Mbonge employs both syntactic and morphological strategies. Example (52) is a non-reflexive transitive sentence and (53) is a reflexive

transitive sentence which employs a syntactic approach. In (54), a derivational approach is employed with the reflexive affixes *a-* and *-ɛ* marked on the verb and the valence decreased by one.

(52) ŋana a-mo-den-a mekɛlɛ.
1-child 3s-Pst-cut-FV 4-plantain
The child cut plantains.

(53) ŋana a-mo-den-a mɔ mɛnɛ.
1-child 3s-Pst-cut-FV 3sPro self
The child cut himself.

(54) ŋana a-ma-a̲-den-ɛ̲.
ŋana a-mo-a̲-den-ɛ̲
1-child 3s-Pst-RO-cut-Rfx-(FV)
The child cut himself.

The discourse or pragmatic differences between these two reflexive constructions is not known.

In Mbonge, reflexive clauses can also optionally include an instrument as direct object. Compare the following sentence to example (54).

(55) ŋana a-ma-a̲-den-ɛ̲ ibɔ.
ŋana a-mo-a̲-den-ɛ̲ ibɔ.
1-child 3s-Pst-RO-cut-Rfx-(FV) 19-machete.
The child cut himself with a machete.

This is not a common construction, but it is considered grammatically correct. It is unusual because the instrument appears in the direct object position without the usual instrumental suffix *-an* (see section 4.3) or the preposition *na* '*with*'. Thus, the resulting sentence appears to be transitive, so there is no decrease in valence.

For verbs such as *nyɛŋgɛ* "*give*" which normally take two objects, the addition of the reflexive affixes reduces the valence by one as illustrated by the following sentence:

(56) a-si-m-a-nyɛŋg-ɛ e-lubɛ.
a-si-mo-a-nyɛŋg-ɛ e-lubɛ
3s-Neg-Pst-RO-give-Rfx-(FV) 7-respect
He did not respect himself. (lit. He did not give himself respect.)

Like many other Mbonge derivational affixes, there are some examples of the reflexive which seem to be fairly lexicalized while others are more productive. In the list of verbs below, some are obvious reflexive examples while others have more specific or idiosyncratic meanings.

Root		Derived Verb	
á ŋgɛ́	*hang, tie, stake*	*á -aŋgɛ́ -ɛ*	*commit suicide*
aŋgo	*throw, shoot, swing*	*á -aŋgó -ɛ*	*leap, jump, do cartwheel*
fimb	*throw out, discard*	*á -fi mb-ɛ*	*dive into water, head first*
kɔmb	*be proud of someone*	*á -kɔ́ mb-ɛ̀*	*be proud of own accomplishment*
kpɛ́ l	*cut, wound*	*á -kpɛ́ l-ɛ*	*wound oneself*
kunu	*turn inside out*	*á -kú nú -ɛ*	*somersault*
nyɛŋg	*give*	*á -nyɛ́ ŋg-ɛ*	*give oneself*
sá s	*incise*	*á -sá s-ɛ*	*boast*
tɔl	*pound*	*a-tɔ́ l-ɛ*	*hit oneself*

3.4 Reciprocal (*-ɛn* with *a-*)

Reciprocals can be formed in two ways, both of which employ the suffix *-ɛn*. The first option is to add the suffix *-ɛn* but retain at least one participant as a direct object. This results in no change of verb valence, as in the following example:

(57) do l-oko-ak-ɛ, Rachel a-tond-ɛn-ɛk-ɛ Wasɛ.
as 2p-learn-Impf-Foc, Rachel 3s-play-Rec-Impf-FV Wase
While we are learning, Rachel and Wase are playing together.

The suffix *-ɛn* is different than the suffix *-an* which is used for accompaniment and instrumental functions. (Although, Kuperus (1985:208) says that for Londo, *-ɛn* comes from the combination of the "neutro-passive" *-ɛ̀* and the accompaniment *-an*.) The reciprocal suffix can only be used for human objects, while the accompaniment suffix can

also be used with non-human objects. Note the difference between (57) which has a human direct object and (58) which does not:

(58) do l-oko-ak-ɛ, Rachel a-tond-an-ak-a mgba.
as 2p-learn-Impf-Foc, Rachel 3s-play-Inst-Impf-FV 9-dog
While we are learning, Rachel is playing with the dog.

Here are additional examples with reciprocal actions but no change in valence. [Note that the verb *oŋgoɛnɛ* '*help*' used in the following examples already has the suffix *-ɛn* included in its most basic stem.]

(59) l-oŋgo-ɛn-ɛk-ɛ isɛ mɛnɛ.
2p-help-REC-Impf-FV 2pPro self
We are helping ourselves.

(60) l-oŋgo-ɛn-ɛk-ɛ isɛ na isɛ.[7]
2p-help-REC-Impf-FV 2pPro Conj 2pPro
We are helping each other.

(61) Santana na Rachel b-oŋgo-ɛn-ɛ bɔ mɛnɛ, onɛ na onɛ.
Santana and Rachel 3s-help-Rec-FV 3pPro self, 1-Dem Conj 1-Dem
Santana and Rachel helped each other (one to the other).

The second way to express a reciprocal action requires two affixes. Like reflexives, the prefix *a-* is added in the object position. In addition, the suffix *-ɛn* must also be applied. When these affixes are present, both (or all) participants are included in the grammatical subject and the verb's valence is decreased by one, generally resulting in an intransitive sentence as in the following examples:

(62) ba-a-simo-ɛn-ɛk-ɛ.
3p-RO-inspect-Rec-Impf-FV
They are admiring/inspecting each other.

---

[7] This structure is grammatically acceptable but rare in occurence.

(63) la-a-simo-ɛn-ɛk-ɛ.
lo-a-simo-ɛn-ak-a
2p-RO-inspect-Rec-Impf-FV
We are admiring each other.

(64) lo-sa-a-bok-ɛn-ɛk-ɛ.
2p-Neg-RO-hear-Rec-Impf-FV
We don't hear (listen to) one another.

(65) Rachel na Wase b-i-iŋgɔ-n-ɛk-ɛ.
Rachel na Wase ba-a-iŋgɔ-ɛn-ak-a
Rachel and Wase 3p-RO-look-Rec-Impf-FV
Rachel and Wase are looking at each other.

(66) Rachel na Wase b-o-ob-ɛn-ɛk-ɛ.
Rachel na Wase ba-a-ob-ɛn-ak-a
Rachel and Wase 3p-RO-hit-Rec-Impf-FV
Rachel and Wase are kicking each other.

In comparing Mbonge to other Bantu languages of Cameroon, I did not find any other languages which employed both a suffix and a prefix to indicate reciprocity. The reciprocal suffix has been identified as *-an* for Proto-Bantu (Guthrie 1967-71) and Common Bantu (Schadeberg 1980:504). Many Bantu languages in Cameroon use a suffix with a form close to *-ɛn* or *-an*, but the scope of its function varies. Languages often use similar processes for reflexive, reciprocal and middles, but some Bantu languages use similar suffixes for instrumental, accompaniment, reciprocal, and sometimes even applicative. Here are some examples:

- Kuperus identifies the Londo (another dialect of Oroko) suffix *-ɛn* as reciprocal and simultaneous.
- In Akoose, the suffix *-ɛn* can be reflexive, instrumental, accompaniment or separative (Hedinger 1992:238-9).

- For Kinyarwanda, Kimenyi (1978) describes a category called "associatives" marked with the suffix *-an* which includes both accompaniment and reciprocity.

- The Tunen reciprocal suffix is *-an* or *-ɛn*. Dugast (1971:244) also identifies a "simultaneity" suffix *-an* which is used when two or more people act together.

- Nomaante uses *-an/-en,* Nugunu has *-anɛn/-enin* for reciprocal and iterative (Orwig 1989: 293) and Basaa uses *-nà* for reciprocal, associative and instrumental (Bitjaa-Kody 1990: 218).

It is possible that the suffix *-ɛn* (without the prefix *a-*) in Mbonge can be used to indicate simultaneous action as in (67), but this is the only example which I have seen.

(67) lo-su-ɛn-ɛ ete eyɔkɔ.
2p-return-Rec-FV 7-time 7-one
We have returned at the same time.

Regardless of its form, the reciprocal is a common Bantu extension that has in most cases remained productive. It typically takes a form similar to *-an/-en*. Mbonge is unusual in that both a prefix and a suffix are required in the cases where the verb's valence is actually reduced.

3.5 Anticausative (*-eɛ*)

Section 4.2 discusses the applicative suffix *-eɛ* which indicates an increase in transitivity. However, there is another suffix with the identical form *-eɛ* that seems to actually indicate a decrease in transitivity. While this seems contradictory and illogical, Ittmann describes a similar situation in Duala. He identifies the applicative suffix as *-ea* and another *-ea* as "decrease transitivity." According to Ittmann (1978:183), this second suffix is pronounced exactly like the applicative but has a completely different origin

(*-eka*). Its function is to render transitive verbs intransitive. When added to intransitives, it shows a state or habit.

The *-eɛ* suffix in Mbonge seems to be functioning in the same way as *-ea* in Duala. Compare the following pairs of examples in which the first example is transitive and the second, marked by *-eɛ,* is intransitive:

(68) balana ba-mo-bo-a koko o bunya wɔkɔ i?
3p-woman 3p-Pst-break-FV cocoa Prep 14-day 14-one QM?
Did the women break cocoa in one day?

(69) dike diyɔkɔ di-ma-bo-eɛ.
5-egg 5-one 5-Pft-break-AntiC-(FV)
One egg has broken.

(70) a-mo-dibo-a muna.
3s-Pst-open-FV 3-door
He opened the door.

(71) loke di-ma-dibo-eɛ.
5-lock 5-Pft-open-AntiC-(FV)
The lock has opened (finally after much trying).

(72) Dan a-ma-kambo-a tolasa.
Dan 3s-Pft-tear-FV 1-trousers
Dan (intentionally) tore his trousers.

(73) tolosa wa Dan a-ma-kambo-eɛ.
1-trousers 1-Asc Dan 1-Pft-tear-AntiC-(FV)
Dan's trousers have torn.

In each case, the subject of the intransitive corresponds to the direct object of the transitive. However, this is not a passive; no expression of the agent is possible, and indeed, no agent is presupposed.

For Londo, another Oroko dialect, the corresponding suffix seems to be *-ɛ̀* . Kuperus (1985:197) has called this the "neutro-passive suffix". She says,

> The translation used for the neutro-passive suffix resembles that of the passive *-ɔ̀a b,* but there is a significant difference, in that though with the passive suffix no agent may be stated, the agent is definitely implied, while this is not the case with *-ɔ̀ɛ* .

Incidently, the applicative form for Londo is not at all the same as this suffix. Rather, the associative suffix *-an* includes the instrumental, comitative and applicative functions (Kuperus 1985:203).

Dugast (1971:235, my translation) uses the term "neutral" for the suffix *-ɛ*, which seems to be a similar suffix in Tunen. She describes it as "the action is undergone by the subject, but is not accomplished by him". Since Dugast doesn't give any examples in context, it is difficult to know how closely this suffix lines up with the Mbonge *-eɛ*. However, the individual glosses indicated that the action was happening to the subject, who was not the agent.

The term "neutral" comes from Proto-Bantu reconstructions. Schadeberg (1980:504) identifies *-ɔ̀e k* as "neutral" for Proto-Bantu (cf. the *-eka* origin of Duala's *-ea*), but also says that it is difficult to retrieve this extension in Bantu languages because the Proto-Bantu /*k*/ has frequently been reduced to zero. It is not clear what the term "neutral" originally referred to, but it seems that this suffix indicates that some unknown or unidentified agent has acted on the subject of an intransitive clause, resulting in a new state or position.

Since the subject is not the cause of the action in these constructions, the label "anticausative" has been selected for the Mbonge suffix *-eɛ*. Whaley (1997:188) describes anticausative as follows: "In this construction, a transitive verb with causative

semantics is marked with a suffix that detransitivizes it, and the agent of the construction is left unexpressed".

The anticausative differs from the stative in that an actual event or process has taken place. Both stative and anticausative indicate a state or position, but for the stative it is not necessarily the result of any action. In stative examples (33)-(35) no action is mentioned or even assumed. On the other hand, in the anticausative examples (69), (71) and (73), a specific action has occurred and has resulted in the current situation. In fact, in (71) the speaker indicated that the opening of the lock was a difficult, time-consuming process.

Here are some examples of verbs related by an *-eɛ* derivation, whose differences seem to be mainly differences in transitivity:

Transitive:		Intransitive:	
bó	*break, hatch, treat someone*	*bó-eɛ*	*be cracked or broken*
fondɛ	*miss a target*	*fond-eɛ*	*be missed, be unhit*
ká mbó	*tear*	*ká mbó-́eɛ*	*be torn*
ká só	*split something*	*ká só-eɛ*	*be split*
kóm	*follow, chase, end*	*kom-eɛ*	*be at the end, be youngest*
lɪ́k	*leave behind; go ahead*	*lɪ́k-́eɛ*	*be left behind*
sum	*use a cane, install, place, pin*	*sum-eɛ*	*be staked, be driven*

Ittmann (1978:184) claims that when the "decrease transitivity" suffix is added to intransitives in Duala, it shows a state or a habit. In Mbonge, the anticausative can also be added to intransitive verbs as seen in example (74), without any change in the valence of the verb. The verb *yaŋga* '*burn*' is intransitive (the causative suffix is needed to form '*cause something to burn*') and it remains intransitive with the addition of *-eɛ*. In (74), the current state of the cocoa beans (burnt) is a direct result of the verb's action.

(74) koko yɔ i-susu i-ma-yaŋg-eɛ.
9-cocoa 9-Asc 9-all 9-Pft-burn-AntiC-(FV)
All the cocoa beans are burnt.

The following verbs have also been derived by the addition of *-eɛ*, but there is no longer an identifiable root, or else the semantic connection with the root is unclear.

Root		Derived Verb	
kɔ́f	*hold*	*kɔ́f-́eɛ*	*be capable, able*
--	(no identifiable root)	*wɔ́ m-́eɛ*	*rest, relax*
--	(no identifiable root)	*ú t-́eɛ*	*be near, beside*

Additional lexicalized or idiosyncratic verbs ending in *-eɛ* are listed in section 4.2, which discusses the applicative suffix *-eɛ*.

3.6 Summary of Valence Reducing Suffixes

The most important information about Mbonge's five valence-reducing suffixes is summarized in Table 3. Each suffix typically reduces a verb's valence by one, but for different reasons and with different results.

Table 3. Valence Reducing Suffixes

Suffix	Description	Function	Role of Subject	Treatment of Agent	Unique Aspects
-ab	Passive	Indicates action done to patient, downplay agent	patient recipient benefactor theme locative	Agent is intentional and usually left unexpressed but can be an instrumental oblique	Can passivize DO or IO DO can be added to passivized clause by using applicative or instrumental suffixes
-am	Stative	Indicates state or position of subject	patient experiencer	Never stated	Highly lexicalized suffix Can co-occur with passive and causative
-ɛ with a-	Reflexive	Specifies that subject and object are same entity	simultaneous agent and patient	Agent is subject acting on itself	Requires prefix and suffix Instruments can optionally be allowed as objects Syntactic reflexives also exist but do not reduce the verb's valence
-ɛn with a-	Reciprocal	Indicates that two or more participants are equally acting upon each other	both participants are agent AND patient	Both (or all) participants are agents acting upon each other	Prefix and suffix are both required in order to indicate a decrease in valence. When *a-* is not used, there is no change in valence.
-eɛ	Anticausative	Indicates resulting state and ignores the agent	patient experiencer	Ignored completely, often unknown	When added to intransitives, resulting state is indicated Form is identical to applicative suffix

CHAPTER 4

VALENCE INCREASING DERIVATIONAL SUFFIXES

This chapter discusses the five Mbonge derivational suffixes which increase verb valence. They are *-isɛ* causative, *-elɛ* indirect agent causative, *-isɛlɛ* indirect effector causative, *-eɛ* applicative, and *-an* instrumental/accompaniment. The syntactic causative (the verb *bola* '*do/make*' plus an infinitive verb) is also briefly examined.

Each is discussed in turn, taking note of the arguments added to the verb, the role of the promoted objects, the function of the derivation (when not completely lexicalized), and any of its characteristics unique to Mbonge.

4.1 Causatives (*-isɛ*, *-elɛ*, *-isɛlɛ* and syntactic causatives)

Mbonge has four different causative constructions, all of which increase the transitivity of the clause. I focus on the three morphological causatives (*-isɛ, -elɛ,* and *-isɛlɛ*) and only briefly touch on the syntactic causatives.

The following examples illustrate the different causative constructions: (75) shows a verb with the suffix *-isɛ* '*direct causative*', (76) shows a verb with the suffix *-elɛ* '*indirect agent causative*', (77) shows a verb with the suffix combination *-isɛlɛ (-isɛ + -elɛ)* '*indirect effector causative*', and (78) uses the verb *bola* '*do/make*' plus the caused action.

(75) oko-isɛ mɔ mgbɛli.
(Imp)-(2s)-learn-Caus-(FV) 3sPro 10-book
Make him learn books.

(76) Manfred a-k-oko-lɛ owa di-kilɛ.
Manfred a-ko-oko-elɛ owa di-kilɛ
Manfred 3s-Fut-learn-Caus2-(FV) 2sPro Inf-cook-(FV)
Manfred will teach you to cook.
(lit. Manfred will cause you to learn to cook.)

(77) owa o-n-oko-isɛlɛ betondi beni.
2sPro 2s-1sO-learn-Caus3-(Tmls) 8-game 8-Dem
You caused me to learn these games.

(78) na-mo-bol-a mɔ da-aka o sekulu.
1s-Pst-make-FV 3sPro Inf-go Prep school
I persuaded him go to school.

The basic semantic distinction between the four Mbonge causatives can be explained in terms of direct versus indirect causation and by the role of the subject as agent or effector. In Van Valin and LaPolla (1997:118), an EFFECTOR is described as "the participant that brings something about, but there is no implication of its being volitional or the original instigator. It is simply the effecting participant. It need not be animate." An AGENT, on the other hand, is a "a willful, purposeful instigator of an action or event" (p. 85).

In Mbonge, the suffix *-isɛ* is the default causative suffix with the broadest usage. Verbs marked with *-isɛ* generally indicate direct, intentional causation by an agent. Verbs marked with *-elɛ* also indicate causation by an agent, but it is less direct. Those marked with *-isɛlɛ (-isɛ + -elɛ)* indicate less direct causation carried out by an effector, and in syntactic constructions such as (78), the causee retains more control. This fits with Haiman's (1983) iconicity principle that states that within a language which has more than one causative, smaller constructions are more direct and larger constructions are less direct.

Kulikov (1993:121) has written in detail about a phenomenon he calls "second causatives" – those cases in which a language has at least two different causative verbal derivations which can both be applied to the same verbs (as opposed to different suffixes for different verb classes). He says the simplest, most productive causative can be referred to as a "first (primary) causative". Other more complex causatives which can be applied to the same verbs as the first causative are considered "second causatives". As seen in (75)-(77), all three Mbonge causative suffixes can be applied to the same verbs. Using Kulikov's terminology, *-isɛ* can be described as the first causative, while *-elɛ* and *-isɛlɛ* are second causatives.

Kulikov (1993:123-4) also describes five morphological options that languages employ for their second causative. The suffix *-elɛ* fits his fifth option in which the second causative does not share any common part with the first causative. The suffix *-isɛlɛ*, on the other hand, is similar to the option he describes as "doubling with alternation: Y[second causative]=X_1 + X_2 whereas both X_1 and X_2 serve as first causative markers but obligatorily alternate when deriving double causatives, since two identical morphemes cannot be repeated immediately". The suffix *-isɛlɛ* is a combination of two causative markers (*-isɛ* and *-elɛ*), but it differs from the Kulikov's description in that only *-isɛ* is a first causative.

Many Bantu languages in Cameroon have a causative, and a few have this same distinction between two or more morphological causatives. The causative suffix is *-ɛ̀ s* in the Oroko dialect Londo (Kuperus 1985:199), *-ed* in Akoose (Hedinger 1992:245), and *-ìsɛ* in Duala (Schadeberg 1980:504). Tunen has a shorter suffix for direct causation and

a longer form for indirect (Dugast 1971:241-242). Basaa also has a direct causative (*-Vs*)[8] similar to Mbonge's, but the indirect causative has an entirely different form (*-ha*) which does not include the direct form. Like Mbonge, both Basaa causative suffixes can appear on the same verbs, so it is not a case of complementary distribution (Ndjeyiha 2001:2).

Now, I look at how causatives are formed in Mbonge and then examine each suffix in turn. Causative constructions can be applied to both intransitive and transitive verbs. For verbs which are normally intransitive, a second argument is added when the causative suffix is applied to the verb. The additional argument (the causor) is the subject of the causative construction. The subject of the intransitive is the direct object in the causative construction. Examples (79) and (81) below are intransitive clauses, while (80) and (82) are corresponding transitive causative constructions.

(79) bunya bo-m-ind-a cɔɔ.
14-day 14-Pst-be.dark-FV Ideo.very.dark
The day got very dark.

(80) mbua y-ind-isɛ bunya.
9-rain 9-be.dark-Caus-(Tmls) 14-day
The rain darkened the day. (The rain caused the day to become dark).

(81) moto mo-mo-loŋg-a.
3-car 3-Pst-roll-FV
The car was moving (lit. The car was rolling).

[8] V=unspecified vowel

(82) a-mo-long-isɛ-(a)k-ɛ bicycle o mboki.
3s-Pst-roll-Caus-Impf-FV bicycle Prep 10-step
She was driving the bicycle down the steps.
(lit. She was causing the bicycle to roll down the steps.)

It is also possible to leave the causee unspecified, as in the following:

(83) na-ma-m-isɛ.
1s-Pft-end-Caus-(FV)
I have finished. (lit. I have caused (it) to end.)

The suffix *-isɛ* can also be added to a verb that is already transitive. The verb then becomes ditransitive as in (85) below. In both (84) and (85) the sentences are imperatives with the subject '*you*'. In (84) the subject of the verb is instructed to carry out the action, but in (85) the subject is instructed to cause the causee to carry out the action.

(84) wam-a mukobo.
(Imp)-wear/put.on-FV 3-shirt
Put a shirt on.

(85) wam-isɛ ŋana mukobo.
(Imp)-wear/put.on-Caus-(FV) child 3-shirt
Put a shirt on the child.

The causee is often left unspecified. Example (86) is a non-causative transitive sentence and (87) is its corresponding causative, but the person opening the door is left unnamed. Finally, (88) shows how the causee can be named, but not all speakers agree that this is grammatically acceptable.

(86) a-mo-dibo-a muna.
3s-Pst-open-FV 3-door
He opened the door.

(87) a-mo-dibo-isɛ muna.
3s-Pst-open-Caus-(FV) 3-door
He caused (someone) to open the door.

(88) a-mo-dibo-isɛ Santana muna.
3s-Pst-open-Caus-(FV) Santana 3-door
*He caused Santana to open the door (*rejected by some speakers).*

As with much derivational morphology, the causative semantic relation between the root and derived verb is not always readily apparent. Givón (1984:556) describes a process in which a co-lexicalized verb eventually becomes a causative affix on the verb. He says, "At that stage, one may still consider it an inflectional morpheme marking the syntactic process of transitivization. But the potential for considering it derivational is just as strong. Indeed, over time the process becomes less regular and more lexically-governed."

This explanation is very fitting for Mbonge causatives. The causative affix *-isɛ* is derivational. In most cases, it seems to be very productive and can be applied to a large percentage of the verbs. However, there are other cases where it seems to have become lexically governed. The resulting meaning is not completely predictable in those cases. For example, when the causative suffix is added to *dub-ɛ* '*believe*', the result is *dub-isɛ* '*baptize*' not simply '*cause to believe*'. Here are some examples of verbs derived with *-isɛ*:

Root		Derived Verb	
bok	*do, make*	*bok-isɛ*	*cause, make (something) be felt*
boŋg	*join*	*boŋg-isɛnɛ*	*arrange, make ready*
dúbɛ́	*believe*	*dub-isɛ*	*baptize*
ɛmbɛlɛ	*be hanging*	*ɛmbɛl-isɛ*	*hang*
fak	*scatter*	*fak-isɛ*	*send (someone) to scatter*
fambú	*bounce*	*fambú-isɛ*	*cause to bounce*
fimb	*throw out, discard*	*fimb-isɛnɛ*	*make too difficult (impossible)*
il	*make noise*	*il-isɛ*	*get people to make noise in order to confuse others*
iŋgil-an	*be round*	*iŋgil-isɛ*	*make round*

kab	*divide*	*kab-ísɛ*	*sell*
kek	*try*	*kek-isɛ*	*test (cause someone to try)*
kia	*refuse, be weaned*	*ki-ɪ́sɛ*	*wean*
kokan-eɛ	*be correct*	*kokan-isɛlɛ*	*complete, cause to be correct*
kot	*become tired*	*kot-isɛnɛ*	*bore (someone)*
kɔ́k	*mock*	*kɔ́k-ɪsɛ*	*punish*
kɔl	*be big*	*kɔl-isɛ*	*make big*
kɔwɔm	*be curved*	*kɔwɔm-isɛ*	*make curved*
kpasim	*be startled*	*kpasim-isɛ*	*startle (someone)*
kumb	*clap, hit a drum*	*kumb-isɛ*	*exaggerate (lit. make noise) cause to drum*
let	*be strong*	*let-isɛ*	*greet, cure, make well, lit: cause to be strong*
l	*eat*	*l-isɛ*	*feed*
lɔl	*good, fine*	*lɔl-isɛ*	*cause to be fine*
lɔŋg	*roll (intr.)*	*lɔng-isɛ*	*cause to roll, drive*
mat	*stop, leave*	*mat-ísɛ*	*interrupt*
m	*finish*	*m-isɛ*	*complete*
nyáŋg	*suck*	*nyáŋg-ɪsɛ*	*breastfeed (a child)*
nyiŋg	*shake*	*nyiŋg-isɛ*	*cause to shake, wave(hand)*
ol	*be sharp*	*ol-isɛ*	*sharpen*
ɔ́k	*wash, rub*	*ɔ́k-ɪsɛ*	*rub with oil or medicine, paint*
sɛ́ŋgɛ	*wake up*	*sɛ́ŋg-ɪsɛ*	*wake (someone)*
teng	*become erect*	*teng-isɛ*	*cause (penis) to be erect*
tɛ	*remain, be left*	*te-isɛ*	*leave behind*
tikil	*suffer (intr.)*	*tikil-isɛ*	*cause to suffer, treat unfairly*
timb	*come back*	*timb-isɛ*	*refund, return (something)*
wɛ́sɛ	*be dry*	*wɛ́s-ɪsɛ*	*cause to dry*
yáŋg	*burn*	*yáŋg-ɪsɛ*	*cause to burn*
y	*be hot*	*y-isɛ*	*heat, warm up*

Ittmann (1978:191) claims that when the causative is added to Duala transitive verbs, it is an intensive form. Hopper and Thompson (1980:264) state that in Chicheŵa, a Bantu language of Malawi, "the causative morpheme is interpreted as a signal of intensity." One example they gave showed that adding the causative suffix to the verb '*eat*' could result in '*feed*' (similar to Mbonge) or '*eat too much*'. For Mbonge, however, the notion of intensity seems to apply only to certain derived words, not to the

usual sense of the causative suffix. Mbonge has two separate suffixes for causation (*-isɛ*) and intensity (*-ɛn* – see section 5.1). Here are some examples of how these two suffixes are used in Mbonge:

(89) na-mo-yaŋg-isɛ brɛdi.
1s-Pst-burn-Caus-(FV) 1-bread
I burned the bread. (I caused the bread to burn.)

(90) ba-brɛdi ba-mo-yaŋg-ɛn-ɛ eyana.
2-bread 2-Pst-burn-Int-FV yesterday
The bread burned so much yesterday.

(91) na-mo-yaŋg-is-ɛn-ɛ brɛdi.
1s-Pst-burn-Caus-Int-FV 1-bread
I burned the bread too much yesterday.

So far, the causative examples in this section have all been formed with the suffix *-isɛ*, the default suffix used for direct, intentional causation by an agent. The suffix *-elɛ* indicates indirect causation by an agent in which the causor has a fair degree of control over the causee.

(92) ŋ-go-kɛnd-ɛ di-naŋg-elɛ Rachel.
1s-Fut-go-FV Inf-lie.down-Caus2-(FV) Rachel
I will go put Rachel to sleep. (lit. I will go cause Rachel to lie down.)

(93) lo-k-oko-lɛ-l-ɛ bana ŋjea ya mokɔlɔnɔ.
lo-ko-oko-elɛ-eɛ-a bana ŋjea ya mokɔlɔnɔ
2p-Fut-learn-Caus2-Appl-FV 2p-child 9-way 9-Asc new
We will teach (lit. cause to learn) the children a new way.

(94) a-mo-bɔ-lɛ fɔkɔ.
3s-Pst-be.lost-Caus2-(FV) one
She lost one (lit. She caused one to be lost).

(95) seŋgo-lɛ mgbole eyabɛ.
(Imp)-(2s)-change-Caus2-(FV) 9-behavior 9-Poss-2s
Change your behavior (lit. Cause your behavior to change).

Here are some derived verbs that seem to be formed by adding *-elɛ*. Since most of these roots end in a vowel, the /e/ of *-elɛ* is deleted, making it difficult to verify that the suffix that has been added really is *-elɛ* and not something else (*-ɛlɛ*, for example). However, the semantic differences between the roots and derived forms are consistent with the causative function of *-elɛ*.

Root		Derived Verb	
alo	*move, go away*	*alo-lɛ*	*remove*
bolo	*kill, murder*	*bolo-lɛ*	*cause to die, be bereaved*
bɔ	*be lost*	*bɔ́-ɬɛ*	*cause to be lost*
iyó	*know*	*ɪ́yó-lɛ*	*ask*
kundu	*fall*	*kundu-lɛ*	*knock down, cause to fall*
ó kó	*learn*	*ó kó-lɛ*	*teach*
seŋgo	*change (intr.)*	*seŋgo-lɛ*	*change (tr.)*
sɔsɔ	*talk, speak*	*sɔs-ilɛ*	*make someone talk*
tati	*suffer*	*tati-lɛ*	*cause suffering, bother*
toko	*stand up, wake up*	*toko-lɛ*	*wake someone up*

Schadeberg identifies similar causatives in other Cameroon Bantu languages: *-Vla* in Nkossi (A.15b), *-ɛ́ ɬɛ* in Duala (A.24), *-ede/-ide* in Noho/Benga (A.32,34), *-(Vl)V* in Ewondo (A.72a), and *-ele* in Ngumba (A.81).

Hedinger (1992:425) gives this description of the suffix *-ed*, which he has identified as "causative":

> The addition of the *-ed* suffix has a valence increasing effect. It adds as the subject a causing agent. The inherent subject becomes object. Intransitive verbs describing a state or quality become transitive ... In transitive verbs, the agent of the verb becomes object and so the verb becomes ditransitive. The causing agent takes up the normal subject position before the verb, the real agent of the verb occurs after the verb before the direct object.

Kuperus (1985:195) identifies this suffix in Londo as *-ɛ̀ r* and calls it "Reverse Transitive," saying that it reverses the transitivity value of the original verb, but not its

semantic content. The examples she gives for intransitive verbs becoming transitive correspond with the Mbonge suffix *-elɛ* . However, the examples she gives for transitives becoming intransitive ("I tore the cloth" (unmarked) and "The cloth tore" (marked with *-ɛ̀ r*)) are very similar to (72) and (73) above in which Mbonge uses the anticausative suffix *-eɛ*.

Kuperus (1985:196) also says that *-ɛ̀ r* in Londo is not productive because language helpers were unable to manipulate it. "For them these are not separable from the existing stems." The situation for Mbonge is similar; this suffix is not very productive, but with verbs that do take it, it behaves as a causative.

Mbonge causatives can also be formed by adding the verbal suffix *-isɛlɛ*, which appears to be a combination of *-isɛ* and *-elɛ*[9]. When *-isɛlɛ* is used, the causative is less direct, carried out by an effector not an agent. Here are some examples of indirect causation:

(96) na-mo-lom-isɛlɛ o sekulu.
1s-3sO-send-Caus3-(FV) Prep 1-school
I convinced him to go to school.

(97) owa o-laŋg-isɛlɛ mɔ mgbɛli ene.
2s 2s-read-Caus3-(FV) 3sPro 9-book 9-Dem
You persuaded him to read that book.

(98) na-mo-naŋg-isɛlɛ Rachel.
1s-Pst-lay.down-Caus3-(FV) Rachel
I persuaded Rachel to lay down (sleep).

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[9] It is also possible that *-isɛlɛ* is a grammaticalized combination of *-isɛ* + the applicative suffix *-eɛ*, suggesting that, at one time, the causee was not the direct object.

Compare example (92), which uses the suffix *-elɛ*, with (97), which uses *-isɛlɛ*. Both are examples of indirect causation, but in (92) the causor is more agentive, instigating the action and exerting a measure of control over the causee. In (97), the causee has more volitional choice and the causor is only an effector.

In the following sentences, the causatives formed with *-isɛlɛ* contrast with those formed with *-isɛ* in that the causor is an effector, not an agent.

(99) Manfred a-mo-kund-isɛ.
Manfred 3s-3sO-fall-Caus-(FV)
Manfred caused him to fall (intentionally).

(100) Manfred a-mo-kund-isɛlɛ.
Manfred 3s-3sO-fall-Caus3-(FV)
Manfred caused him to fall (accidentally).

(101) ŋili mo-mo-kund-isɛlɛ.
3-root 3-3sO-fall-Caus3-(FV)
The root caused him to fall.

(102) owa o-bul-isɛ mba o ndabo.
2sPro 2s-leave-Caus-(Tmls) 1sPro Prep 9-house
You caused me to leave the house (forcefully).

(103) owa o-bul-isɛlɛ mba o ndabo.
2sPro 2s-leave-Caus3-(FV) 1sPro Prep 9-house
You caused me to leave the house (not forcefully, just by nagging).

Finally, unlike *-elɛ*, *-isɛlɛ* is much more productive. The suffix *-elɛ* has become quite lexicalized, *-isɛ* is very productive with a few lexicalized forms, and *–isɛlɛ* is even more productive. So far, I have found no lexicalized examples of *-isɛlɛ*.

Next, I look briefly at the syntactic causatives. In Mbonge, the verb *bola* '*do/make*' can be used with another verb (which may or may not be marked with a causative suffix) to indicate when one actor is acting on another. In these syntactic

causatives, the causee retains more control than in the morphological causatives. According to Whaley (1997:196), the "degree of control retained by the causee" is a semantic difference that often distinguishes causative types. Here are some examples:

(104) Dan a-bol-i mba di-loŋg-isɛ moto.
Dan 3s-do/make-Tmls 1sPro Inf-roll-Caus-(FV)3-vehicle
Dan caused me to drive the vehicle.
(lit. Dan caused me to cause the vehicle to roll.)

(105) na-mo-bol-a mɔ da-aka o sekulu.
1s-Pst-make-FV 3sPro Inf-go Prep 1-school
I made him go to school.

(106) Simon a-mo-bol-a tɛtɛ Santana a-dibo-isɛ muna.
Simon 3s-Pst-do-FV until Santana 3s-open-Caus-(Tmls) 3-door
Simon made Santana open the door.
(lit. Simon made Santana cause the door to become open.)

It is interesting to note that there are two different kinds of syntactic causatives. Examples (104)-(105) show co-subordination in which the two verbs share an argument. In those cases, the verb is in the infinitive form. Example (106), on the other hand, is an example of two coordinated (or subordinated)[10] propositions and the verb of the second clause is conjugated as usual. It seems that *tɛtɛ* '*until*' implies that Simon had to continue pressuring Santana over a period of time before she opened the door.

In conclusion, it seems clear that the default suffix *-isɛ* generally indicates direct causation carried out by an agent causor, *-elɛ* indicates indirect causation by an agent causor, and *-isɛlɛ* indicates indirect causation by an effector causor. The syntactic

[10] Further analysis is needed to determine whether or not *tɛtɛ* is a coordinating or subordinating conjunction.

causatives formed with *bola* '*do/make*' are also indirect, but the causee retains more control over the action.

4.2 Applicative (*-eɛ*)

Adding the suffix *-eɛ*[11] to a verb creates the applicative form, a common Bantu construction. The addition of the applicative suffix to a verb increases its valence by one, most commonly by adding a recipient, as in (108), or benefactive, as in (110).

(107) n-jak-ak-a di-til-a mgbɛli.
1s-want-Impf-FV Inf-write-FV 9-book/letter
I want to write a letter.

(108) n-jak-ak-a di-til-eɛ Zachs mgbɛli.
1s-want-Impf-FV Inf-write-Appl-(FV) Zachs 9-book/letter
I want to write Zacks a letter.

(109) Judith a-mo-kilɛ moleli.
Judith 3s-Pst-cook-(FV) 3-food
Judith cooked food.

(110) Judith a-mo-kil-eɛ bana moleli.
Judith 3s-Pst-cook-Appl-(FV) 3p-child 3-food
Judith cooked food for the children.

According to Schadeberg (1980:504), the applicative form is well attested to in Cameroon, citing the following forms: Nkossi (*-Vda*), Duala (*-ɛ̀e̋a*), Noho and Benga (*-ea*), and Basaa (*-Vl*).

In Mbonge, the applicative suffix *-eɛ* is very common and productive. In the neighboring dialect, Lolue (A.12), the applicative is realized as *-ey* and *-ɛy* (Roberts

[11] This suffix is identical in form to the anticausative suffix *-eɛ* discussed in section 3.5, but it has a very different function.

1991). Surprisingly, another Oroko dialect, Londo (A.11a), does not have this suffix at all. Instead, applicative functions are covered by the "associative" suffix *-an*, which also includes comitative, instrument, recipient, and source (Kuperus 1985:203-204).

Bresnan and Moshi (1990:148-149) say,

> The applicative construction arises from a derived verb form (the 'applied verb') that introduces a new object argument to the base verb ... The new or 'applied' object may have the semantic roles of benefactive, maleficiary, goal (recipient), instrument, location, or motive (reason or purpose), depending on the semantics of the base verb.

Payne (1997:186-7) describes applicatives as follows:

> Some languages have operations whereby a verb is marked for the thematic role of a direct object. Here we will refer to such operations as applicatives, though they are also called 'advancements' or 'promotions' to direct object. In most cases, an applicative can be insightfully described as a valence increasing operation that brings a peripheral participant onto center stage by making it into a direct object. The 'new' direct object is sometimes referred to as the applied object. For verbs that already have one direct object, the applicative either results in a three-argument (ditransitive) verb, or the 'original' direct object ceases to be expressed. In the latter case, the applicatives cannot be considered a valence increasing device, since the original and the resulting verb have the same number of arguments; rather, the applicative simply ascribes a new, formerly peripheral, thematic role to the direct object.

When the applicative suffix indicates the addition of a benefactive or recipient to a transitive verb, the resulting applied verb has double objects. There seem to be two different systems among Bantu languages for how these double objects are treated: asymmetrical and symmetrical (see Chapter 7 for more details).

The following description of applicatives by Comrie (1985:316) is typical of an asymmetrical system: "The additional argument functions as (closest) direct object to the applicative verb, while a direct object of the basic verb loses many of its direct object

properties, including the possibility of being encoded as an object prefix before the verb stem".

However, the extent to which the direct object loses its direct object properties varies among Bantu languages. Kisseberth and Abasheikh (1977:180) explain that for Chi-Mwi:ni, a Bantu language closely related to Swahili, sometimes a single NP in applied verbal constructions displays all the characteristics of the object of the verb, but in other cases those characteristics are shared by two NP's. They assert that "the factors that determine whether a single NP will possess all the characteristics of the object, or whether two different NP's will share these characteristics, will be shown to be basically semantic in nature".

This section describes the grammatical structure of Mbonge clauses with applied verbs and the thematic roles that applied objects can have. Also examined are difficulties in identifying the applicative suffix because of the various forms it takes in different tenses and phonological settings. The question of whether or not more than one applicative suffix can be applied to the same verb is also addressed. Finally, the applicative's co-occurrence with other suffixes is discussed.

First, I examine the various grammatical structures that occur with applied verbs. The most common use of the applicative construction is to add a recipient or benefactive immediately following the verb and preceding the original object, while marking the verb with -*eɛ*, as already seen in (108) and (110).

In his description of Kinyarwanda, Kimenyi (1978:53, 64) says that basic constituent order is S V IO DO. When a benefactive is added, it becomes S V BEN IO

DO. In Mbonge, benefactive, patient, and recipient cannot all appear in the same clause unless one occurs in a prepositional phrase. Two seems to be the maximum number of NP "objects" allowed. The benefactive and recipient seem to share the position immediately after the verb, never appearing together. In some cases, context is the only way to determine whether the object following the verb is a recipient or benefactive, as in the example below:

(111) a-mo-til-eɛ isɛ mgbɛli.
3s-Pst-write-Appl-(FV) 1pPro 9-book/letter
He wrote a letter to us. OR *He wrote a letter for us.*

It is also possible to add the applied object as a prefix on the verb, as in (113) below:

(112) Becky a-be-ak-a efafe.
Becky 3s-sew-Impf-FV 7-cloth
Becky is sewing a dress.

(113) Becky a-m-be-ak-eɛ efafe.
Becky 3s-1sO-sew-Impf-Appl-(FV) 7-cloth
Becky is sewing a dress for me.

In Mbonge, either the original object or the applied object can be marked as a prefix on the verb. This is in contrast to Comrie's (1985:316) claim that the original direct object loses the possibility of being encoded as an object prefix. However, it is not possible in Mbonge to use prefixes for both objects at the same time.

(114) Judith a-mo-ba-kil-eɛ moleli.
Judith 3s-Pst-2pO-cook-Appl-(FV) 3-food
Judith cooked food for them.

(115) Judith a-mo-ŋa-kil-eɛ bana.
Judith 3s-Pst-3O-cook-Appl-(FV) 3p-child
Judith cooked it (food) for the children.

(116) *Judith a-mo-ŋa-ba-kil-eɛ
Judith 3s-Pst-3O-2pO-cook-Appl-(FV)
Judith cooked it for them.

When the applied object (including a question word or phrase) is focal, it can also be fronted to give it extra prominence:

(117) Simon Inspector a-kat-ak-eɛ mboli.
Simon Inspector 3s-tie-Impf-Appl-(Foc) 9-goat
Simon is tying up the inspector's goat.

(118) Tata n-dil-ak-eɛ mgbɛli.
father 1s-write-Impf-Appl-(FV) 9-letter
I am writing a letter to Father.

(119) nja o-kp-ak-eɛ nda ɔ?
who 2s-peel-Impf-Appl-(Foc) cocoa.yam QM?
Who are you peeling the cocoa yams for?

(120) Dan m-gb-ak-eɛ nda.
Dan 1s-peel-Impf-Appl-(FV) cocoa.yam.
I am peeling cocoa yams for Dan.

Direct objects (patients) can be left unspecified (assumed) as in the following example:

(121) ba-sa-taŋg-ak-eɛ moto wa oŋgoɛn-ɛ mɔ.
3p-Neg-pay-Impf-Appl-(FV) 1-person 1-Rel (1)-help-FV 3sPro
They do not pay (money to) the person who helps them.

Finally, some languages such as Kinyarwanda require the applicative suffix when an infinitive (or other verb phrase) is used as a complement to the verb (Kimenyi 1978:158), but this is not the case for Mbonge. See (107) and (135) for examples.

Next, I examine the thematic roles that Mbonge allows as applied objects. Mbonge uses the applicative suffix to indicate the addition of any of the following

thematic roles to the arguments of the verb: recipient, benefactive (including malefactive), location, motive[12], source, theme, manner, and possibly possessives.

Unlike many Bantu languages, Mbonge does not use the applicative suffix for the addition of instrument or accompaniment/associative. There is a separate suffix, *-an*, used specifically for that function (see section 4.3).

Temporal noun phrases do not require a preposition and are not marked by the applicative suffix. They are generally found clause initial or final, never appearing next to the verb unless other grammatical terms are not present, so there is no confusion between temporals and subjects or objects.

The addition of the above thematic roles to a verb's basic valence must be marked on the verb by the addition of the suffix *-eɛ*. However, not all of these get promoted to the grammatical status of object; some still require a preposition. In this section, I examine each role in turn. Examples have already been given for recipient ((108), (118)) and benefactive ((110), (113)-(115)), which are the most common roles marked by the applicative suffix. In Chapter 7, I claim that both roles are fully promoted to object status.

Malefactives, like benefactives, can be promoted to object status by the addition of the applicative suffix:

(122) ŋana a-mo-yo-eɛ mɔ o e-yɔnɔ.
1-child 3s-Pst-vomit-Appl-(FV) 3sPro Prep 7-lap
The child vomited on her, on the lap.

[12] In this paper, motive refers to reason or purpose as suggested by Bresnan and Moshi (1990:149).

Location in Mbonge is usually expressed by a prepositional phrase and is not marked on the verb. However, in the following examples the applicative suffix has been added to the verb to indicate the addition of a locative demonstrative or locative question word. While the locative prepositions *o* or *wa* are not overtly present, they are identifiable parts of the demonstratives themselves.

(123) ote o-k-ɛɛn-eɛ njaŋga ya mbimbi.
Dem-Loc 2s-Fut-see-Appl-(FV) 9-crayfish 9-Asc 9-good
You will see the good crayfish there.

(124) owe a-mo-bolo-eɛ nyama ɔ?
Loc-WH 3s-Pst-kill-Appl-(FV) 9-animal QM
Where did he kill the animal?

(125) a-ka-d-ak-eɛ ŋga wane.
3s-Dur.Pst-eat-Impf-Appl-(FV) right/just Dem-Loc
He kept eating right there (without going out).

Occasionally, the addition of an oblique locative is marked on the verb by the applicative suffix. This seems to only happen to verbs which would normally not take an oblique locative such as in the following example (note: *-el* is a variation of the applicative which is discussed later in this chapter):

(126) Manfred a-yo-el-i o moto fɛ.
Manfred 3s-vomit-Appl-Tmls Prep vehicle again
Manfred has vomited in the vehicle again.

Motive can also be marked on the verb by the applicative suffix, as in the following examples. In (127) and (128), the motive noun phrases are not preceded by a preposition, but prepositions are used in the rest of examples. It is unclear why prepositions are used in some cases and not in others.

(127) n-j-iyo ne eye mgba e-bom-ak-eɛ.
1s-Neg-know-(Tmls) if what 9-dog 9-bark-Impf-Appl
I do not know why the dog is barking.

(128) njamɛ a-mo-nyɛŋg-ɛk-eɛ tata i-kɔ?
what/why 3s-Pst-give-Impf-Appl-(FV) 1-father 19-money
Why was he giving father money?

(129) o i-kɔ a-kɔn-ɔk-eɛ.
Prep 19-money 3s-sing-Impf-Appl-(Foc)
She sings for money.

(130) a-ma-tat-eɛ o e-tafo e-ne.
3s-Pft-anger-Appl-(FV) Prep 7-thing 7-Dem
He is angry because of that thing.

(131) o eye ba-to ba-w-ak-eɛ ɔ?
Prep what 2p-person 2p-die-Impf-Appl-(FV) QM?
Why do people die?

Source noun phrases can also be added to a verb's valence and marked by the applicative, but a preposition is still required.

(132) o-ni ŋana na munde ib-ak-eɛ.
1-Dem 1-child with/from 1-friend (3s)-steal-Impf-Appl-(FV)
This child is stealing from a friend (cheating).

(133) kua o di-ke e-m-u-eɛ.
9-chicken Prep 5-egg 9-Pst-come-Appl-(FV)
The chicken came from an egg.

(134) Judith a-m-u-eɛ o markɛti.
Judith 3s-Pst-come-Appl-(FV) Prep market
Judith came from market.

Theme can be indicated by applied verbs without the use of a preposition. Additional examples of theme (see (154) and (157)) are discussed later in this chapter when the applicative variation *-ɛlɛl* is described.

(135) niŋgɛ ma o-kɛnd-i di-lom-eɛ Simon.
so.then then 2s-go/walk-Tmls Inf-send.message-Appl-(FV) Simon
Then you go tell him about Simon.

Manner has been added to the verb's arguments in each of the following examples. No prepositions are needed, because no nouns have been added. *Lo* "*how/because*" is a conjunction and *nawe* "*how*" is an interrogative adverb.

(136) o-n-dumɛlɛ lo ba-bol-ak-eɛ.
2s-1sO-show-(FV) how/because 2p-do-Impf-Appl-(FV)
Show me how they do it.

(137) w-iyo lo ba-bol-ak-eɛ i?
2s-know how/because 2p-do-Impf-Appl-(FV) Y/N?
Do you know how to use (it)?

(138) a-kɔŋgɛl-ɛk-ɛ lo a-ko-lu-eɛ ikɔ.
3s-think-Impf-FV how/because 3s-Fut-have-Appl-(FV) 19-money
He is thinking how to get money.

(139) nawe o-ko-tomb-eɛ iliba ɔ?
how 2s-Fut-pass-Appl-(FV) 19-river QM?
How will you cross the river?

Possessors might be marked by the applicative in Mbonge, but the evidence is unclear. In the following examples, a noun or pronoun has been added to the verb's usual arguments and has been translated as a possessor; however, they could also be interpreted as benefactives.

(140) Simon a-kat-ak-eɛ Inspector mboli.
Simon 3s-tie-Impf-Appl-(FV) inspector 9-goat
Simon is tying up the inspector's goat.

(141) nja a-ko-n-os-an-ak-eɛ mba b-ana ba-nɪ ɔ?
who 3s-Fut-1sO-sit-ACC-Impf-Appl-(FV) 1sPro 3p-child 3p-Dem QM?
Who will watch (sit with) my children?

To summarize, the addition of the applicative suffix *-eɛ* in Mbonge allows a wide variety of thematic roles to function as applied objects. Table 4 summarizes the thematic roles which may be added and whether or not they require a preposition.

Table 4. Thematic Roles Added by Applicative Suffix

Thematic Role	Add Applicative Suffix?	Require Preposition?
recipient	yes	no
benefactive	yes	no
malefactive	yes	no
location	for demonstratives and some obliques	yes (preposition is part of demonstratives)
motive	yes	sometimes
source	yes	yes
theme	yes	no
manner	yes	no
possessor	need more data	no
instrument	no, use *-an*	N/A
accompaniment/associative	no, use *-an*	N/A
temporal	no	N/A

Based on the need for prepositions with some noun phrases, the applicative suffix does not seem to always be promotional. The properties of original direct objects, applied objects, and obliques marked on the verb is discussed further in Chapter 7.

In describing Basaa's applicative form, Bitjaa Kody (1990:224) shows how the applicative suffix is the most productive yet the least stable morphologically; it has several variations depending on the phonological environment. This is certainly true for Mbonge, as well. First, I illustrate the different forms taken by *-eɛ* when it is added to a regular verb such as *duma* '*dig*' in various tenses.

The applicative suffix is unchanged for regular verbs in the present imperfective, perfect, near past, and future tenses:

(142) njamɛ o-dum-ak-eɛ munyɛli moni ɔ?
what/why 2s-dig-Impf-Appl-(FV) 3-dirt 3-Dem QM?
Why are you digging this dirt?

(143) a-ma-tat-eɛ o etafo ene.
3s-Pft-anger-Appl-(FV) Prep 7-thing 7-Dem
He is angry because of that thing.

(144) nja a-mo-dum-eɛ mɔ eyoko ene ɔ?
who 3s-Pst.Nr-dig-Appl-(FV) 3sPro 7-hole 7-Dem QM?
Who dug that hole for him?

(145) njamɛ o-ko-dum-eɛ munyɛli moni ɔ?
what/why 2s-Fut-dig-Appl-(FV) 3-dirt 3-Dem QM?
Why will you dig this dirt?

In the far past[13], *-eɛ* becomes *-ee*:

(146) eyɛ o-mo-dum-ee munyɛli moni ɔ?
what/why 2s-Pst.Far-dig-Appl-(FV) 3-dirt 3-Dem QM?
Why did you dig this dirt?

When the timeless suffix *-i* is added to the verb, *-eɛ* takes the form *-el* or *-elel*. The reason for the doubling of this suffix in some cases is unknown.

(147) njamɛ o-dum-el-i eyoko ɔ?
what/why 2s-dig-Appl-Tmls 7-hole QM?
Why have you dug the hole?

(148) eyɛ o-dum-elel-i munyɛli moni ɔ?
what/why 2s-dig-Appl-Tmls 3-dirt 3-Dem QM?
Why have you dug this dirt?

When *-eɛ* is added to a verb whose root contains /ɛ/ or /ɔ/, the situation is more complicated. In the present imperfective, perfect, near past and future tenses, the form

[13] Another tense not listed here is the far future, which is a rarely used and for which I have insufficient data.

-eɛ is retained as in the following examples. If the final vowel of the root is *-ɛ,* it is deleted at the addition of *-eɛ*, but if the final vowel is *-ɔ*, it is not deleted.

(149) njamɛ o-kɛnd-ɛk-eɛ nanɛ ɔ?
what/why 2s-walk-Impf-Appl-(FV) like.that QM
Why are you walking like that (in that manner)?

(150) ŋalana owabɛ a-m(a)-o-kɔlɔ-eɛ.
1-woman 1-Poss-2s 3s-Pft-2sO-grow-Appl-(FV)
Your wife has grown up for you.

(151) nawe o-mo-dub(ɛ)-eɛ obasɛ ɔ?
how 2s-Pst.Nr-believe-Appl-(FV) God QM?
What did you believe about God?

(152) eye e-ko-bolɛn(ɛ)-eɛ o bato ba badɔli ɔ?
what 7-Fut-happen-Appl-(FV)Prep 2-people 2-Rel 2-good QM?
What will happen to the good people?

The far past applicative forms for roots containing /ɛ/ or /ɔ/ are *-ɛl*, *-ɛlɛl*, or *-ɛɛ*. The reason for this variation is unknown, but Mbonge speakers have attested all of the following as acceptable:

(153) obasɛ a-mo-kem(ɛ)-ɛl-ɛ Eve Adam.
God 3s-Pst.Far-create-Appl-FV Eve Adam
God created Eve for Adam.

(154) njamɛ o-mo-dub(ɛ)-ɛlɛl-ɛ obasɛ ɔ?
what 2s-Pst.Far-believe-Appl-FV God QM?
What did you believe about God?

(155) njamɛ o-mo-dub(ɛ)-ɛɛ[14] obasɛ ɔ?
what 2s-Pst.Far-believe-Appl(-FV) God QM?
What did you believe about God?

[14] This is the ONLY example I have of *-ɛɛ*.

When the timeless suffix *-i* (see section 6.1) follows the applicative for roots containing /ɛ/ or /ɔ/, the result is *-ɛl-i* or *-ɛlɛl-i*. If a root does not end in *-ɛ*, the resulting form is *-ɛl-i*, as in (156):

(156) eye o-kpɛl-ɛl-i male mani ɔ?
what/why 2s-cut.down-Appl-Tmls 6-tree 6-Dem QM?
Why did you cut down these trees?

However, when a root ends in *-ɛ*, the resulting form is *-ɛlɛli* (i.e. *-ɛ + -eɛ + -i*), as in (157). Since *-eɛ + -i* is *-ɛli*, it is not surprising that *-ɛ + -ɛli = -ɛlɛli*. For more information on suffix variations triggered by the addition of the timeless suffix *-i*, see section 6.1.

(157) nawe o-dub(ɛ)-ɛlɛl-i obasɛ ɔ?
how 2s-believe-Appl-Tmls God QM?
What do you believe about God?

Finally, when the applicative *-eɛ* follows other derivational suffixes which end in *-ɛ* (such as *-isɛ*), it becomes *-ɛl* in all tenses. See section 6.4 "Other Suffix Combinations" for examples.

Some of this variation for roots containing /ɛ/ or /ɔ/ can be explained phonologically. Regular vowel harmonization in Mbonge spreads from left to right, changing all occurrences of the vowel /*a*/ following /ɛ/ to /ɛ/. The vowel /ɔ/ participates in the same harmonization process, changing all occurrences of the vowel /*a*/ following /ɔ/ to /ɔ/.

The presence of the consonant /*l*/ in the many *-eɛ* variations cannot be explained on a purely phonological basis; however, there is a historical basis. Schadeberg (1980:504) identifies *-ɛ̀d* as the Proto-Bantu form. In Mbonge, /*l*/ and /*d*/ are alternations

of the same phoneme, so *-el* and *-ɛl* are not radically different from the Proto-Bantu *-ɛ̀d*. Ittmann (1978:181) writes that Duala's applicative (*-ea*) was originally *-ela*. He notes that certain forms (such as those ending *-i*) still retain the /*l*/. When *-ea* is followed by *-ɛ*, the resulting form is *-ɛlɛ* (1978:188). This alternation operates in the opposite direction from Mbonge, but results in the same form. Ittmann (1978:182) also shows that *-ea* becomes *-eyɛ* in the present and infinitive, which corresponds closely to the Mbonge *-eɛ*.

Table 5 summarizes all the variations of the applicative suffix after verb roots.

Table 5. Variations of the Applicative Suffix (After Verb Roots)

Tense	Regular root	Root ending *-ɛ*	Root contains *-ɛ*	Root contains *-ɔ*
Present Imperfective	*-eɛ*	*-eɛ*	*-eɛ*	*-eɛ*
Perfect	*-eɛ*	(ND)	(ND)	*-eɛ*
Near Past	*-eɛ*	*-eɛ*	*-eɛ*	*-eɛ*
Future	*-eɛ*	*-eɛ*	*-eɛ*	*-eɛ*
Far Past	*-ee*	*-ɛlɛ, -ɛlɛlɛ, -ɛɛ*	*-ɛlɛlɛ*	(ND)
Far Future	(ND)	(ND)	(ND)	(ND)
Timeless	*-el-i, -elel-i*	*-ɛlɛl-i*	*-ɛl-i*	*-ɛl-i*

(ND) = No Data or Insufficient Data

As mentioned in section 3.5, it is often difficult to distinguish between the anticausative suffix *-eɛ* and the applicative suffix *-eɛ*, despite their opposite functions. The following derived verbs seem to be applicative examples:

Root:		Derived Verb:	
bɔ́k	*sense, feel, understand*	*bɔ́k-ɛ́ɛ*	*empathize (feel for)*
ká ŋg	*prohibit, refuse*	*ká ŋg-ɛ́ɛ*	*prohibit someone*
kɪ́m	*threaten*	*kɪ́m-ɛ́ɛ*	*threaten someone*
kumb	*clap, ring, beat*	*kumb-eɛ*	*clap for*
--	(no identifiable root)	*kú t-ɛ́ɛ*	*close a pot, put cover on*
--	(no identifiable root)	*lú ʉm-eɛ*	*think evil against someone*
mat	*leave, put down, stop*	*mat-eɛ*	*leave for*
ɔ́b	*beat, hit, kick, flap*	*ɔ́b-ɛ́ɛ*	*beat for*
ɔm	*say*	*ɔm-eɛ*	*tell, relate to*

--	(no identifiable root)	*sɔ́ ɲǰɔ -eɛ*	*shout at*
--	(no identifiable root)	*tak-eɛ*	*beg a favor of, apologize to*
tá ŋg	*pay*	*tá ŋg-é́ɛ*	*pay for*
ú	*come from*	*ú -é́ɛ*	*come from*

For each of the derived verbs listed below, the suffix *-eɛ* seem to have become lexicalized, and it is unknown whether it was originally anticausative or applicative.

Root:		Derived Verb:	
--	(no identifiable root)	*bɛm-eɛ*	*peep, sneak a look*
bɔ́ t	*start a new work, pioneer*	*bot-eɛ*	*start*
bol	*do, make*	*bol-eɛ*	*behave*
--	(no identifiable root)	*fɔ l-é́ɛ*	*greet in the morning*
kaŋg	*lock*	*kaŋg-eɛ*	*pack or load a container*
kpɛ	*reach, be up to*	*kp-eɛ*	*enter*
l'	*eat*	*l-é́ɛ*	*show, give advice, advise*
lal	*walk*	*lal-eɛ*	*smash*
lɪ m	*(fire) go out, die*	*ǐ m-é́ɛ*	*take a wrong turn*
m	*stop, swallow*	*m-eɛ*	*go through, exceed, overfill*
ɔ́ k	*rub oil or medicine on oneself*	*ɔ́ k-é́ɛ*	*bathe*
sak	*want, look for*	*sak-eɛ*	*prepare*
--	(no identifiable root)	*sɛs-eɛ*	*sprinkle, sow grain*
ú nd	*escort*	*ú nd-é́ɛ*	*wait*
ú ŋg	*fly*	*ú ŋg-é́ɛ*	*blow, breath out, whistle*

I now discuss whether the applicative suffix can be "stacked" when more than one argument is added. In (149) and (158), the applicative suffix is not doubled even though more than one argument has been added.

(158) a-kɔnɔ-(a)k-eɛ meleka meni o ikɔ.
3s-sing-Impf-Appl-(FV) 3-young.boy 3-Dem Prep 19-money
She sang for those young boys for money.

At first glance, the applicative variants *-ɛlɛl* and *-elel* appear to be examples of two applicative suffixes added to the same verb, but upon further investigation it is clear that they are not. In (148), the applicative variant *-elel* is used despite the addition of

only one argument (motive). The variant *-ɛlɛl* is also used with the addition of only one argument in (154), (157) and (159).

(159) njamɛ a-mo-nyɛŋg-ɛlɛl-ɛ tata ikɔ?
what/why 3s-Pst.Far-give-Appl-FV 1-father 19-money
Why did he give father money?

So, having looked at examples of sentences in which more than one argument is added to a verb's original valence and after examining the forms *-ɛlɛl* and *-elel*, I conclude that the applicative suffix in Mbonge cannot be applied more than once.

The same seems to be true of most other Bantu languages. I have not been able to find evidence that any of the Bantu languages of Cameroon allow stacking of the applicative suffix. Kimenyi (1978:87) also says that the applicative suffix *-ir* in Kinyarwanda is never doubled when more than one NP is objectivized.

Port (1981:71) did a thorough analysis of the apparent stacking of applicatives in Swahili. He examined examples that appear to have more than one applicative suffix (*-IE*) and found that there is just one productive verb suffix. He was able to distinguish the productive suffixes from "frozen lexical stems that look the same or similar". One test Port (p. 75) applied to check this is whether or not he could add the applied suffix to something that already ended in *-IE*. If the word already contained a productive *-IE*, Port found that they could not add another *-IE*. In other words, Swahili productive applied suffixes cannot be stacked, and for those which at first glance appear to have more than one suffix *-IE*, only the final one is productive. As Port (p. 82) concludes, "there are both distributional and semantic reasons for postulating a single productive applied suffix in Swahili".

On the other hand, Comrie (1985:316) claims that Wolof is unusual in that it can add more than one applicative suffix. He explains that in Wolof, when "a verb has more objects than is permitted by its basic valence, this must be coded by adding the suffix *-al* for each additional object". Later in the chapter, he shows that these can be stacked when more than one object is added (p. 330). However, the Wolof suffix *-al* is used for applicative and causative functions, and the cases in which it is doubled involve the addition of both, rather than a doubling of applicative functions.

So, it seems that Mbonge is normal in its inability to apply more than one applicative suffix to the same verb root. However, unlike some Bantu languages, Mbonge has a separate suffix (*-an*) which is employed for the addition of instrumental and accompaniment arguments. As discussed earlier, some languages include instrumental and accompaniment functions in the scope of the applicative. Since Mbonge can have both instrumental and applicative suffixes on the same verb simultaneously, this may compensate for not being able to apply the applicative more than once. The co-occurrence of the applicative and instrumental suffixes and their joint effect on valence is discussed further in section 4.3.

In summary, the Mbonge applicative suffix *-eɛ* indicates an increase in valence by adding one or more arguments to a verb. The most common additions are benefactives and recipients, but a wide variety of thematic roles can be filled by applied objects. The applicative suffix is very productive but unstable morphologically, with several variations which depend on the verb's tense and phonological structure.

4.3 Instrumental and Accompaniment (*-an*)

The suffix *-an* can be added to a verb to indicate the addition of an instrument or accompaniment noun phrase. Compare the two sentences below. The meaning is the same but in (160) the preposition *na* '*with*' is used while in (161) the suffix *-an* has been marked on the verb and the instrumental noun phrase appears in the object position without a preposition. The grammatical status of the added instrumental or accompaniment noun phrase is discussed in further detail in Chapter 7, but for the purposes of discussion, it is referred to as an "applied instrumental".

(160) besumbu u-ak-ɛ na ekɔli.
8-grass (3s)-weed-Impf-Foc Prep 7-hoe
He is clearing grass with a hoe.

(161) besumbu u-an-ak-ɛ ekɔli.
8-grass (3s)-weed-Inst-Impf-Foc 7-hoe
He is clearing grass with a hoe.

The suffix *-an* is very productive. In general, any time the preposition *na* '*with*' could be used with a following noun phrase, it is possible to use the suffix *-an* instead. Comrie (1985:318-319) makes a similar observation about two other Bantu languages: "the instrumental verbal suffix in Wolof and Luganda is so regular in its use that it more properly belongs to syntax, rather than to derivational morphology". While the Mbonge use of *-an* is highly regular with only a few lexicalized forms, it is very much still a part of the derivational morphology and participates in all the phonological processes undergone by Mbonge verbs.

I have labeled *-an* "instrumental and accompaniment, " but its scope is fairly broad. Instruments may be tangible (as in (162)) or they can be logical or abstract items (as in (163)).

(162) a-mo-l-an-a toko elɛsi.
3s-Pst-eat-Inst-FV 9-spoon 7-rice
He ate rice with a spoon.

(163) mba m-gb-an-ak-a nja wani.
mba N-w-an-ak-a nja wani.
3s 1s-die-Inst-Impf-FV 9-hunger Dem-Loc
I am dying of hunger here.

Typically, accompaniment means that a person or animate object accompanies the subject, as in the following examples:

(164) Rachel a-ko-tond-an-a babu.
Rachel 3s-Fut-play-Inst-FV 3p-friend
Rachel will play with her friends.

(165) Manfred a-ak-an-ak-a mgba o eyaŋga.
Manfred 3s-go-Inst-Impf-FV 9-dog Prep 7-farm
Manfred is going to the farm with the dog.

(166) na-mo-tat-an-a Rachel.
3s-Pst-anger-Inst-FV Rachel
I got angry with Rachel.

Accompaniment also involves inanimate or abstract objects. They may actively be participating in the action of the verb or merely be in the presence of the subject.

(167) a-ma-yo-an-a makia fɛ.
3s-Pft-vomit-Inst-FV 6-blood again
He has vomited with blood again.

(168) a-mo-kund-an-a ekpa.
3s-Pst-fall-Inst-FV 7-bag
He fell with a bag.

(169) mbea e-y-an-ak-a maliba.
9-pot 9-hot-Inst-Impf-FV 6-water
The pot is hot with water.

(170) ŋalana a-mo-kɔn-ɔn-ɔ ŋɛnyɔ.
woman 3s-Pst-sing-Inst-FV 3-happiness
A woman sang with joy.

Sometimes, when the suffix *-an* is added to a verb, a causative sense is also added. The subject causes (by persuasion or force) the object to accompany him or her:

(171) a-m-anj-a ŋgɔ. a-m-ak-an-a.
3s-Pst-take-FV 9-leopard 3s-Pst-go-Inst-FV.
He picked up Leopard and went with him.

(172) bomana ib-a-bu b-ak-an-i bɔ o cəci ya Pres.
3p-man 3p-Poss-3p 3p-go-Inst-Tmls 3pPro Prep church Asc Pres.
Their husbands have taken them to the Presbyterian church.

The suffix *-an* can also be used to add source noun phrases when they are definite and animate, as long as they would otherwise require the preposition *na*, as in (173) and (174). For source noun phrases which are indefinite, generic, inanimate or which ordinarily require the locative preposition *o*, the applicative suffix *-eɛ* is used (see (132)-(134)).

(173) Hans a-ma-ko-an-a Manfred balu.
Hans 3s-Pft-receive-Inst-FV Manfred ball.
Hans took the ball from Manfred.

(174) a-sak-ak-a d-and-an-a mba mboli.
3s-want-Impf-FV Inf-buy-Inst-FV 1sPro 9-goat
She wants to buy a goat from me.

Hedinger (1992:239) calls examples like these "separative" in that they "separate" something from someone or something (e.g. steal from, take from, get from). Compare

(174) and (175) to see an example of the difference between adding the instrumental *-an* or the applicative *-eɛ* to the same verb.

(175) a-sak-ak-a d-and-eɛ mba mboli.
3s-want-Impf-FV Inf-buy-Appl 1sPro 9-goat
She wants to buy me a goat.

In many Bantu languages of Cameroon, the scope of the equivalent of *-an* is broader than in Mbonge. Of special interest is Londo (A.11a), one of the other Oroko dialects. Like Mbonge (A.11e), Londo has a separate morpheme for reciprocal (*-ɛ̀ n*) but Kuperus (1985:203-204) identifies *-an* in Londo as "associative". She writes the following:

> The label "associative" has been chosen to cover the wide range of uses of this suffix. These include:
> applicative - do something for someone (the beneficiary)
> comitative - do something with someone (co-agent or accompaniment)
> instrumental - do something with a tool (instrument)
> - do something which can be in some way received by someone (recipient)
> - do something which removes something from someone (source)

Londo's use of *-an* for benefactive and recipient is especially surprising because of the widespread, productive use of the applicative in Mbonge. This is a significant dialectical difference.

Here are some examples of how other Bantu languages deal with instrumental and accompaniment.

Schadeberg (1980:504) says that the Proto-Bantu reciprocal *-a̰ n* has developed into reciprocal, associative, and instrumental in Nkossi (A.15B), Duala (A.24), Noho (A.32), Benga (A.34), Basaa (A.43, see also Bitjaa-Kody 1990:218), and Ewondo

(A.72a). In Akoose (Nkosi), the suffix *-ɛn* can be reflexive, instrumental, accompaniment, or separative (Hedinger 1992:238-9). Dugast (1971:244) identifies a "simultaneity" suffix *-an* for Tunen which is used when two or more people act together. Mbonge, on the other hand, has a separate reciprocal suffix (*-ɛn*) which is described in section 3.4.

For Kinyarwanda, Kimenyi (1978) describes a category called "associatives" marked with the suffix *-an* which imply both accompaniment and reciprocity. Instrumentals, however, use the same prefix (*-iish*) as causatives. Swahili's instrumental is included in the applied suffix (Port 1981:73).

Basic constituent order for Mbonge clauses involving an applied instrumental is determined primarily by the animacy hierarchy. The object highest on the animacy hierarchy (people > animals > objects) must be closest to the verb, as in (176) and (177). When there are two unmarked noun phrases of equal animacy, the applied instrumental appears immediately after the verb as in (162).

(176) Rachel a-m-ob-an-a mgba ŋele.
Rachel 3s-Pst-hit-Inst-FV 9-dog 9-stick
Rachel hit the dog with a stick.

(177) ba-mo-ful-an-a ŋana one male.
3p-Pst-bury-Inst-FV 1-child 1-Dem 6-medicine
They buried that child with medicine.

The following examples illustrate how either object can be fronted for focus. In (178), the original direct object is in focus and in (179) the applied instrumental is focus. This is very different from instrumental applied verbs in Chi-Mwi:ni, which are limited to situations where the instrument is topicalized or at least pre-supposed (Kisseberth

1977:196-197). Note too that the original direct object can be maintained as in (178) or deleted as in (179).

(178) munyeli a-lum-an-ak-ɛ esoni.
3-dirt 3s-dig-Inst-Impf-Foc 7-shovel
It's dirt that he is digging with a shovel.

(179) toku a-l-an-ak-ɛ.
spoon 3s-eat-Inst-Impf-Foc
It's a spoon she is eating with.

Above I claimed that anytime the preposition *na* '*with*' could be used, it is possible to use the suffix *-an* instead. However, sometimes the suffix *-an* and the preposition *na* are both used. In the following examples the suffix *-an* has been added to the verb, but the preposition *na* has been retained and the instrument has not moved to the position immediately following the verb.

(180) a-mo-len-an-ak-a besumbu na ibɔ ya
3s-Pst-cut-Inst-Impf-FV 6-grass Prep 9-machete Rel

i-s-ol-ak-a.
9-Neg-sharp-Impf-FV.
He was cutting grass with a machete that is not sharp.

(181) a-mo-dum-an-a eyoko na ibɔ.
3s-Pst-dig-Inst-FV 7-hole Prep 19-machette
He dug the hole with a cutlass.

(182) a-mo-l-an-a elɛsi na toko.
3s-Pst-eat-Inst-FV 7-rice Prep 1-spoon
He ate rice with a spoon.

(183) na mokomba na-mo-bolo-an-a.
Prep 3-gun 3s-Pst-kill-Inst-FV
I killed it with a gun.

It is unclear why the preposition and instrumental suffix are both used in the examples above. The default is to use one or the other, not both. Interestingly, Port (1981:75) described a similar situation in Swahili. He found that his informants could not agree whether or not a "redundant" preposition was acceptable in instrumental applicative constructions.

When the suffix *-an* is used without the preposition *na* '*with*', the instrument has the appearance of a promoted direct object. In Chapter 7, I discuss this further and claim that applied instrumentals are promoted to direct object, but there are some differences between them and other objects. However, when the suffix *-an* and the preposition *na* '*with*' are both used, it seems that the applied instrumental is not promoted to direct object but remains an oblique.

As with almost all derivational morphology, some verbs with the suffix *-an* have developed idiosyncratic, lexicalized meanings while others remain very productive. Here are some derived verbs with the suffix *-an*:

Root		Derived Verb	
ak	*go*	*á k-á n*	*resemble*
di	*sit*	*di-an*	*sit with, stay with, be pregnant*
dibó	*open*	*dibó-án*	*open with, break with*
fɔ	*come*	*fɔ-n*	*bring, come with*
kab	*share*	*kab-an*	*share with*
kam	*accept*	*kam-an*	*accept, permit, allow*
ó s	*stay home*	*ó s-á n*	*babysit, stay home with (someone)*
ɗe ŋg	*go astray, miss target*	*ɗe ŋg-á n*	*bridge, lie across, cross over*
kɛ́ ndɛ	*go, walk*	*kɛnd-ɛn*	*take along, go with, continue*

Finally, I consider some cases where both the instrumental *-an* and the applicative *-eɛ* have been added to the same verb, as in the following sentences:

(184) njamɛ a-mo-m-und-an-ak-eɛ ɔ?
what 3s-Pst-3sO-wait-Inst-Impf-Appl/Lex?-(FV) QM?
Why was he waiting for him?

(185) mba n-o-liŋg-an-el-i ndutu ene.
1sPro 1s-2sO-like-Inst-Appl-Tmls 9-work 9-Dem
I like that job for you.

(186) eye o-m-ak-an-eɛ ɔ?
what 2s-Pst-go-Inst-Appl-(FV) QM?
What did you take (lit. go with)?

In the above examples, it is unclear why both suffixes are necessary. In (184), *-eɛ* seems to be indicating motive while *-an* is probably indicating the person for whom the subject is waiting. In (185), the benefactive is marked by *-eɛ*, but *ndutu* '*work*' should not require a preposition or the suffix *-an*. In (186), *-an* is required for the accompanying object, but it is unknown why *-eɛ* is also used.

In many languages, such as Luganda, it is not possible to have both instrumental and benefactive suffixes on the same verb simultaneously (Comrie 1985:318). Although both can simultaneously appear on the verb in Mbonge, it does not seem like they are both functioning productively. This is an area that bears further investigation.

In at least some cases, the addition of both *-an* and *-eɛ* seems to be lexicalized, as in the verbs *boka* '*hear*' and *bokaneɛ* '*listen*':

(187) Na-mo-bok-a mɔ.
1s-Pst-hear-FV 3sPro
I heard him.

(188) Na-mo-bok-an-eɛ mɔ.
1s-Pst-hear-Inst-Lex-(FV) 3sPro
I listened to him.

Here are additional verbs with both *-an* and *-eɛ*:

Root		Derived Verb	
bó	*treat someone, break, hatch*	*bó-án-eɛ*	*meet someone, receive*
bók	*sense, feel, hear, undertand, smell*	*bók-án-eɛ*	*listen, taste, sense, feel*
ɪ́yó	*know*	*ɪ́yó-an-eɛ*	*be used to, accustomed to*
kit	*be same, take after, join, tell story*	*kit-an-eɛ*	*join in marriage*
tomb	*be far, be distant*	*tomb-an-eɛ*	*be far apart, far from*
faŋg	*scatter, disperse*	*faŋg-án-eɛ*	*dismiss a group of people*
--	--	*kok-an-eɛ*	*be correct, be complete*
lumb	*have an odor or scent*	*lumb-án-éɛ*	*smell something*

In summary, the instrumental suffix *-an* indicates the addition of instrumental, accompaniment, and source noun phrases to a verb's valence. The instrumental suffix does not include reciprocal functions as it does in many of the Bantu languages in Cameroon. The grammatical status of applied instrumentals is dealt with in Chapter 7. Finally, animacy constraints govern the position of instrumental constructions vìs-à-vis other consitutients.

4.4 Summary of Valence Increasing Suffixes

I here summarize the most important information about Mbonge's five valence-increasing suffixes in Table 6. Each suffix increases a verb's valence by at least one, but for different reasons and with different results.

Table 6. Valence Increasing Suffixes

Suffix	Description	Function	Treatment of Arguments
-isɛ	Causative	Show intentional, direct causation by agent (also increases transitivity)	Added to Intransitive: Add causor subject (agent). Previous subject becomes causee object (patient, experiencer or actor). Added to Transitive: Add causor subject. Previous subject becomes causee DO (or is left unspecified). Previous DO becomes secondary object (patient).
-elɛ	Causative 2	Show indirect causation by agent (also increases transitivity)	Same as *-isɛ* except causation is less direct.
-isɛlɛ	Causative 3	Show indirect causation by effector (also increases transitivity)	Same as *-isɛ* except subject is an effector not an agent.
-eɛ	Applicative	Add object or certain obliques to verb's valence	No change to subject. One of the following is added: recipient, benefactive/malefactive, theme, motive, manner, locative, or source. Those which do not require prepositions are promoted to object status. Resulting sentence order is S V AO DO where AO=applied object.
-an	Instrumental & Accompaniment	Add instrumental, accompaniment, or source noun phrase to verb's valence	No change to subject. Applied instrumental appears as object immediately following the verb unless DO is higher on animacy hierarchy. Original object also retained as an object.

CHAPTER 5

DERIVATIONAL SUFFIXES NOT AFFECTING VALENCE

This chapter discusses verbal suffixes which do not change verb valence. The suffix *-ɛn* is the only suffix in this chapter that is still productive. It is adverbial in nature, indicating intensification of the action of the verb. All of the other suffixes in this chapter are completely lexicalized and have become inseparable from the verb root. Some of the verbs derived with these lexicalized suffixes still have a recognizable semantic relationship with the root, but many have developed their own idiosyncratic meanings. A comparison of Mbonge suffixes to Proto-Bantu reconstructions is also made at the end of this chapter.

5.1 Intensity (*-ɛn*)

The suffix *-ɛn* is added to a verb to indicate an increase in the intensity or degree of the verb. In (190) there is no change in valence, only in degree.

(189) ŋgoa e-lit-ak-a.
9-pig 9-heavy-Impf-FV
The pig is heavy.

(190) ŋgoa e-lit-ɛn-ɛk-ɛ.
9-pig 9-heavy-Int-Impf-FV
The pig is very heavy.

Verbs derived with *-ɛn* are often translated into English using some of the following words: *very*, *so much*, *so many*, *enough*, *often* or *too much*. Here are a few examples:

(191) mbua e-tumb-ɛn-ɛ.
9-rain 9-be.many-Int-FV
There is so much rain.

(192) na-ma-kot-ɛn-ɛ.
1s-Pft-tire-Int-FV
I am very tired.

(193) ndiŋgɛ ya tata e-tiŋg-ɛn-ɛ.
9-love 9-Asc 1-father 9-enough-Int-FV
The love of the Father is more than sufficient.

The intensification suffix *-ɛn* can be applied very productively to many verbs. Sometimes, however, the meaning of the derived verb contains additional elements. Some of the following derived verbs have an obvious relationship to their root, while others have taken on a more specific, lexicalized meaning:

Root		Derived Verb	
bok	*hear, sense*	*bok-ɛn*	*obey*
boŋg	*join*	*boŋg-is-ɛn*	*prepare*
bɔ-lɛ	*misplace, lose*	*bɔ-lɛ-n*	*lose*
kos-an	*join, gather*	*kos-ɛn*	*arrange*
---	---	*kɔmbɛl-ɛn*	*arrange a meeting*
kɔŋgɛl-ɛ	*think*	*kɔŋgɛl-ɛn*	*remind*
oŋg	*safe*	---	---
oŋgo	*carry away*	*oŋgo-ɛn*	*help, protect*
us-ɛ	*miss target*	*us-ɛn*	*sin*

In addition to the suffix *-ɛn* that indicates intensity, there is a suffix *-ɛn* which occurs when the verb contains the relative time prefix *e-*. The sense of the combination *e- … -ɛn* is '*since*'. This combination seems to be in the process of being replaced by borrowing the English conjunction '*since*', especially by the youth. The following sentences are the only examples I have of this combination of *e-* with *-ɛn*.

(194) eye Judith a-bol-ak-ɛ ɔ, e-m-is-ɛn-ɛ
what Judith 3s-do-Impf-Foc QM (3s)-RT-stop-Caus-RT-FV

d-ona diyonda?
Inf-plant 5-crops
What has Judith been doing, since she finished planting?

(195) Rachel e-toko-ɛn-ɛ a-sa-bok-ak-a ŋɛnyɔ.
Rachel (3s)-RT-get.up-RT-FV 3s-Neg-feel-Impf-FV 9-happiness
Since Rachel woke up, she has not been happy.

(196) w-e-m-is-ɛn-ɛ sekulu eye o-bol-ak-ɛ ɔ?
2s-RT-stop-Caus-RT-FV school what 2s-do-Impf-Foc QM?
What have you been doing since you finished school?

Mbonge has another relative time prefix *ka-* '*prior to*' which is added to a verb to indicate that something will happen prior to it. The suffix *-ɛn* is not added to these verbs. Instead, the subjunctive final vowel *-e* is added to the verb because of the uncertainty of its eventual realization.

I have been unable to find any other Bantu languages with the same kind of relative time affix combination as described here. However, Hedinger describes a verb construction with an "echo verb". In these cases a verb form appears at the end of the clause which repeats the main verb root and has the suffix *-ɛn* added. He states that these constructions "have a range of functions which have not yet been explored". It is possible that the Akoose "echo" verb which is dependent on an earlier verb in the sentence is related to the Mbonge relative time verb.

5.2 Inversive (*-o*, *-u*)

Schadeberg describes two inversive suffixes in reconstructed Proto-Bantu: *-ó d* "transitive inversive" and *-ó k* "intransitive inversive". He says that the transitive

inversive can still be found as -*wá* in Duala (A.24), -*wa* in Noho (A.32), -*uwa* in Benga (A.34), and -*Vl* in Basaa (A.43) (1980:504).

The inversive suffix has been defined as follows: "the action or state described by the verb is the inverse of the action or state expressed by the original verb" (Dugast 1971:237, my translation). Usually, this is a matter of expressing the opposite of a quality or the reverse of an action[15].

Mbonge has a few remaining examples of an inversive suffix (-*o* or -*u*), which is used on both transitive and intransitive verbs. This suffix is completely lexicalized and does not affect the verb's valence. While there are over 40 known verbs ending -*o*-*a* and over 25 ending -*u*-*a*, an underlying root cannot be identified for most of them. The following are the only ones for which I could identify an inversive relationship with an existing root. (Some of these roots include other frozen derivations and the original root has been lost.)

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[15] This is, thus, not the same as those inverse constructions that swap the subject and object. Payne (1997:209) calls such inverses "valence rearranging" devices, since they "invert" the normal alignment between semantic roles and grammatical expression of those roles, but result in the same number of arguments. The Bantu inversive described here, however, does not "rearrange" valence. The subject and object are unchanged and the semantic meaning of the verb is inverted, resulting in its own opposite.

Root		Derived Verb	
ɛ́ ny	*be tough, hard*	*ɛ́ ny-ó*	*stretch (be pliable)*
ikáˈl	*cover something*	*íˈk-ó*	*open, uncover*
káˈmb	*be sticky, stick together*	*káˈmb-ó*	*tear, rip apart*
kil-ɛ	*cook*	*kil-o*	*remove food from the fire*
kol-ɛ	*ignite, light match*	*kol-o*	*be lit, catch on fire*
kut-eɛ	*close, cover*	*kut-u*	*open, remove cover*
lib	*close, lock*	*lib-o*	*open, unlock*
túˈt	*cover, put on, push*	*túˈt-ú*	*remove, take off*

The following derived verbs probably come from the roots listed below, but they have developed unique meanings which are not predictable from the combination of the root and inversive suffix:

Root		Derived Verb	
`aˈb	*stroll, turn around, pace*	*áˈb-ó*	*turn (yourself) around; turn from*
fak	*scatter*	*fak-o*	*prune trees, open blocked path*
kúˈnd	*fall, fail*	*kúˈnd-ú*	*fall from sitting or standing position*
ómb-ɛ́	*give to me*	*ómb-ó*	*plead, beg, ask for*
sin	*trim around the face*	*síˈn-ó*	*trim hair, flowers, etc*
ý	*bear fruit or child, be hot*	*y-ó*	*vomit*

Kuperus (1985:193-194) identifies the suffix *-w* in Londo as "reversive", saying that is a tentative label based on only a few verb pairs. She also suggests that the diachronic source of the glide /*w*/ is /*o*/. Finally, she comments that "this suffix, being lexicalized, is inseparable from the radical, and takes the left-most position in a series of suffixes".

The Mbonge inversive suffix is also inseparable from the radical. This is quite different from suffixes like the anticausative *-eɛ*, in which both productive and lexicalized applications of the suffix can be separated from the root by other suffixes. The inversive suffix has truly been incorporated into the most basic verb stem.

5.3 Ancient Causative (*-ɛ*)

The verbal ending *-ɛ* can be found in many verb stems but is not a productive suffix. Hedinger (1992:240) says this about the same ending in Akoose: "This extension is found in many lexical items as part of the verb stem but without an identifiable meaning."

Ittmann (1978) describes this same affix in Duala as an ancient causative form that is no longer employed productively. One example he gives is *lond-a* '*be full*', which becomes *lond-ɛ* '*fill*'. Mbonge has this exact same pair. Here are some identifiable Mbonge pairings:

Root		Derived Verb	
ǐɪm	*(fire) go out, die*	*ǐɪm-ɛ́*	*put out (fire), extinguish*
ǐɪmb	*argue, refuse to do, deny*	*ǐɪmb-ɛ́*	*argue*
ǐo nd	*be full*	*ǐo nd-ɛ́*	*fill*
ɔ́ŋgɔ́ t	*pull, draw, breathe in*	*ɔ́ŋgɔ́ t-ɛ*	*crawl, pull oneself along*
timb	*come back*	*timb-ɛ*	*put back*
fɪb	*be spoiled, be wasted*	*fɪb-ɛ́*	*spoil, waste*

Over 25 verb stems end in *-ɛ* but do not have a corresponding root. The following seem to correspond to a root but the derived forms have developed independent meanings:

Root		Derived Verb	
á ŋg	*fry*	*á ŋg-ɛ́*	*hang, tie, stake*
an	*fight*	*an-ɛ*	*dry, put out to dry*
and	*buy*	*and-ɛ*	*thank*
ful	*bury*	*ful-ɛ*	*gut fish, remove pus*
kǒ t	*become tired*	*kǒ t-ɛ́*	*intoxicate, cause side-effects*
kú l	*make arrangement, agree to meet*	*kǔ l-ɛ́*	*be satisfied, finish*
kú nd	*fall, fail*	*kú nd-ɛ́*	*forget*
ǐe n	*cut across width or grain*	*ǐe n-ɛ́*	*stop (raining, talking)*
u	*weed, clear weeds*	*u-ɛ*	*roast*
ú l	*satisfy, tired of, fed up, fill with*	*ú l-ɛ́*	*take away, castrate, initiate*

5.4 Lexicalized *-i*

The ending *-i* can be identified on numerous verbs, but a consistent meaning is not apparent:

Root		Derived Verb	
--	--	*l-i*	*stay, reside, live at, sit*
--	--	*ny-ɪ́*	*ignore, neglect*
nyɔl	*smooth or iron something*	*nyɔl-i*	*level, smooth (cement, wood, etc.)*
[English "to pump"]		*pɔ́ mb-ɪ́*	*spray, pump (chemicals)*
[English "to sign"]		*sá n-ɪ́*	*sign*
--	--	*s-i*	*grind with mortar and pestel*
--	--	*sik-i*	*cut easily, slice through*
sis	*trim a flowering bush*	*sɪ́s-ɪ́*	*trim a flowering bush*
tat	*get angry*	*tat-i*	*suffer*
--	--	*t-í*	*crack open (a nut)*
--	--	*fɪ́t-ɪ́'*	*be small*
--	--	*tond-i*	*pace, wait impatiently*

5.5 Lexicalized *-ɛl*

The ending *-ɛl* can be identified on numerous verbs but its function is no longer apparent. Its origin may be related to either *-elɛ* '*indirect agent causative*' or *-eɛ* '*applicative*', but the verbs below have developed their own meanings which are not simply a change in transitivity.

Root		Derived Verb	
bɛ	*butcher, cut up meat*	*bɛ-l*	*blame*
bɔ́k	*sense, hear, feel, smell*	*bɔ́k-ɛ́l*	*feel pain*
ɛ́k-ɛ́	*catch water*	*ɛ́k-ɛl*	*lean something*
--	--	*ɛ́l-ɛ́l*	*branch off*
--	--	*is-ɛl*	*let loose*
--	--	*kɛ́ny-ɛ́l*	*lie on one's back*
kɔŋg	*keep*	*kɔŋg-ɛl*	*think*
--	--	*lúm-ɛ́l*	*show*
--	--	*súk-ɛ́l*	*prop up, support*
túb	*prick, inject*	*túb-ɛ́l*	*blame*

5.6 Comparing to Proto-Bantu and Other Bantu Languages

Table 7 summarizes the Mbonge suffixes compared to Proto-Bantu reconstructions of verbal extensions. I have included the reconstructions of both Meeussen (1967:92) and Schadeberg (1980:504).

Table 7. Comparison to Proto-Bantu Suffixes

Mbonge	Description	Meeussen	Schadeberg	Proto-Bantu label
-isɛ *-elɛ* *-isɛlɛ* *-ɛ*	causative - default causative - indirect agent causative - indirect effector causative - lexicalized	*-ɪ̀-, -ic-*	*-ɪ̀-, -ic-*	causative
-eɛ	applicative	*-id-*	*-ɛ̀d -*	applicative
--	--	*-ik-*	*-ɛ̀k-*	positive/impositive
-eɛ	anticausative	*-ik-*	*-ɛ̀k-*	neuter
-am	stative	*-am-*	*-à m-*	stative
-an *-ɛn with a-*	instrument, accompaniment reciprocal	*-an-*	*-à n-*	reciprocal
--	--	*-ad-*	*-à d-*	(function unidentified)
--	--	*-at-*	*-à t-*	contactive
-o	inversive	*-ud-*	*-ò d-*	inversive/reversive (tr.)
-o?	inversive	*-uk-*	*-ò k-*	inversive/reversive (intr.)
-ab	passive	*-u-*	*-ó -*	passive

In addition to the above suffixes, Mbonge also has the following:

-ɛ (with *a-*)	reflexive
-ɛn	intensity
-i	lexicalized
-ɛl	lexicalized

Few Bantu languages seem to have more derivational suffixes than Mbonge. However, here are some suffixes employed by other Bantu languages in Cameroon that are not used in Mbonge:

- The diminutive is marked by *-ɛl* in Tunen (Dugast 1971:233) and *-ɛd/-id* in Nugunu (Orwig 1989:290). So far, I haven't found any marking of diminutive in Mbonge (except by intensifying the verb *titi* '*be small*').

- Basaa has a habitual suffix which can only be used with animate patients (and is, thus, not very productive). It "signifies that the subject has the habit of acting in the same way towards everything" (Bitjaa 1990).
- Nugunu uses the suffix *-an/-en/-ɔn* to indicate habitual or repeated action and also plural objects (Orwig 1989:293).

CHAPTER 6

COMPLEX COMBINATIONS OF VERB SUFFIXES

This chapter describes some of the complications that arise when two or more suffixes are added to the same verb root. Interactions of the timeless suffix *-i*, the imperfective suffix *-ak*, and the applicative suffix *-eɛ* with other suffixes are discussed because of the various surface forms that result when they combine. Finally, the ordering of derivational suffixes and their combined effect on valence is examined.

6.1 Timeless Suffix (*-i*) Combined With Other Suffixes

Since most phonological processes in Mbonge operate from left to right, the various final vowels do not usually affect the derivational suffixes in a significant way. However, the timeless suffix *-i* has several forms, depending on the phonological environment, and it sometimes affects the material which precedes it, resulting in numerous surface forms. Here is a summary of the phonological rules involved when the timeless suffix *-i* is added.

Normally *-i* is added to the verb in the final vowel position instead of the default final vowel *-a*, as in the following examples:

Root	Gloss	3rd Person Timeless
liŋg	*like*	*a-liŋg-i*
kɛnd	*walk*	*a-kɛnd-i*
sɔl	*go to bush*	*a-sɔl-i*

Following CV roots that end in *ɛ* or *ɔ*, *-i* becomes *-li*.

Root	Gloss	3rd Person Timeless
bɛ	*be*	*a-bɛ-li*
fɔ	*come*	*a-fɔ-li*

Following CV roots that end with a vowel other than *ɛ* or *ɔ*, *-i* gets deleted.

Root	Gloss	3rd Person Timeless
lu	*have*	*a-lu*

Following roots that consist of only C, *-i* becomes *-eli*.

Root	Gloss	3rd Person Timeless
d	*eat*	*a-d-eli*
w	*die*	*a-w-eli*

On roots that have incorporated *-eɛ*, the resulting timeless form is *-ɛli*[16] or *-eli*.

Root	Gloss	3rd Person Timeless
kokan-eɛ	*be correct*	*a-kokan-ɛli*
bot-eɛ	*start*	*a-bot-ɛli*
boan-eɛ	*meet*	*a-boan-eli*
kp-eɛ	*enter*	*a-kp-eli*

Despite all these rules, there are still exceptions. The following are irregular:

Root	Gloss	3rd Person Timeless
u	*come from*	*u-w-ɛli*
di	*sit*	*a-di-ɛ*
be	*sew*	*a-be-́e li*
ak	*go*	*a-ak-ɛ*
kp-ɛ	*reach*	*a-kpɛ*

[16] There are several possible explanations for this variation, including transcription errors, free variation, and speaker variation. However, there is some evidence that if *-eɛ* is an integral part of the word (i.e. it occurs in lexicalized words or as the anticausative suffix) before productive suffixes are applied, then the resulting suffix is *-ɛli*. Some of the data needs to be re-checked with more than one speaker to investigate this fully.

The variations given above are the result of adding *-i* to verb roots. The same variations occur when *-i* follows the following suffixes: inversive *-o/-u*, ancient causative *-ɛ*, lexicalized *-i*, lexicalized *-eɛ*, and anticausative *-eɛ*. Most of these, of course, have simply become a part of the root.

When other derivational suffixes are added to the root before the suffix *-i*, further complications arise. For suffixes that take the usual -VC shape, the timeless suffix remains *-i*, but for those which end in a vowel, the following variations occur.

The timeless suffix *-i* is deleted after the following suffixes which end in *-ɛ*: reflexive *-ɛ* (with *a-*), causative *-isɛ*, indirect causative by agent *-elɛ*, and indirect causative by effector *-isɛlɛ*.

When the timeless suffix *-i* follows the applicative suffix *-eɛ*, the result is *-el-i* or *-elel-i*, unless the verb root contains /ɛ/ or /ɔ/. Then, the resulting combination is *-ɛl-i*. If the root ends in *-ɛ* and is followed by the applicative suffix *-eɛ*, the result is *-ɛlɛl-i* when the timeless suffix is added. See section 4.2, examples (156) and (157).

Table 8 summarizes the various forms of the timeless suffix *-i* and the derivational suffixes that it affects.

Table 8. Variations of the Timeless Suffix

Root	With Derivational Suffix	Result When *-i* Is Added
ends VC	--	*-i*
C only	--	*-eli*
Cɛ, Cɔ	--	*-li*
other CV	--	delete *-i*
CVCV	--	delete *-i*
(CV)C-eɛ	--	*-ɛli* (& *-eli*)
any root	reflexive *-ɛ* causative *-isɛ* indirect causative *-isɛlɛ* change intr. to trans. *-elɛ*	delete *-i*
CɛC, CɔC, CɔCɔ	applicative *-eɛ*	*-ɛli*
other CVC	applicative *-eɛ*	*-eli/eleli*
CVCɛ	applicative *-eɛ*	*-ɛlɛli*

6.2 Interactions with Imperfective Aspect (*-ak*)

As mentioned in section 2.1, the suffix *-ak* '*imperfective*' occurs between the two causative suffixes *-isɛ* and *-elɛ* when they are both marked on a verb to form the indirect, effector causative *-isɛlɛ*.

(197) owa o-kɔn-isɛ-k-ɛl-ɛ bana.
owa o-kɔn-isɛ-ak-elɛ-a bana
2sPro 2s-sing-IND.Caus3-Impf-Caus3-FV 2-children
You are the one causing children to sing.

The resulting surface form (*-isɛkɛlɛ*) is the same as that which results when the applicative *-eɛ* follows *-isɛ* and *-ak* (see also footnote 9, p. 53).

(198) boyo bunya o-foko-n-dimb-isɛ-k-ɛl-ɛ?
boyo bunya o-foko-n-timb-isɛ-ak-eɛ-a
14-Dem 14-day 2s-Fut.Far-1sO-return-Caus-Impf-Appl-FV?
When will you refund it to me?
(lit. What day will you cause it to be returning to me?)

The suffix *-ak* also occurs before lexicalized instances of the suffix *-eɛ*.

(199) nja und-ak-eɛ ɔ?
who (3s)-wait-Impf-Lex-(FV) QM?
Who is waiting?

(200) kp-ak-eɛ-ni.
enter-Impf-Lex-(FV)-2p
Enter (you plural).

The following list of verbs and corresponding example sentences illustrates how *-ak* occurs between various derivational suffixes (also see Table 2 in section 2.1).

Verb	Suffix(es)	Gloss	Example
bó k-á	default FV	*sense, feel, hear, understand, smell*	(201)
bó k-á k-á	imperfective	*is sensing, is feeling, (etc. as above)*	(202)
bó k-éɛ	applicative	*empathize*	(203)
bó k-éɛ	anticausative	*be heard, be sensed*	(204)
bó k-é l-é	(lexicalized)	*feel pain*	(205)
bó k-á n-eɛ	instrument, appl	*listen, taste, sense, feel*	(206)
bó k-é n-ɛ	intensity	*obey*	(207)
a-bó k-é n-ɛ	reflexive	*hear one another*	(208)

(201) na-ma-bok-a.
1s-Pft-hear-FV
I have heard (you).

(202) a-bok-ak-a ŋɛnyɔ.
3s-feel-Impf-FV 3-happiness
He is happy (lit. he is feeling happiness).

(203) ... lokili la obasɛ a-lo-bok-ak-eɛ ...
19-kindness 19-Rel God 3s-1pO-feel-Impf-Appl-(FV)
the kindness God feels for us

(204) ŋga mbua e-yɔ-k-ɔ, e-bok-ak-eɛ o bacani.
if/when 9-rain 9-come-Impf-FV 9-hear-Impf-AntiC-(FV) Prep 2-roof
When the rain comes, it is heard on the zinc roofs.

(205) ŋana wa eyɔli a-bok-ɛl-ɛk-ɛ
1-child 3-Asc 7-hawk 1s-feel-Lex-Impf-FV
Hawk's child was feeling pain.

(206) bok-an-ak-eɛ-ni ndeako ya basaŋganyu.
listen-Lex-Impf-Lex-(FV)-2p 9-advice 9-Asc 2-parents
Listen to your parents' advice.

(207) a-sa-bok-ɛn-ɛk-ɛ a-sa-dol-i.
3s-Neg-hear-Int-Impf-FV. 3s-Neg-good-Tmls.
It is bad to disobey. (lit. He is disobeying. It is not good.)

(208) lo-sa-a-bok-ɛn-ɛk-ɛ.
1p-Neg-RO-hear-Rfx-Impf-FV
We don't hear one another.

6.3 Applicative (*-eɛ*) With Other Derivational Suffixes

The addition of the applicative suffix to different verb roots was described in section 4.2. The combination of the applicative and the timeless suffix *-i* was examined in section 6.1. In this section, I describe one additional variation when the applicative is added following certain derivational suffixes.

When the applicative *-eɛ* follows other derivational suffixes which contain /ɛ/, it becomes *-ɛl* in all tenses. This is true for suffixes that have undergone vowel harmonization such as *-ɛk* (from *-ak*), as well as for suffixes that normally end in *-ɛ* such as *-isɛ* and *-elɛ*.

(209) nawe o-kilɛ-k-ɛl-i bolaŋga ɔ?
how 2s-cook-Impf-Appl-Tmls 14-fufu QM?
How do you cook fufu?

(210) a-sak-ak-a di-kab-isɛ-(ɛ)l-ɛ mba mboli.
3s-want-Impf-FV Inf-share-Caus-Appl-FV 1sPro 9-goat
She wants to sell me a goat.

(211) lo-k-oko-lɛ-(ɛ)l-ɛ bana njea ya mokɔlɔnɔ.
lo-ko-oko-elɛ-eɛ-a bana njea ya mokɔlɔnɔ
2p-Fut-learn-Caus2-Appl-(FV) 2p-child 9-way 9-Asc new
We will teach (lit. cause to learn) the children a new way.

When the suffixes *-isɛlɛ* + *-eɛ* + *-i* are combined, the result is *-isɛlɛlɛ* instead of *-isɛlɛli* as would be expected. Normally, the suffix *-i* deletes after *-isɛ* and *-isɛlɛ*, but not after *-eɛ*.

(212) nja a-y-isɛlɛ mbea ene ɔ?
who 3s-be.hot-Caus3 -(Tmls) 9-pot 9-Dem QM?
Who has caused this pot to be hot?

(213) nja o-y-isɛlɛ-lɛ mbea ene ɔ?
who (3s)-2sO-be.hot-Caus3-Appl-(Tmls) 9-pot 9-Dem QM?
Who has caused this pot to be hot for you?

6.4 Multiple Derivational Suffixes and Valence Change

Kuperus (1985:22) put it well when she said, "Bantu languages typically have a wide range of possibilities of derivation and flexion expressed by strings of mainly monosyllabic morphemes". In this paper, I have identified ten derivational suffixes in Mbonge, not counting the four frozen derivational suffixes, the imperfective aspect suffix, four final vowels, and the second personal plural suffix. Many of these suffixes can co-occur with other suffixes, creating numerous possibilities for verb endings. The ordering of verb suffixes is shown in Table 9 (cf. Table 2, p. 10).

Table 9. Order of Derivational Suffixes

Frozen suffixes: *-o/u* *-ɛ* *-i* *-ɛl*	*-am* Stat	*-isɛ* Caus *-elɛ* Caus2	*-ab* Pass	*-an* Inst *-ɛn* Rec *-ɛn* Int *-ɛn* RT	*-ak* Impf	*-eɛ* Appl *-eɛ* AntiC *-eɛ* Lex *-ɛ* Rfx *-(isɛ)lɛ* Caus3	*-a* FV *-i* Tmls *-ɛ* Foc *-e* Subj	*-ni* 2p

Except for the suffixes in the first column, which have been fully incorporated into the verb stem, the others can be separated from the root by other suffixes. Even those

suffixes and suffix combinations which seem lexicalized (*-eɛ*, *-am-eɛ*, *-an-eɛ*) function morphologically as if they are productive.

Bantu languages are well known for the agglutinative nature of their verbs and Mbonge is no exception. Hedinger (1992:236) says the following about Bantu languages in Cameroon:

> It seems to be a common occurrence in Bantu languages that more than one extension may occur with a root to form a verb stem (Meeussen 1967:92). Both geographically and linguistically close Bantu languages allow for two or more extensions to occur: cf. Balondo (Bantu A.11, Kuperus 1982:19, 1985: 207-213), Nugunu (Bantu A.62, Orwig 1989) and Basaa (Bantu A.43, Lemb and de Gastines 1973:35).

For Mbonge, any number of the suffixes in Table 9 can theoretically be applied to the same verb as long as only one suffix is selected from each of the above position classes, with the exception of the causatives. The causative suffixes *-isɛ* and *-elɛ* can be used together to form a third causative *-isɛlɛ*. When that happens the suffix *-elɛ* occurs in the position immediately following *-ak*; otherwise *-elɛ* occurs in the same position as *-isɛ*.

Table 10 shows all attested suffix combinations thus far (from a corpus of over 3000 sentences and a 2400 word lexicon). Table 11 shows all the attested suffix combinations of the valence-changing suffixes.

Table 10. Attested Combinations of Suffixes

	Derivation Position 1						Aspect	Derivation Position 2			Final Vowel				2 Plural
	am	isɛ	elɛ	ab	an	ɛn[17]	ak	eɛ Appl	eɛ AntiC	ɛ Ref	i	a (ɛ, ɔ)	ɛ Foc	e Subj	ni
am		amisɛ amisɛbɛ		amisɛbɛ					ameɛ (ɔmeɛ)		ami	ama			
isɛ			isɛlɛ isɛkɛlɛ	isɛbɛ isɛbɛkɛ		isɛnɛ	isɛkɛ isɛkɛlɛ	iselɛ isekɛlɛ iselelɛ			(deletes)	(deletes)			iseni iseleni
elɛ				(e)lɛbɛ (e)lɛbɛkɛ			(e)lɛkɛlɛ	elelɛ elekɛlɛ iselelɛ			(deletes)	(deletes)			
ab					abana	abɛnɛ	abaka (ɔbɔkɔ) abakɛ	abeɛ abelɛ abɛli abelɛ	abeɛ		abi abɛli	aba abaka	abakɛ	abe abakɛ	
an							anaka (ɛnɛkɛ, ɔnɔkɔ) anakani anakɛ (ɔnɔkɛ) anake anakeɛ anakeɛni	aneɛ anakeɛ aneli	aneɛ aneɛni anakeɛ anakeɛni		ani aneli	ana anaka	anakɛ (ɔnɔkɛ)	ane anake	anakani aneɛni anakeɛni
ɛn							ɛnɛkɛ ɛnɛkɛni	ɛneɛ				ɛnɛ ɛnɛkɛ ɛnɛkɛni			ɛnɛkɛni
ak								akeɛ (ɛkeɛ, ɔkeɛ) ɛkɛlɛ akee akɛli (ɛkɛli)	akeɛ akeɛni		aki	aka	akɛ	ake akeɛ	akeɛni akeni
eɛ Appl											eli eleli ɛli ɛlɛli iselelɛ	(deletes) ɛɛ ɛlɛ ɛlelɛ	(deletes)	ee	eɛni
eɛ AntiC											ɛli	(deletes)	(deletes)		eɛni
ɛ Ref											(deletes)	(deletes)			

[17] This table contains a single -*ɛn* suffix although three functions have been distinguished: intensity, reciprocal (*a-* … *-ɛn*), and 'since' (*e-* … *-ɛn*).

Table 11. Attested Combinations of Valence-Changing Suffixes

	Derivation Position 1						Derivation Position 2		
	am	isɛ	elɛ	ab	an	ɛn[18]	eɛ Appl	eɛ AntiC	ɛ Ref
am		amisɛ amisɛbɛ		amisɛbɛ				ameɛ (ɔmeɛ)	
isɛ			isɛlɛ	isɛbɛ		isɛnɛ	isɛlɛ isɛlɛlɛ		
elɛ				(e)lɛbɛ			elɛlɛ isɛlɛlɛ		
ab					abana	abɛnɛ	abeɛ abɛlɛ abɛli abelɛ	abeɛ	
an							aneɛ aneli	aneɛ aneɛni	
ɛn							ɛneɛ		

In the remainder of this chapter, I consider the effect of applying more than one valence-changing suffix to the same verb. With so many possible combinations, how does the application of more than one valence-changing suffix affect a verb's overall valence? Since there are ten[19] possible suffixes affecting a verb's valence, the potential combinations are complex. The impact of each valence-affecting suffix has been discussed in Chapter 3 or 4, but here I discuss their interaction.

Below I examine a sampling of valence-affecting suffix combinations to see if the resulting verb valence can be predicted from the "sum of the parts". Example sentences have been repeated here for the reader's convenience.

In (214) *-am* and *-isɛ* have been added to the transitive verb *telɛ* "*open*". Since *-am* decreases valence by one and *-isɛ* increases it by one, the resulting derived verb is still transitive.

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[18] The only *-ɛn* suffix that is valence changing is the reciprocal *e- … -ɛn*.
[19] The suffix *-isɛlɛ* is shown separately in Table 10 since it is a combination of *-isɛ* and *-elɛ*

(214) a-mo-tel-am-isɛ muna.
3s-Pst-open-Stat-Caus-(FV) 3-door
He caused the door to open.

In (215) *-am, -isɛ,* and *-ab* have been added to the transitive verb *telɛ* "*open*". The suffix *-am* decreases valence by one, *-isɛ* increases it by one, and *-ab* decreases it by one, resulting in a net loss of one, i.e. an intransitive verb.

(215) muna mo-tel-am-isɛ-(a)b-ɛ.
3-door 3-open-Stat-Caus-Pass-FV
The door has been caused to be open.

In (216) *-isɛ* and *-ab* have been added to the transitive verb *ɔkɔ* "*rub, apply*". Since the suffix *-isɛ* increases valence by one and *-ab* decreases it by one, the derived verb is still transitive (although the free translation into English does not capture this fact).

(216) n-dabo e-mɔ-ɔk-is-ɛb-ɛ lɔki.
9-house 9-Pst-apply-Caus-Pass-FV 5-paint
The house was painted (with) paint.

In (217) *-ab* and *-an* have been added to the transitive verb *oba* "*hit*". The suffix *-ab* decreases valence by one and *-an* increases it by one, resulting in a clause which appears to be transitive.

(217) Santana a-m-ob-ab-an-a Rachel na ŋele.
Santana 3s-Pst-hit-Pass-Inst-FV Rachel with/by stick
Santana was hit by Rachel with a stick.

In (218) *-ab* and *-eɛ* have been added to the transitive verb *ya* '*bear*'. Since the suffix *-ab* decreases valence by one and *-eɛ* increases it by one, the prediction is no overall change to valence. In this case, however, the resulting clause is intransitive,

because valence has been increased by adding an oblique locative to the arguments of the verb rather than a direct object.

(218) na-mo-y-ab-el-ɛ o America.
1s-Pst.Far-bear-Pass-Appl-FV Prep America
I was born in America.

In (219) *-an* and *-eɛ* have been added to the intransitive verb *aka* "*go*". The suffix *-an* increases valence by one and the applicative *-eɛ* normally also increases it by one, so a ditransitive verb would be expected. An accompanying object has been added to the clause as indicated by *-an*, but *-eɛ* does not seem to be indicating the addition of any arguments. As was discussed in section 4.3, it does not seem like *-an* and *-eɛ* can both function productively on the same verb.

(219) eye o-m-ak-an-eɛ ɔ?
what 2s-Pst.Nr-go-Inst-Appl-(FV) QM?
What did you take with you? (lit. What did you go with?)

The verb *undeɛ* "*wait* " in (220) includes the suffix *-eɛ*, but has developed a lexicalized meaning. Despite this, the suffix *-eɛ* splits off from the root when other derivations are added. In this example, *und-eɛ* combines with the instrumental suffix *-an* to indicate the addition of an accompanying person. Since *-eɛ* seems unproductive, one would expect the total increase in valence to be one. However, besides the added object, a motive is also added to the clause.

(220) njamɛ a-mo-m-und-an-ak-eɛ ɔ?
what 3s-Pst-3sO-wait-Inst-Impf-Appl/Lex-(FV)? QM?
Why was he waiting for him?

Example (221) shows the addition of *-elɛ* and *-eɛ* to the intransitive verb *okoa* "*learn*". Each suffix indicates an increase in valence, resulting in a net addition of two

arguments. In this case, both manner and recipient are semantic additions to the verb, but the recipient object is left unspecified.

(221) nawe o-ko-lɛ-k-ɛl-ɛ ɔ?
nawe o-ko-elɛ-ak-eɛ-a ɔ?
how 2s-learn-Caus2-Impf-Appl-FV QM
How does he teach?

From this sampling, it can be seen that, even when combined with other valence-changing suffixes, Mbonge suffixes behave in a fairly predictable manner. The maximum number of objects seems to be two, but verbal suffixes can also indicate the addition of noun phrases of instrument, motive, manner, etc. or locative obliques to a verb's valence. Occasionally, certain combinations of suffixes with similar functions (such as *-eɛ* and *-an*) may result in fewer changes to a verb's final valence than would be expected. However, on the whole, Mbonge derivational suffixes have a direct impact on the verbal valence.

In summary, Mbonge is classical Bantu in its agglutinative nature, allowing for the co-occurrence of several derivations on the same verb stem. Despite the fact that some of these derivations are becoming increasingly lexicalized, all but a few still participate in all of the morphological verb-forming processes. Valence-changing suffixes may combine with each other, resulting in complex changes to the verb's valence. With only a few exceptions, these changes to valence are predictable by adding together the various changes implemented by each suffix. This rich morphology allows for enormous semantic and syntactic flexibility with a limited number of verb roots.

6.5 Residue

During the course of this study, several areas have surfaced which need additional data or further investigation. A few of these areas are summarized here.

The "objects" of apparent tertiary passives need to be tested to determine their grammatical status.

The subject of the stative sentence (222) seems to be more active than a prototypical patient. The derived verb *fend-am* '*put on, climb on*' is not what would be expected from the root *fend* '*put on top of*'. Sentence (222) should be rechecked to see if fish got on monkey's back of his own accord or if he was placed there by someone.

(222) ndɔndi e-mo-fend-<u>am</u>-a o mbusa ya kema.
9-fish 9-Pst-put.on-Stat-FV Prep 9-back 9-Asc 9-monkey
Fish got up on monkey's back..

The underlined suffixes in (223) and (224) have been analyzed as variations of the applicative, but there is no motivation for the final vowel *-ɛ*. The verb *ya* '*bear*' may be idiosyncratic or there may be something else going on.

(223) e-yo mboka o-mo-y-ab-<u>el-ɛ</u> ɔ?
9-Dem 9-village 2s-Pst-bear-Pass-Appl-FV QM?
Which village were you born (in)?

(224) na-mo-y-ab-<u>el-ɛ</u> o America.
1s-Pst-bear-Pass-Appl-FV Prep America
I was born in America.

In certain co-occurrences of *-an* and *-eɛ* such as in (225), it does not seem that both suffixes are functioning productively. The reason for this is unknown.

(225) eye o-m-ak-<u>an</u>-<u>eɛ</u> ɔ?
what 2s-Pst-go-Inst-Appl QM?
What did you take (lit. go with)?

In addition to the above questions, further study is needed in the areas of animacy, topicalization, tone, stress, and intonation. Givón (1984:168) states that the common syntactic coding devices for direct object are constituent order, morphology, and intonation. No analysis of intonation has been completed for Mbonge, and the interaction of animacy and topicalization with constituent order has only been touched upon.

CHAPTER 7

STATUS OF DOUBLE OBJECTS

Bantu languages commonly allow for a verb to have more than one object. The characteristics of these multiple objects, however, have been the source of much discussion. In this chapter I discuss some of the typical properties of direct objects, language variation in the treatment of multiple objects, and the status of Mbonge double objects. I also investigate whether applied objects and applied instrumentals share the same characteristics as other objects.

Numerous criteria have been proposed to identify direct objects. The following three tests are commonly used to determine the object(s) of a verb in Bantu languages:

1. Access to the position immediately following the verb.
2. Control of object marker affixation on the verb.
3. Capable of assuming the subject role through passivization.
   (Kisseberth and Abasheikh 1977:183-184, Hualde 1989:179, Hyman and Duranti 1982:220)

Kimenyi (1978:62-63) describes the properties of direct objects as follows:

> Direct objects are distinguished from non-terms in that they alone (a) are introduced to the verb without a preposition; (b) undergo subjectivization rules (passivization, stativization and object-subject reversal), (c) undergo pronoun incorporation, and (d) are reflexivizable.

Another test that is sometimes used in determining an object's status is whether or not it can be relativized. For example, Hedinger (Forthcoming:145) says that instrumental and accompaniment noun phrases in Akoose can be relativized only when they are marked by a suffix on the verb, not when a preposition is used.

So, do both Mbonge double objects pass the above tests? I do not have adequate data to examine two of Kimenyi's subjectivization rules: stativization and object-subject reversal. Combining the remainder of the above lists, I examine which objects have the following object characteristics in Mbonge:

1. Immediately follows the verb or has access to that position.
2. Does not require a preposition.
3. Controls object marker affixation on the verb.
4. Capable of assuming the subject role through passivization.
5. Capable of being reflexivized.
6. Capable of being relativized.

Looking at tests one and two above, Mbonge objects follow immediately after the verb without the need for prepositions. The default word order for Mbonge is S V O1 O2 where O1 is a benefactive, recipient or instrumental[20] noun phrase and O2 is a patient. If an instrumental O1 is lower in animacy than O2, however, then the order of the objects is reversed (see section 4.3).

Test three for pronoun incorporation or control of affixation does not work well for Mbonge because object prefixes on the Mbonge verb are mutually exclusive with expressed noun phrases. However, either the direct object or the applied object may be expressed as a prefix on the verb while the other object is expressed as a full noun phrase. Only one Mbonge object can be expressed as a prefix on the verb at a time.

(226) Judith a-mo-ba-kil-eɛ moleli.
Judith 3s-Pst-3pO-cook-Appl-(FV) 3-food
Judith cooked food for them.

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[20] For the purpose of this section, accompaniment and source noun phrases will be included in the term "instrumental".

(227) Judith a-mo-ŋa-kil-eɛ bana.
Judith 3s-Pst-3O-cook-Appl-(FV) 3p-child
Judith cooked it (food) for the children

(228) *Judith a-mo-ŋa-ba-kil-eɛ
Judith 3s-Pst-3O-3pO-cook-Appl-(FV)
Judith cooked it for them.

According to Hualde (1989:180), KiRimi, like Mbonge, has a single object prefix. He says its presence is controlled by two principles: "A) Any object may control the prefix position if left unexpressed as a lexical NP. B) A definite animate NP object requires a prefix on the verb. Of these two principles the second one prevails in cases of conflict." For Mbonge, principle A is true, but B is not, so this test is unhelpful in determining a "primary" object for Mbonge. Both objects are treated equally.

Applied instrumentals can be marked on the verb if they are animate, as in (229). It seems that inanimate applied instrumentals cannot be marked on the verb as an object prefix, but I do not have adequate data to state this definitively.

(229) iya a-mo-n-ak-an-ak-a o fɛsi ya mbo ...
3s-mother 3s-Pst-1sO-go-Inst-Impf-FV Prep 9-side 9-Asc 9-lake
Mother was going with me to the side of the lake ...

Concerning test four, I demonstrated in section 3.1 that both objects of a ditransitive verb can be passivized. Both objects in an applied construction can also be passivized.

(230) Judith a-mo-kil-eɛ bana moleli.
Judith 3s-Pst-cook-Appl-(FV) 3p-child 3-food
Judith cooked food for the children.

(231) bana ba-mo-kilɛ-(a)b-eɛ moleli.
2-child 2p-Pst-cook-Pass-Appl-(FV) 3-food
The children had food cooked for them.

(232) moleli mo-mo-kil-ɛb-eɛ bana.
3-food 3-Pst-cook-Pass-Appl-(FV) 2-child
The food was cooked for the children.

On the other hand, I have found no evidence that applied instrumental noun phrases can passivize. This does not seem to be unusual. Marantz (1980:335-336) claims that instrumental applied verbs behave differently from benefactive, malefactive, source, and goal applied verbs. He gives examples in which the applied instrumental form sometimes has a different word order than the applied benefactive. He also points out that "it is the root object in the instrumental applied verb construction which appears as the subject of the passive, not the instrumental applied object".

In Mbonge, passive and instrumental suffixes can co-occur. However, as Marantz has claimed, it is not the instrument which becomes the subject of the passive clause. In (233) and (234), the patient has become the subject of the passive clause:

(233) ŋana one a-mo-ful-ab-an-a male.
1-child 1-Dem 3s-Pst-bury-Pass-Inst-FV 6-medicine
That child was buried with medicine.

(234) Santana a-m-ob-ab-an-a bolalɛ.
Santana 3s-Pst-hit-Pass-Inst-FV 14-stone
Santana was hit by a stone (that someone threw at her).

Animacy constraints may well contribute to this restriction on instrumental noun phrases. It is possible that the most topical noun in the clause must also rank highest on the animacy hierarchy. Animacy constraints and discourse functions are outside the scope of this paper, so this needs to be investigated in the future.

For test five, Kimenyi (1978:63) says, "Reflexivization occurs if the direct object, indirect object or benefactive NP is coreferential with the subject". Mbonge uses the

affixes *a-* and *-ɛn* to show reflexivization. Direct objects and recipients can both be reflexivized, but I have no data for benefactive or applied instrumentals. See example (235) for an example of a co-referential direct object and (236) for a co-referential recipient.

(235) ŋana a-ma-a-den-ɛ.
ŋana a-mo-a-den-ɛ
1-child 3s-Pst-RO-cut-Rfx-(FV)
The child cut himself.

(236) a-si-m-a-nyɛŋg-ɛ e-lubɛ.
a-si-mo-a-nyɛŋg-ɛ e-lubɛ
3s-Neg-Pst-RO-give-Rfx-(FV) 7-respect
He did not respect himself. (lit. He did not give himself respect.)

Test six is relativization. The following examples show how direct objects (237) and applied instrumentals (238) can be relativized. I do not have the necessary data to determine if applied benefactives and recipients can be relativized. Oblique instrumentals cannot be relativized.

(237) asɔsɔ na mosɔŋgɔ wa ɛɛnɛ.
3s-(Nar)-talk with 3s-hunter 3s-Rel 3s-(Nar)-see
He talked with a hunter that he saw.

(238) o-n-jak-eɛ mba bolale
2s-1sO-search-Appl-(FV) 1sPro 14-stone

wa ŋalana owa a-si-an-ak-ɛ ndoŋga.
14-Rel 1s-woman 3s-Poss-1s 3s-grind-Inst-Impf-Foc 9-pepper
Please look for the stone which my wife grinds pepper with.

Table 12 summarizes the results of the five object tests above:

Table 12. Results of Object Tests

Test	Double Objects - ditransitive verb	Double Objects - applicative	Double Objects - instrumental
1. Follows Verb	recipient then DO	applied O then DO	INST then DO unless DO is more animate
2. No Prepositions	neither uses PREP	neither uses PREP	neither uses PREP
3. Control Affix	either object can appear on the verb as a prefix but only one at a time	either object can appear on the verb as a prefix but only one at a time	animate instrumental objects can appear on the verb as a prefix but it seems that inanimate ones cannot
4. Passivize?	yes - both	yes - both	original DO - yes instrument - no evidence that it can
5. Reflexivize?	yes - both	no data	no data
6. Relativize?	DO - yes recipient - no data	DO - yes applied O - no data	yes - both

So, for those tests that have been applied to Mbonge double objects so far, it is clear that the double objects of ditransitive verbs and applicative constructions have equal status. The evidence for applied instrumentals is not quite as clear, since instrumentals which are marked on the verb with *-an* cannot passivize, and inanimate instrumentals are not always found immediately after the verb. However, even inanimate instrumentals can be relativized (see (238)). Therefore, applied instrumentals demonstrate some but not all object characteristics.

How does Mbonge compare to other Bantu languages? Bresnan and Moshi (1990:147) characterize two different Bantu systems as follows:

> Though Bantu languages quite generally allow more than one postverbal NP object, they split into two broad types according to the syntactic behavior of the objects. In what we will call the asymmetrical object type language only one of the postverbal NPs exhibits 'primary object' syntactic properties of passivizability, object agreement, adjacency to the verb, and the like ... In the

symmetrical object type language more than one NP can display 'primary object' syntactic properties.

Bresnan and Moshi (1990:149-157) characterize the differences between these two language types using the Kichaga and Chicheŵa languages as examples for each. In Table 13, I compare Mbonge to their findings. I have not included applied instrumentals in the comparisons below due to a lack of data for these specific tests.

Table 13. Comparison of Asymmetrical and Symmetrical Systems to Mbonge

Characteristic	Asymmetrical (Chicheŵa)	Symmetrical (Kichaga)	Mbonge
"Primary" object(s)	only one	more than one	more than one
Prepositions	available for instrument, recipient but not for oblique benefactives or locatives	none	available for instrument, recipients, locatives, and source
Passivizability of Objs	patient only	both objects	both objects
Object Markers - distribution	always complementary distribution with NPs	complementary distribution with NPs except co-occur obligatorily with pronoun objects	always complementary distribution with NPs
Object Markers - roles allowed on verb	benefactive only	any or all objects (patient and benefactive)[21]	benefactive, recipient or patient, but only one at a time
Unspecified Object Deletion (of patient in presence of other Obj)	prohibited	allowed	allowed
Reciprocalization	patient can't be reciprocalized in presence of applied objects	patient can be reciprocalized in presence of any applied object	No evidence that objects can be reciprocalized in applied constructions - see (239)-(240) below
Interactions of Object Properties:			
1) co-occurrence of passives with object markers	no	yes (with some animacy restrictions)	yes (Ben/Rec can be object marker (241)-(243); need more data for patient)
2) unspecified object deletion with passives	no	yes	yes - see (21) and (24)

[21] "There are languages of the symmetrical object type that have only a single object marker." (Bresnan and Moshi 1990:151)

3)	unspecified object deletion with object markers	no	yes	yes - see (244)-(247), some restrictions
4)	co-occurrence of reciprocals with passives	no	yes	no - see (248)-(251)
5)	co-occurrence of reciprocals with object markers	no	yes	Reciprocals have an invariant prefix *a-* in the object marker position (see section 3.4).
6)	co-occurrence of reciprocals with unspecified object deletion	no	yes	yes - see (252) and (253)

As Table 13 indicates, it seems that reciprocalization cannot occur with applied constructions in Mbonge. Instead, the benefactive is added in an oblique phrase, as in the following examples:

(239) bomana ba-a-bolo-ɛn-ɛk-ɛ o kenyi.
3p-man 3p-RO-kill-Rec-Impf-FV Prep chief
The men are killing each other for the chief.

(240) bana b-o-oŋgo-ɛn-ɛk-ɛ bɔ mɛnɛ
3p-child 3p-RO-help-Rec-Impf-FV 3pPro self

o nyolo ya moleli.
Prep 9-reason 9-Asc 3-teacher
The children are helping each other for the teacher.

I now illustrate the interactions of object properties in Mbonge (see Table 13). Here are additional examples of object markers co-occurring with passives. In each of them, it is the benefactive/recipient that is marked on the verb, not the patient. I have no examples of sentences in which an object that is a patient is marked on the verb in a passive (i.e. when a benefactive or recipient is subject).

(241) ikɔ ya sukulu i-mo-n̲-daŋg-ab-el-ɛ.
19-money 19-Asc 7-school 19-Pst-1sO-pay-Pass-Appl-FV
The school fees were paid for me.

(242) mboli e-mo-n-and-ab-el-ɛ.
9-goat 9-Pst-1sO-buy-Pass-Appl-FV
A goat was bought for me.

(243) moleka mo-mo-m-bɔ-n-ɔb-el-ɛ.
moleka mo-mo-N-fɔ-an-ab-eɛ
3-boy 3-Pst-1sO-come-Inst-Pass-Appl-FV
The boy was brought for me.

Unspecified object deletion can co-occur with object marking of the other object in Mbonge (point 3 of Table 13). In the following two examples the patient has been deleted while the recipient is marked on the verb. Compare these examples to (114) and (19), the corresponding clauses in which the patient has not been deleted. Note that (244) is an applied construction while (245) contains a verb that is already ditransitive.

(244) Judith a-mo-ba-kil-eɛ.
Judith 3s-Pst-3pO-cook-Appl-(FV)
Judith cooked for them.

(245) Dan a-ma-mo-nyɛŋg-ɛ.
Dan 3s-Pft-3sO-give-FV
Dan has given (it) to him.

It is interesting to note, however, that when the patient is marked on the verb with an object marker, it is not always possible to leave the benefactor/recipient unspecified. For the ditransitive verb *nyɛŋgɛ* '*give*', the recipient can be unspecified as in (246) below. However, for an applied construction such as (247), it is not possible.

(246) Dan a-ma-ya-nyɛŋg-ɛ.
Dan 3s-Pft-9O-give-FV
Dan has given it (to someone).

(247) *Judith a-mo-ŋa-kil-eɛ.
Judith 3s-Pst-3O-cook-Appl-(FV)
Judith cooked it (for them).

The passive and reciprocal suffixes cannot co-occur in Mbonge (point 4 of Table 13). The following sentences are not possible in Mbonge:

(248) *lobɔ lo-m-a-den-ɛb-an-ɛn-ɛk-ɛ bomana.
11-machetes 11-Pst-RO-cut-Pass-Inst-Rec-Impf-FV 3p-men
Machetes were being used by the men to cut each other.

(249) *makɔŋgɔ ma-m-o-oba-ɛb-an-ɛn-ɛk-ɛ basɔŋgɔ.
6-spear 6-Pst-RO-hit-Pass-Inst-Rec-Impf-FV 3pl-hunter
Spears were being used by the hunters to hit each other.

The following reciprocal constructions would be used instead, with the instrument filling the applied object position:

(250) bomana ba-ma-a-kpɛl-ɛn-ɛk-ɛ lobɔ.
3p-man 3p-Pst-RO-cut-Rec-Impf-FV 11-machetes
Men were cutting each other with machetes.

(251) basɔŋgɔ ba-ma-a-tub-ɛn-ɛk-ɛ makɔŋgɔ.
3p-hunger 3p-Pst-RO-stab-Rec-Impf-FV 6-spear
The hunters were stabbing each other with spears.

Finally, unspecified object deletion can co-occur with a reciprocal verb (point 6 of Table 13):

(252) bana ba-a-kil-ɛn-ɛk-ɛ.
3p-child 3p-RO-cook-Rec-Impf-FV
The children are cooking for each other.

(253) bana ba-a-nyɛng-ɛn-ɛk-ɛ.
3p-child 3p-RO-give-Rec-Impf-FV
The children are giving to each other.

Table 13 shows how Mbonge patterns more with a symmetrical object system than with an asymmetrical one. More data is needed to complete the comparison, but it is clear that Mbonge double objects both display many object characteristics.

One remaining question is whether or not both objects can display object characteristics *simultaneously*.

Bresnan and Moshi (1990:153) write the following:

> "... under certain conditions the asymmetrical object type *does* allow different NPs to have object properties. This is true, for example, of the Chicheŵa applied locative: either it or the patient can be passivized, object marked, or (subject to pragmatic plausibility) reciprocalized. But what is critical in the asymmetrical object type is that only one argument at a time can have these object properties (Zaenen (1984), Alsina and Mchombo (1989)). In a true symmetrical object language, in contrast, different arguments can simultaneously have primary object properties.

Points 1-6 in Table 13 are the tests Bresnan and Moshi used to determine if double objects were simultaneously showing primary object properties. They concluded that in asymmetrical systems like Chicheŵa, only one object at a time could be the primary object, but in symmetrical systems like Kichaga, both objects simultaneously had primary object properties.

Mbonge also meets the criteria Bresnan and Moshi established for a symmetrical system, with the exception of point four, "co-occurrence of reciprocals with passives". So, in conclusion, more data is needed to determine some of the restrictions affecting Mbonge object properties, but it seems that Mbonge double objects simultaneously possess primary object properties.

CHAPTER 8

SUMMARY/CONCLUSIONS

The primary purpose of this thesis was to explore the valence changing processes that are indicated by Mbonge verbal morphology. I have examined five suffixes which decrease valence and five which increase valence, as well as several suffixes that have no effect on valence.

In Mbonge, multiple derivational suffixes can be applied to a single verb root, resulting in complex morphological forms and triggering numerous phonological processes. I have attempted to identify the underlying suffixes and their grammatical functions in these complex combinations.

Some of the verbal derivations described in this paper are typical for Bantu languages. However, Mbonge certainly has some unique characteristics such as the combination of a suffix and a prefix for the reflexive and reciprocal forms.

The causative system in Mbonge is also unusually rich. Three separate morphological causatives are used to distinguish direct causation by an agent, indirect causation by an agent, and indirect causation by an effector. There is also a syntactic construction for causatives in which the causee retains a fair amount of control, as well as another ancient causative suffix which has become completely lexicalized.

The applicative suffix is very productive and allows for a broad range of thematic roles to be added to the verb's valence. I claim that benefactives and recipients added in

applicative constructions are promoted to object and in many respects share an equal status with the original direct objects, making Mbonge a symmetrical system.

The applied instrumental also seems to share many, but not all, of the characteristics of the other objects. I have claimed that it is also promoted to direct object, but further work is needed to determine the specific differences between applied instrumentals and other objects.

While further work is still needed in a number of areas, this thesis has described the rich derivational morphology of Mbonge verbs and provided a basic understanding of the underlying suffixes and their functions.

APPENDIX: LIST OF ABBREVIATIONS

In addition to the verb prefix and suffix abbreviations listed in Table 1 and Table 2, the following abbreviations are used in glossing examples and verb lists:

Asc	associative marker
Conj	conjunction
Dem	demonstrative
Dem-Loc	demonstrative locative
Exclam	exclamation
Ideo	ideophone
Imp	imperative
lit.	*literally*
Loc-WH	locative question word
Poss	possessive
Prep	preposition
Pro	pronoun
QM	question marker
Rel	relativizer
SpO	speech orienter
Y/N	yes/no question marker

REFERENCES

Alsina, A., and S. A. Mchombo. 1989. Object asymmetries in the Chicheŵa applicative construction, Unpublished manuscript, Departments of Linguistics, Stanford University, Stanford, California, and the University of California, Berkeley.

Bickford, John Albert. 1987. Universal constraints on relationally complex clauses. Unpublished doctoral dissertation, University of California at San Diego.

Bitjaa Kody, Zacĥe e Denis. 1990. Le systѐme verbal du basaa. Yaoundѐ : University of Yaounde.

Bresnan, Joan and Lioba Moshi. 1990. Object asymmetries in comparative Bantu syntax. Linguistic Inquiry 21(2):147-85.

Comrie, Bernard. 1985. Causative verb formation and other verb-deriving morphology. Language typology and syntactic description, vol. 3, ed. by Timothy Shopen, 309-48. Cambridge: Press Syndicate of the University of Cambridge.

Dieu, Michel, and Patrick Renaud. 1983. Atlas linguistique de l'Afrique Centrale (ALAC), Atlas linguistique du Cameroun (ALCAM). Situation linguistique en Afrique centrale, inventaire préliminaire: le Cameroun. Yaoundé: Dѐe lѐgation Gѐnѐrale ̀a la Recherche Scientifique et Technique.

Dugast, Idelette. 1971. Grammaire du tunɛn. Langues et Littѐratures de L'Afrique Noire, vol. 8. Paris: Editions Klincksieck.

Friesen, Dan. Forthcoming. Oroko orthography development: Linguistic and sociolinguistic factors. Unpublished master's thesis, University of North Dakota, Grand Forks, North Dakota.

Friesen, Dan, and Lisa Friesen. 2001. Extendibility survey of Oroko (Orɔkɔ). Unpublished manuscript.

Friesen, Dan, Rebecca Scott, and Michael Scott. 2001. Tone description of Mbɔŋgɛ. Unpublished manuscript.

Friesen, Lisa. 2000. Discourse features outline of Oroko. Unpublished manuscript.

Grimes, Barbara F. (ed.) 2000. Ethnologue: Languages of the world, 14th edition. Dallas, Texas: SIL International.

Givón, T. 1979. On understanding grammar. New York: Academic Press.

————. 1984, 1990. Syntax: A functional-typological introduction, vols. 1-2. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Guthrie, Malcolm. 1953. The Bantu languages of Western Equatorial Africa. London: Oxford University Press for the International African Institute.

————. 1967-71. Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages, vols. 1-4. Farnborough: Gregg International Publisher Ltd.

Haiman, John, and Pamela Munro. (eds.) 1983. Switch reference and universal grammar. Amsterdam: John Benjamins Publishing Company.

Hedinger, Robert. 1985. The verb in Akɔɔse. Studies in African Linguistics 16(1):1-55.

————. 1992. Verbal extensions in Akoose: Their form, meaning and valency changes. In Afrika und Ubersee, Band 75:227-51.

————. Forthcoming. A grammar of Akoose.

Hopper, Paul J., and Sandra A. Thompson, 1980. Transitivity in grammar and discourse. Language 56:251-99.

Hualde, Jose I., 1989. Double object constructions in KiRimi. Current Approaches to African Linguistics 5 (8):179-89.

Hyman, Larry M., and Alessandro Duranti. 1982. On the object relation in Bantu. Syntax and Semantics 15, ed. by Paul J. Hopper and Sandra A. Thompson, 217-239. New York: Academic Press.

Ittmann, Johannes. [1939]1978. Grammaire du duala. Translated by L. A. Boumard. Douala: Collège Libermann.

Jacquot, A., and I. Richardson. 1956. Report of the western team. Linguistic survey of the northern Bantu borderland, vol. 1, ed. by M. Guthrie and A.N. Tucker, 9-62. London: Oxford University Press for the International African Institute.

Johnston, H. 1919, 1922. A comparative study of the Bantu and semi-Bantu languages, vols. 1-2. Oxford: Clarendon.

Kimenyi, Alexandre. 1978. A relational grammar of Kinyarwanda. Berkeley, CA: University of California Press.

Kisseberth, Charles, and Mohammad Abasheikh. 1977. The object relation in Chi-Mwi:ni, a Bantu language. Syntax and Semantics 8, ed. by P. Cole and J. Sadock, 179-218. New York: Academic Press.

Kulikov, Leonid I. 1993. The 'second causative': a typological sketch. Causatives and Transitivity, ed. by Bernard Comrie and Maria Polinsky, 121-54. Studies in Language Companion Series, vol. 23. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Kuperus, Julianna. 1979. The subclassification of some languages of South-West Cameroon. Unpublished manuscript.

————. 1982. The morphology of (Ba-)londo verb tenses. Le verbe bantou, ed. by G. Guarisma, G. Nissim, and J. Voorhoeve, 19-56. Paris: SELAF.

————. 1985. The Londo word: Its phonological and morphological structure. Tervuren, Belgique: Musee Royal de L'Afrique Centrale.

Lemb, Pierre, and Fran•ois de Gastines. 1973. Dictionaire basáa-fran•ais. Douala: Collège Libermann.

Marantz, Alec. 1984. On the nature of grammatical relations. Cambridge, Massachusetts: MIT Press.

Marantz, Alec. 1980. Affixation and the syntax of applied verb constructions. Paper published in Proceedings of the First West Coast Conference on Formal Linguistics, 330-40.

Mbongue, Joseph. 2000. A rapid appraisal survey of Oroko. Yaoundé, Cameroon: Cameroon Association of Bible Translation and Literacy.

Mchombo, Sam A. 1993. A formal analysis of the stative construction in Bantu. Journal of African Languages and Linguistics 14:5-28.

Meeussen, A. E., 1967. Bantu grammatical reconstructions. Africana Linguistica 3:79-212.

Ndjeyiha, Madelein Ngo. 2001. Le causatif basaa. Lecture given at Africa Area Linguistics Consultants Seminar, Yaounde, Cameroon, March 26-April 6, 2001.

Orwig, Carol, 1989. Les extensions verbales en nugunu. Description de langues camerounaises, ed. by D. Barreteu and R. Hedinger, 283-314. Paris: ORSTOM et Agence de coopération Culturelle et Technique.

Payne, Thomas E. 1997. Describing morphosyntax: A guide for field linguists. Cambridge: Cambridge University Press.

Perlmutter, David M. (ed.) 1983. Studies in relational grammar 1. University of Chicago Press, Chicago.

Port, Robert F. 1981. The applied suffix in Swahili. Studies in African Linguistics 12 (1):71-82.

Richardson, I. 1955. Some problems of language classification with particular reference to the North-West Bantu borderland. Africa 25:161-9.

Roberts, James. 1991. Grammar sketch of Lolue. Unpublished document. Yaoundé, Cameroon: Summer Institute of Linguistics.

Schadeberg, Thilo C. 1980. La morphology verbale du bantu commun et les langues bantoues du Cameroun. L'Expansion bantoue: Actes du colloque international du CNRS, Viviers (France) 4-16 avril, 1977, ed. by Luc Bouquiaux, 503-9. Paris: SELAF.

Van Valin, Robert D., Jr., and Randy J. LaPolla. 1997. Syntax: Structure, meaning and function. Cambridge: Cambridge University Press.

Whaley, Lindsay, J. 1997. Introduction to typology: The unity and diversity of language. Thousand Oaks, California: Sage Publications.

Zaenen, A. 1984. Double objects in Kikuyu? Cornell Working Papers in Linguistics 5, ed. by C. Rosen and L. Zaring. Ithaca, New York: Cornell University.