BETWEEN AGREEMENT AND CASE MARKING IN LAMNSO*

Laura W. McGarrity and Robert Botne

Abstract: Lamnso, a language in the Grassfields branch of Southern Bantoid, has a system of noun classes marked by (C)V affixes that attach to the stem. Noun modifiers agree with the noun by attaching a comparable affix that matches the class. This type of NP-level concord is typical of Bantu languages. At the clausal level, (C)V markers that are identical in form to those appearing at the NP-level appear as enclitics on virtually all nouns in a sentence. Though these markers are identical, it is argued that they serve separate functions, marking agreement on subject nouns before the verb and case on oblique object nouns after the verb. Direct objects and nouns in locative expressions are not marked. Typological evidence in the form of a grammatical relations hierarchy is discussed in support of these claims.

1. Introduction

Grammatical relations in human languages, such as those between a noun phrase and the verb, are primarily expressed by means of three different morphosyntactic strategies: word order, case marking, and agreement (Croft 1990: 101). All languages, rather than relying on just one of these mechanisms, use some combination of the three. In this paper, we intend to show that the Southern Bantoid language Lamnso employs elements of all three of these strategies to indicate the relationship that a noun bears to the verb in a clause.

Lamnso, like Bantu and many languages in the Niger-Congo family, has a system of noun classes marked by (C)V affixes that attach to the noun stem. At the phrasal level, noun modifiers (e.g., demonstratives, adjectives, possessives, quantifiers, etc.) must agree with the noun by attaching a comparable affix that matches the noun class. While this type of NP-level concord is typical of Bantu languages, at the clausal level, Lamnso behaves in a manner that differs markedly from Bantu. Markers that are segmentally identical to the (C)V adjectival concord markers at the phrasal level appear as enclitics on virtually all nouns in a sentence. However, despite their identical form, they serve different functions according to the grammatical relations these nouns hold with the verb. We propose that markers on subject nouns indicate agreement with the verb, though this pattern of dependent-marking differs from the head-marking pattern of subject-verb agreement in the Bantu languages. Markers on nouns that are objects of non-locative prepositions, on the other hand, represent oblique case rather than agreement. Direct objects and locatives are unmarked. That these markers are being used to indicate both subject-verb agreement and case in Lamnso is supported by typological observations of the behavior of other languages that employ both case and agreement to indicate the grammatical relations that hold among the elements of a clause.

The paper is organized as follows. Section 2 provides a background and classification of Lamnso with a brief description of its sound system, including its consonant, vowel and tone inventories. Section 3 introduces the Lamnso noun classification system and describes the major noun classes. A discussion of how concord is realized on noun modifiers at the phrasal level is also presented. Section 4 discusses the marking of nouns at the clausal level. There we propose that markers on subject nouns indicate agreement with the verb. Typological evidence in the form of a grammatical relations hierarchy for agreement is discussed in support of this claim. Marking on object nouns is also discussed. We show that nouns occurring in prepositional phrases expressing such semantic roles as benefactive, recipient, instrumental and comitative are marked. However, direct object nouns and nouns in the locative are not marked. Though the markers on object nouns are identical to those occurring on subjects, we conclude that they indicate case instead of agreement. Once again, typological considerations are discussed supporting this claim. Section 5 re-visits marking on subject nouns in conjoined

^{*} We would like to thank Karen Baertsch for her helpful comments and suggestions on this paper. This work was supported in part by grants from the National Institutes of Health (DC01694, DC00012) to Indiana University.

and comitative constructions. Several unusual characteristics of subject-marking in Lamnso, including its resemblance to case marking in certain respects, are discussed. Section 6 concludes with a brief summary of the main findings.

2. Background

2.1. Classification

Lamnso¹ ('language of the Nso') is an SVO language spoken by about 125,000 people in the Bui Division of the Northwest province in the United Republic of Cameroon (Grimes 2000). Lamnso belongs to the Benue-Congo branch of Niger-Congo. The most well-known feature of Niger-Congo languages is their system of noun classification, which can be traced in some form in almost every branch (Welmers 1973:159).

Lamnso is from the Ring subgroup of the Grassfields branch of the Southern Bantoid languages.² Other languages of the Ring subgroup include Aghem, Oku, Kom, Babungo, Noni, and Babanki, to name a few (Watters and Leroy 1989). Of these Ring languages, Lamnso is most closely related to Oku. Although Grebe (1984) states that Lamnso does not have any significant dialectal variation, Eastman (1980) describes a dialect of Lamnso that differs somewhat from the one described here.

2.2. The Sound System

The sound system of Lamnso has 29 consonants. It has both voiced and voiceless labial (p, b), alveolar (t, d), velar (k, g) and labiovelar (kp, gb) stops, as well as the glottal stop (?). The fricative series includes f, v, s, \check{s} , y and the affricate series includes voiced and voiceless palatal affricates (\check{c}, \check{j}) . There are three labialized velar consonants (k^w, g^w, y^w) and two labialized palatals $(\check{s}^w \text{ and } \check{j}^w)$. Furthermore, Lamnso has nasal consonants across four places of articulation (m, n, p, y) as well as the lateral l, the flap r, and the glides w and y.

Lamnso has a six-vowel inventory $(i, e, \partial, a, o, u)$, each of which may be phonemically long or short. Long vowels are indicated orthographically in this description as double vowels (e.g. *kisoo* 'hoe'). Each of the vowel phonemes may be followed by a palatal offglide (y). Otherwise, no diphthongization is evident in the language. Only the short low vowel can occur word initially (the only exception is the preposition i 'with, in, to, on'), though all of the vowels may occur word finally.

Lamnso has a fairly complex tone system. According to Grebe (1984), there are three level tones, high, mid, and low, and four contour tones: high-mid, mid-low, high-low and low-falling. Because the Lamnso tonal system is such a complex one, and since the main focus of this description is the morphology involved in indicating the grammatical relations that hold among the elements of a clause, we do not mark tone. For a detailed description of the tonal system of Lamnso, see Grebe (1984) and Grebe & Grebe (1975).

3. The Noun Phrase

3.1. Lamnso Noun Classes

The type of gender system known as a noun class system is perhaps most closely associated with the Bantu languages. Lamnso, like the Bantu languages, also has a noun class system. The various noun

¹ The orthography of the name of this language has also appeared in the literature as Lamnsok, Lamnsoq, Lamnso?, Lamnso, Lam

² While the languages commonly referred to as Bantu are also classified as Southern Bantoid languages, they are considered to be Narrow Bantu whereas Lamnso and the other Grassfields languages are Non-Narrow (or Wide) Bantu.

classes are identified by affixes on the noun stem and/or concord elements on the noun modifiers. Lamnso has 10 major noun classes, though not all of these classes have affixes that attach to the noun stem and not all of these affixes are prefixes as they are in the Bantu languages. Four classes (6, 7, 8, 19) take CV prefixes on the stem to mark the class, one class (2) is marked by a V prefix, one class (10) is marked by a CV suffix, and four classes (1, 3, 5, 9) have no affix on the noun at all. Table 1 displays the affixes, if any, for the 10 major Lamnso noun classes and lists an example of each. The noun class numbering system used here is based on the Bantu system of numbering.

Class #	Noun affix	Examp	les
1	Ø	na?	'cow'
2	a-	a na?	'cows'
3	Ø	šwin	'leg'
5	Ø	wum	'egg'
6	mi-	mi nən	'birds'
7	ki-	ki soo	'hoe'
8	vi-	visoo	'hoes'
9	Ø	jwi	'dog'
10	-si	j̃wi si	'dogs'
19	ši-	ši nən	'bird'

Table 1: Noun class affixes ³

The Lamnso noun classes are grouped into six main genders, each consisting of a singular (odd-numbered) and a plural (even-numbered) class. Table 2 below lists the noun genders with some examples of each.⁴

As can be seen in the table, some plural classes may be paired with several different singular classes to form different genders. Note, for example, that the plural class 10 is paired with three different singular classes to form three different genders. Likewise, some singular classes can be paired with different plural classes to form additional genders as well (see fn. 4).

While in general it can be said that there is some kind of shared semantic meaning among the nouns in a particular class, there are many examples where no shared meaning is evident. For example, there is a mild correlation between gender 1/2 and humans (e.g., fon~afon 'chief(s)', fər~afər 'sibling(s)'), between gender 7/8 and miscellaneous objects (e.g., kisoo~visoo 'hoe(s)', kiyin~viyin 'bowl(s)'), between gender 9/10 and animals (e.g., jwi~jwisi 'dog(s)', bvəy~bvəysi 'goat(s)'), and between gender 19/6 and liquid masses (e.g., sindzəv~mindzəv '(drop of) water', silui?~milui? '(drop of) wine'). However, these semantic relationships are by no means definitive, since each of these semantic categories can be found in other genders, and each of these genders contains other semantic categories.

Just as it is not possible to determine a noun's class based on its semantic content, it is also not enough to do so by looking at the affix on the noun. For example, as mentioned above, there are four classes that are not marked by any affix at all (1, 3, 5, 9). In such cases, it is necessary to consider more than just the shape of the noun affix to determine the proper class to which it belongs. One must

³ In this table, the noun affixes are bolded for clarity. Throughout the paper, bold typeface will be used selectively in the examples for those markers that are the focus of the discussion at hand.

⁴ This table is not exhaustive. There are a few nouns that have gender agreement that is identical to that of the nouns in gender 1/2, but form their plurals differently than the class 2 nouns (i.e., without the *a*- prefix). These exceptions can be placed into two subclasses, 2a and 2b, which both combine with class 1 to form the additional genders 1/2a and 1/2b. Gender 1/2a includes the nouns $wan \sim won$ 'child/children' and $wir \sim wiri$ 'person/people', and gender 1/2b includes $wiiy \sim vikiy$ 'woman/women' and $lumin \sim vilum$ 'man/men'. Furthermore, we have found only two nouns in gender 7/5, $kiwuu \sim wuu$ 'foot/feet' and $kiwoo \sim woo$ 'hand(s)'.

Gender #'s	Sing. affix	Plural affix	Examples:
1/2	Ø	a-	na?~ana? 'cow(s)'; fon~afon 'chief(s)';
			bvərə?~abvərə? 'lion(s)'
3/10	Ø	-si	<i>šwin~šwinsi</i> 'leg(s)'; <i>koy~koysi</i> 'pestle(s)';
			nton~ntonsi 'pot(s)'
5/10	Ø	-si	<i>či~čisi</i> 'spoon(s)'; wum~wumsi 'egg(s)
7/8	ki-	vi-	kitam~vitam 'elephant(s)';
			kiym~viym 'dish(es)'; kisoo~visoo 'hoe(s)'
9/10	Ø	-si	<i>j̃wi~j̃wisi</i> 'dog(s)'; <i>nyam~nyamsi</i> 'animal(s)'
			bvəy~bvəy si 'goat(s)'
19/6	ši-	mi-	šinən~minən 'bird(s)'; šiley~miley 'berry/berries'
			<i>ši</i> yuuv~ <i>mi</i> yuuv 'bee(s)'

Table 2: Noun class genders

look to the other elements of the phrase that relate to the nouns by means of grammatical concord. We take up this notion of noun-modifier concord in the next section.

3.2. NP-level Concord

One defining characteristic of noun class languages is that "they exhibit grammatical agreement between the noun and at least some of its modifiers or pronominal substitutes and that these modifiers and/or substitutes are inflected for the class of the noun to which they refer" (Grebe 1984:61). It is concord that provides the basis for establishing the number of genders or classes in a given language. In other words, the different Lamnso noun classes must be distinguished not just phonologically by the affixes on the nouns but also syntactically by the type of concord they take (Corbett 1991:4).

Lamnso has NP-level concord that is similar to that of the Bantu languages. Elements of the noun phrase, e.g., demonstratives, possessives, relative markers, quantifiers, adjectives, and pronouns, exhibit agreement with the head noun. This concord is realized in the form of affixes on the modifier or pronoun that agree with the class of the head noun. Table 3 summarizes how some of these concord markers are realized on the different types of modifiers for the major Lamnso noun classes.

As can be seen in the table, classes 6, 7, 8, 10, and 19, which are the only classes to have CV noun affixes, have alliterative concord – that is, the initial consonant of each of the concord markers is identical to that of the noun affix. We will refer to these five noun classes as the alliterative or CV noun classes. The other classes (1, 2, 3, 5, 9), on the other hand, do not have alliterative concord. These classes, where they have markers at all, have different concord elements depending upon which modifier is being used with the noun. Because these noun classes have incomplete concord marking, we will primarily use nouns from the five CV noun classes in the examples throughout this paper since their overt, alliterative marking makes it easier to see when concord is involved.

⁵ Throughout this paper, the term *concord* is used to refer to gender matching between the head noun and its modifiers in the noun phrase. We use the term *agreement* to refer specifically to the type of marking that indexes or cross-references the noun in subject-verb relations in the clause. This type of agreement does not involve person and number agreement with the verb, but rather the agreement with the class of the noun.

Class #	Noun affix	Dem.	Poss.	Rel.	Quant.	Num.	Adj.
1	Ø	və-	W-	W-	wu-	Ø	Ø
2	a-	vi-	V-	V-	a-	a-	-i
3	Ø	və-	W-	w-	wu/yi	Ø	-i
5	Ø	rə-	y-	y-	yi-	Ø	-i
6	mi-	mi-	m-	m-	mi-	mi-	-mi
7	ki-	ki-	k-	k-	ki-	ki-	-ki
8	vi-	vi-	V-	V-	vi-	vi-	-vi
9	Ø	rə-	y-	y-	yi-	Ø	Ø
10	-si	si-	S-	s-	si-	si-	-si
19	ši-	ši-	š-	š-	ši-	ši-	-ši

Table 3: Lamnso noun class concord markers ⁶

In Lamnso, as in the Bantu languages, modifiers always follow the nouns they modify. Concord markers are realized on the noun modifiers either as prefixes, suffixes, or both. In the case of demonstratives, the concord marker is realized as a prefix on the demonstrative root.

(1) Nouns + demonstratives:⁷

a. *Ø-na? vð-n*1-cow 1-this
'this cow'

b. *a- na? vi-n* 2-cow 2-this 'these cows'

In the example in (1a), the noun na? 'cow', which has a null marker prefix since it belongs to class 1, is followed by the demonstrative stem -n. The demonstrative has a class 1 prefix va- as its concord marker reflecting agreement with the class of the head noun. The example in (1b) shows how concord is realized in its plural counterpart. The noun stem has a class 2 prefix a- which marks it as plural. Once again, the noun is followed by the demonstrative root -n which has a class 2 concord prefix vi- that agrees with the noun. Additional examples are given in (2)-(5).

(2)	a.	ø-šwin	v∂-n
` /		3-leg	3-this
		'this le	g'

b. *šwin* si-n 8 10.leg 10-this 'these legs'

(3) a. \emptyset -jwi r-n 9-dog 9-this 'this dog'

b. *jwi* si-n 10.dog 10-this 'these dogs'

(4) a. *ki-soo ki-sə* 7-hoe 7-that 'that hoe'

b. *vi-soo vi-sə* 8-hoe 8-that 'those hoes'

⁶ In this table and throughout the paper, the following abbreviations are used:

Adj	adjective	Fut	future	Poss	possessive
Con	connective	Neg	neagtive	Quant	quantifier
Coor	coordinating element	Num	number	Rel	relative
Dem	demonstrative	Pst	past	SM	subject marker

Numbers refer to noun classes or to participants.

⁷ All of the Lamnso data presented in this paper were provided by a 39-year-old informant from Cameroon, B.W., who is a native speaker of Lamnso and Oku.

⁸ The class 10 noun suffix –*si* only shows up on nouns in isolation. Whenever the noun is followed by a modifier with a class 10 concord marker, the noun suffix is deleted to prevent doubling. This pattern is typical of many of the Ring languages (Hyman 1980: 228). The concord marking on the modifiers is enough to indicate the class membership of the noun.

(5) a. *ši-nən ši-sə* b. *mi-nən mi-sə* 19-bird 19-that 'that bird' b. *mi-nən mi-sə* 6-bird 6-that 'those birds'

The nouns in (2) and (3) do not have overt affixes indicating which noun classes they belong to. To identify their noun class membership, it is necessary to look to the concord element on the demonstrative modifer. The noun in (2a) has concord on the demonstrative that is indicative of class 3 nouns, while the noun in (3a) is modified by a demonstrative with a class 9 marker. Similarly, it is not possible to look at the plurals in (2b) and (3b) to determine which genders these class 10 nouns belong to; one must look to their singular counterparts to determine that $\delta \sin n$ 'leg' belongs to the 3/10 gender while $\delta \sin n$ 'dog' belongs to 9/10. The examples in (4) and (5) give the singular and plural counterparts of two phrases containing nouns with alliterative concord, illustrating that in each case the marker on the demonstrative root is identical to the class affix on the noun that it modifies.

Possessive pronouns also follow the noun and demonstrate concord with its class. Examples of nouns modified by possessive pronouns are given in (6) and (7).

Nouns + possessive pronouns:

(6) a. *ki-day ke-v* 7-table 7-3pl.POSS 'their table' b. *vi-day ve-v* 8-table 8-3pl.POSS 'their tables'

(7) a. ø-nta? wo-m 1-chair 1-1sg.POSS 'my chair' b. *a-nta?* ve-m 2-chair 2-1sg.POSS 'my chairs'

Like the demonstratives, possessives exhibit morphological concord with the noun in the form of a prefix on the root that matches the noun class.

In the case of numerals, if a numeral from one to five modifies the noun, it follows the noun and is marked by the number concord prefix for that class, if any. Numbers higher than five do not exhibit concord.

Nouns + numbers:

(8) a. ø-nčekun ø-mo?on 1-mouse 1-one 'one mouse'

b. *a-nčekun a-taar* 2-mouse 2-three *'three mice'*

(9) a. *ki-tam ki-mo?on* 7-elephant 7-one 'one elephant'

b. *vi-tam vi-taar* 8-elephant 8-three 'three elephants'

Some quantifiers in Lamnso also take numeral concord. The quantifiers -dzom 'each, all', -nin 'many', and -ya/2an 'much' each take concord prefixes that are identical to the markers on numeral modifiers. Examples of these constructions are given in (10a-13a). However, there is another quantifier -mo?- 'some, a certain' that is marked by both prefixal and suffixal concord. Unlike the other quantifiers, this quantifier does not take a numeral concord prefix. This is evident when one looks at phrases including nouns from some of the classes that do not have alliterative concord (1, 3, 5, 9). For nouns in these classes, a concord prefix is used that differs from the numeral concord prefix found on the other quantifiers (as a result, we list this prefix as the quantifier concord prefix in Table 3). Furthermore, this quantifier takes an adjectival concord suffix as well. Examples of noun phrases with the quantifier -mo?- 'some, a certain' are given in (10b-13b).

Nouns + quantifiers:

(10) a. ø-na? ø-dzəm 1-cow 1-each 'each cow' b. ø-na? wu-mo?-ø 1-cow 1-some-1 'a certain cow'

(11) a. ø-jwi ø-dzəm 9-dog 9-each 'each dog' b. *ø-jwi yi-mo?-ø* 9-dog 9-some-9 'a certain dog'

(12)	a.	a-na? a -nin
		2-cow 2-many
		'many cows'

- b. *a-na?* **a-***mo?-***o** 2-cow 2-some-2 'some cows'
- (13) a. mi-lu? mi-ya?an 6-wine 6-much 'much wine'
- b. mi-lu? mi-mo?-mi 6-wine 6-some-6 'some wine'

That the -mo?- modifier takes both a prefix and a suffix is similar to how adjectival concord is realized in Babanki and Babungo, related languages of the Ring subgroup of Wide Grassfields Bantu. In Babanki, adjective modifiers take both prefixes and suffixes, while numerals take only prefixes (Hyman 1980:241). In Babungo, it is only for certain noun classes that modifying adjectives are marked by both a prefix and a suffix, while for other classes, the adjectives are marked by only a prefix (Schaub 1985:186).

According to Corbett (1991), concord may occur in a wide range of agreeing elements, such as those discussed above, but it is particularly common in adjectives. As with demonstratives, possessives, numerals and quantifiers, modifying adjectives in Lamnso follow the noun; however, there must be a relative marker (which also agrees with the noun) intervening between the noun and the adjective. Furthermore, unlike the modifiers discussed so far, adjectives take only suffixes as their concord markers rather than prefixes, as can be seen in (14) and (15). This characteristic of adjectival concord will prove to be important in the discussion of the morphology of NP-marking in clauses in the next section.

Nouns + adjectives:

- (14) a. ø-fon w-o faŋin-ø 1-chief 1-REL fat-1 'fat chief'
- (15) a. ši-nən š-e teri-ši
 19-bird 19-REL small-19
 'small bird'
- b. **a**-fon **v**-e faŋ-kin-**i** 9 2-chief 2-REL fat.pl-2 'fat chiefs'
- b. mi-nən m-e teri-mi 6-bird 6-REL small-6 'small birds'

4. Noun Marking in Clauses

While the type of NP-level concord discussed in the previous section is very typical of Bantu languages, at the clausal level, Lamnso behaves in a manner that is quite unlike Bantu. Markers that are segmentally identical to the adjectival concord suffixes at the NP-level appear as enclitics on most nouns in a sentence. Consider the example in (16), in which the marker in question is glossed with a "?".

(16) *vi-lum-i* fo *mi-ndzəv* wuna *vi-faveyi-vi* i *vi-tam-vi* wuna *mi-nən-mi* 2b-men-? give 6-water COOR 8-food-? to 8-elephant-? COOR 6-bird-? 'The men give water and food to the elephants and birds.'

In this sentence, every noun—with the sole exception of the first direct object noun following the verb—has a marker that is identical to the adjectival concord marker for that class. Since none of the nouns in the sentence has a modifier, these markers cannot be indicating NP-level concord. This raises questions about the status of these markers and their function at the clause level. We address these questions in the following sections, first by looking at the marking on subjects and then at the marking on the object nouns following the verb.

4.1. Marking on Subject Nouns

Subject nouns are followed by markers of the form (C)V that are morphologically identical to the markers that appear as concord suffixes on adjectival modifiers (displayed in Table 3 and in examples (14) and (15) above). These markers appear between the noun and the following verb or tense/aspect morpheme, as in the examples in (17) and (18).

⁹ Some adjectives require the marker -*ki*- in plural forms. This marker is also found in certain verbal forms with plural subjects.

- (17) a. fon du nto?
 1.chief go.to palace
 'The chief is going to the palace.'
 - a. *ši-nən -ši ki yoov luŋ* 19-bird-SM PST sing song 'The bird sang a song.'

(18)

- b. *a-fon -i du nto?*2-chief-SM go.to palace
 'The chiefs are going to the palace.'
- b. *mi-nən-mi ki yoov luŋ* 6-bird-SM PST sing song 'The birds sang a song.'

In (17a), there is no overt post-nominal marker between the class 1 noun and the verb. Class 1 nouns, the reader will recall, have a null adjectival concord marker, as demonstrated previously in (14a). The other examples, in (17b) and in (18a,b), do exhibit post-nominal markers following the subject nouns that are segmentally identical to the concord suffixes that would appear on adjectives modifying those nouns. We propose that these markers, which we label subject markers (SM) here for convenience, serve to mark agreement between the subject noun and the verb in a manner comparable to that found in Bantu languages. Compare, for example, the structure of the sentences from Chindali (M.21 Malawi) (19) and from Lamnso (20).

- (19) kale kale ichiinja chimo, ii-fula yi-ta-ka-wa long ago year certain, 9-rain 9-NEG-PST-fall 'One year long ago, the rain did not fall.'
- (Chindali)

(20) vi-tam-vi yo? yi kfər vi-kwi 8-elephant-SM NEG FUT chew 8-grass 'The elephants will not eat the grass.'

In Chindali (19), the verb agrees with the class of the subject noun *iifula* 'rain' by means of the class 9 agreement prefix *yi*-. This prefix is followed in turn by the negative marker -*ta*-, the tense marker -*ka*-, and then the verb stem. In the Lamnso sentence (20), the subject noun is followed by a subject agreement marker, which is followed by the negative marker, then tense marker, and, finally, the verb. There is a crucial difference between the two sentences: In Chindali, which is an agglutinating language, the agreement marker following the noun is realized as a prefix on the verb. However, in Lamnso, which is more isolating than agglutinating, there are several pieces of evidence that suggest that the subject agreement markers are phonologically enclitics associated with the noun and not prefixes on the verb. Although unusual—the most common way to mark subject-verb agreement is on the verb (Nichols 1986, Whaley 1997)—an agreement marker can also be "affixed to the noun phrase it putatively agrees with" (Croft 1990: 14), as, for example, in Bartangi (Eastern Iranian, cited by Croft, p. 15),

(21) *āzņum tāņr kitob vuj* I-ISG you-to book bring.PERF 'I have brought you a book.'

The first bit of evidence supporting the enclitic analysis is phonological. There is in Lamnso a phonological rule of assimilation whereby a suffix vowel assimilates to a stem vowel across an intervening glottal stop within a word. This process provides support for the claim that subject markers are enclitics on the noun because single vowel subject markers undergo this process when they follow a noun ending in a glottal stop, as a comparison of the examples in (22) with those in (23) shows.

- (22) a. *a-fon-i du nto?*2-chief-SM go.to palace
 'The chiefs are going to the palace.'
 - b. a-pur-i du kwa? 2-cat-SM go.to field 'The cats are going to the field.'
- (23) a. *a-na?-a kfər vi-kwi* 2-cow-SM chew 8-grass 'The cows are eating grass.'
 - b. a-bvərə?-ə kfər nyam 2-lion-SM chew meat 'The lions are eating meat.'

The subject nouns in (22) and (23) are class 2 plural nouns. The subject marker for class 2 nouns is the vowel -i. Since the nouns in (22) end in coronal consonants, vowel assimilation is blocked and the vowel of the subject marker does not assimilate to the preceding vowel in the noun stem. However, the class 2 nouns in (23) both end in a glottal stop. In each case, the following vowel of the subject marker assimilates to the preceding vowel in the noun stem. If the vowel of the subject marker were not attached to the noun but, instead, were separated from the glottal stop by a word boundary, the vowel would remain unchanged and not undergo the assimilation rule, as is the case with the preposition I in (24).

- (24) a. *Ntaŋ ki wiy nta? i laav*Ntang PST come chair to house
 'Ntang brought a chair to the house.'
 - b. Ntan ki fo na? i fon Ntang PST give cow to chief 'Ntang gave a cow to the chief.'

The preposition *i* 'to' in in (24) is identical in form to the class 2 subject marker in (22) above. However, it does not assimilate to the stem vowel of the noun it follows even though the noun ends in a glottal stop because, in these examples, the vowel is a separate word and is not attached to the noun. This indicates that the subject markers, which do undergo assimilation, are cliticized to the preceding noun and are neither separate words nor prefixes on the verb.

Although these markers appear to be clitics on the noun, they are, more accurately, clitics on the noun phrase. As the sentences in (25) demonstrate, the marker is attached to the final word of the NP whatever the type, possessive phrase (25a), genitive construction (25b), or relative clause (25c).

- (25) a. [vi-soo ve-m]_{NP}-vi kivkirni 8-hoe 8-my -SM broken 'My hoes are broken.'
 - b. [šwin s-e vi-daŋ] NP-si be?kirni 10.leg 10-CON 8-desk -SM broken 'The legs of the desk are broken'
 - c. [a-na? v-e ver ki yenin]_{NP} -i faŋkir 2-cow 2-CON we PST see -SM fat 'The cowsthat we saw are fat'

One might argue that while these markers may be phonologically enclitic, they are syntactically affiliated with the verb instead of the noun phrase. This is possible in English. For example, English auxiliaries can attach to a preceding noun phrase as an enclitic even though they are still syntactically part of the verb phrase. Consider the example *Jack's winning* (< *Jack is winning*). Here, the auxiliary is of the verb phrase is winning is contracted and cliticized to the preceding noun. That this clitic is phonologically dependent on the noun is evident from the fact that it assimilates to the voicing of the final consonant, being voiced when it follows a noun ending in a voiced consonant (e.g., *Doug'[z] winning*). Because of this independence of syntactic affiliation and phonological attachment that characterizes clitics such as these, subject markers in Lamnso, though phonologically dependent on the noun phrase, appear to be part of the verbal complex and thus resemble subject-verb agreement markers in Bantu, which are marked on the verb. However, sentences with more than one noun before the verb provide further support to the claim that these markers are associated with the noun in Lamnso and not the verb. Consider the example in (26).

(26) *ši-nən-ši* wuna ki-tam-ki du kwa? 19-bird-SM with 7-elephant-SM go.to field 'The bird and the elephant are going to the field.'

Each of the nouns preceding the verb in this sentence is followed by a marker. If these markers were syntactically associated with the verb, one might only expect the subject immediately preceding

¹⁰ We are grateful to Karen Baertsch for pointing out this possibility.

the verb to have a marker. Because the marker on the first noun is separated from the verb by the second noun, it cannot be associated with the verb. 11

A third piece of evidence that suggests that subject markers are dependent and therefore must be enclitics on the noun phrase and not separate words is that they cannot stand alone as the subject of the sentence. When an anaphoric pronoun is used to "co-refer" to some element introduced earlier in the clause (or in the discourse) by substituting for the noun that it refers to, it has a different morphological shape than that of the subject markers. Unlike the subject marker clitic, which for some classes (1 and 9) is realized as null, each of the subject pronouns consists of either V or CV agreement elements, depending on the class of the noun to which it refers. In light of the fact that they must be independent and stand in as substitutes for the noun, this is not surprising. Thus, the subject marker clitic (SM) and subject pronoun (SP) serve two slightly different functions—one is a clitic that is a dependent of the noun phrase and serves to mark subject-verb agreement, and the other is an independent pronoun that can stand alone and serves as the subject of a clause. Consider the following examples.

- (27) a. *ši-nən-ši* yoov luŋ 19-bird-SM sing song 'The bird is singing a song.'
- (28) a. *mi-yka?-mi baari kidʒuŋ* 6-wood-SM burn well 'The wood is burning well.'
- (29) a. pur du kwa?
 1.cat go.to field
 'The cat is going to the field.'
- (30) a. *a-pur-i* du kwa? 2-cat-SM go.to field 'The cats are going to the field.'

- b. **ši** yoov luŋ
 SP sing song
 'It is singing a song.'
- b. *mi baari kidʒuŋ*SP burn well
 'It is burning well.'
- b. wu du kwa?

 SP go.to field
 'It is going to the field.'
- b. **a** du kwa?

 SP go.to field

 'They are going to the field.'

In these examples, the (C)V markers in the abbreviated sentences in (27-30b) are subject pronouns that refer anaphorically to the nouns that were introduced previously in discourse. Notice in the example in (29a) that, although there is a null subject marker indicating subject-verb agreement, there is, nonetheless, a CV marker acting as the subject pronoun in (29b). That subject agreement markers and subject pronouns do not constitute a single set can be seen in the following table that lists the subject marker clitics and subject pronouns for each of the ten major noun classes.

Noun class	Subj. marker (SM)	Subj. pronoun (SP)
1	Ø	wu
2	-i	а
3	-i	wu
5	-i	yi
6	-mi	mi
7	-ki	ki
8	-vi	vi
9	Ø	yi
10	-si	si
19	-ši	ši

Table 4: Subject marker clitics and subject pronouns

¹¹ We discuss constructions with more than one noun before the verb in more detail in section 5.

¹² Givón (1976) argues that subject-verb agreement markers develop historically from anaphoric pronouns. He suggests that subject-verb agreement derives from topic-shifting constructions (e.g., *The man, he lived in Africa*) where the topicalized noun phrase (*the man*) co-refers to one of the verb's arguments (*he*). Constructions with this kind of topic agreement then become reanalyzed as neutral constructions with subject-verb agreement.

In addition to functioning as the subject of the main clause, the subject pronoun can also be used as the subject of a dependent clause.

- (31) *ši-nən š-e* **ši** ki yoov luŋ-ši sənsənin 19-bird 19-CON SP PST sing song-SM black 'The bird that sang a song is black.'
- (32) a-na? v-e a ki šan -i faŋkir 2-cow 2-REL SP PST pass-SM fat 'The cows that passed by are fat.'

In each of these examples, the subject pronoun acts as the subject of a relative clause. It refers to and agrees with the class of the head noun. The example in (32) also demonstrates that the independent subject pronoun and the dependent subject marker clitic can both occur in the same sentence. Both the subject pronoun a and the subject marker -i for the class 2 noun ana? 'cows' appear in the clause before the verb. Notice again that the subject marker indicating subject-verb agreement is cliticized to the entire noun phrase, following not just the head noun but the relative clause modifying it.

4.1.1. Adjacent Concord and Subject Markers

Because subject markers are enclitics on the noun phrase, the possibility of two adjacent markers arises. This occurs in sentences in which the subject NP is an adjectival phrase. In such cases, the adjective should carry a concordial suffix while the NP supports a subject marker determined by the same head noun. Thus, for example, in (33a) there is only a subject marker on the subject NP. In (33b), however, the enclitic —mi could be construed as either a concordial suffix, marking nounadjective concord, or as a subject marker cliticized to the NP. The occurrence of just the one marker suggests a deletion of the other due to haplology. And, indeed, our speaker did accept as possible the double occurrence of the markers, as in (33c), albeit only in very slow, careful speech

- (33) a. *mi-nən-mi yoov luŋ* 6-bird-SM sing song 'The birds are singing.'
 - b. *mi-nən m-e teri-mi yoov luŋ* 6-bird 6-CON small-6/SM sing song 'The small birds are singing.'
 - c. [mi-nən m-e teri-mi]-mi yoov luŋ 6-bird 6-CON small-6-SM sing song 'The small birds are singing.'

Further support for the underlying presence of both markers comes from an interesting construction in which the noun and its modifier can be separated. In (34a), comparable to (33b) in form, only one marker appears. However, when the quantifier is dislocated, as in (34b), the enclitic -mi appears both as subject marker on the subject NP and as concordial clitic on the quantifier; haplology does not come into play because the -mi's are no longer adjacent.

- (34) a. *mi-ndzəv mi-mo?-mi dzə laav* 6-water 6-some-6 be.in house 'Some water is in the house.
 - b. mi-ndzəv-mi dzə laav mi-mo?-mi 6-water-SM be.in house 6-some-6 'Some water is in the house.'

The fact that both of these markers can appear, even though phonologically identical, supports the claim that the concord marker on the adjective and the subject marker on the noun phrase perform two separate functions, one marking concord at the phrasal level, the other agreement at the clausal level.

4.2. Agreement Hierarchy

The claim that these subject markers indicate agreement between the subject noun and the verb is also supported by typological evidence. Following Whaley (1997), agreement marking in languages operates according to an implicational hierarchy of grammatical relations, given in (35).

(35) Agreement Hierarchy (Whaley 1997:154)¹³ subject > direct object > indirect object > other

According to this hierarchy, if there is agreement with one of the nominals in the hierarchy, there will also be agreement with those nominals to the left of it. For example, the hierarchy predicts that if verb agreement is used to indicate the grammatical relation of just one nominal, it will be with the subject. If it marks agreement with only two nominals, it will be with both the subject and the direct object, and so on. Furthermore, the frequency with which one finds agreement decreases as one moves rightward along the hierarchy. In other words, subject agreement is very common, direct object agreement less so, indirect object agreement fairly uncommon, and agreement with other nominals extremely rare.

The Lamnso data appear to be in accord with the predictions of this hierarchy. Consider the sentence in (36). The subject noun *vitam* 'elephants' agrees with the verb by means of the enclitic *-vi*. The direct object noun, on the other hand, has no enclitic and, hence, is not marked for agreement with the verb. This pattern is fully consistent with the pattern predicted by the hierarchy:

(36) *vi-tam-vi kfər vi-kwi* 8-elephant-SM chew 8-grass 'The elephants are eating the grass.'

Only one nominal is marked for agreement with the verb – the subject noun. While we argue that object nouns are not marked for agreement, it is not the case that all object nouns are unmarked. We take up the issue of marking on object nouns in the following sections.

Givón and Moravcsik (cited in Croft 1990: 130) have noted that agreement may be with a primary object rather than with a direct object. Hence, agreement would occur with the goal of ditransitive verbs rather than with the theme. This would also mean that the patient of transitive verbs should license agreement. However, as the example in (36) illustrates, this is not the case in Lamnso (even in cases where the object is human or animate, properties conducive to agreement marking).

4.3. Marking on Object Nouns

So far, we have considered the marking of subject nouns in clauses, arguing that the markers on these nouns indicate agreement between the subject and the verb. But what of object nouns? As we saw in the example in (16), some of the object nouns following the verb are marked; others, such as the object in (36), are not. What determines whether or not an object is marked? When an object is marked, what does the marker indicate? To answer these questions, we look first at the distribution of marking on object nouns.

4.3.1. Nouns in Prepositional Phrases

The unmarked word order for Lamnso sentences is Subject – Verb – Direct Object – Indirect Object – Prepositional Phrase (i.e., obliques). Because indirect object nouns are expressed solely by means of the preposition *i 'to'*, this means that a noun following the verb in an unmarked sentence is either a direct object or the object of a prepositional phrase. Nouns occurring in prepositional phrases are marked with a (C)V marker when they express such semantic roles as benefactive, recipient, instrumental, or comitative. Examples of nouns that have markers in prepositional phrases are given below.

¹³ Croft (1990) discusses a grammatical relations hierarchy that is more simplified than the one discussed by Whaley, involving only three levels in the hierarchy — subject > direct object > oblique — where 'indirect object' is grouped with the obliques.

(37) Benefactive

Ntan naa vi-faveyi fo ši-nən-ši Ntang cook 8-food for 19-bird-? 'Ntang is cooking food for the bird.'

(38) Recipient

Ntang fo vi-faveyi i ši-nən-ši Ntang give 8-food to 19-bird-? 'Ntang is giving food to the bird.'

(39) Instrumental

wu ki ko? ki-či i ki-raŋ-ki he PST climb 7-tree with 7-ladder-? 'He climbed the tree with a ladder.'

(40) Comitative

wu ki wiy i mi-lu?-mi He PST come with 6-wine-? 'He brought wine.'

In (37), the object noun 'bird' following the preposition fo 'for' is marked with the class 19 clitic $-\dot{s}i$. This noun is also marked when it follows the preposition i 'to' as the recipient of the ditransitive verb in (38). The nouns in the instrumental in (39) and the comitative in (40) are also marked with the appropriate class clitic when they follow the preposition i 'with'. However, not all nouns occurring in prepositional phrass are marked. In particular, nouns in locative phrases, such as that in (41) with the loctive preposition mvom 'in, inside', do not permit the enclitic. Compare this with the comitative use of i in (42), which does. Other examples of locative constructions exhibiting no marking on the object nouns are given in (43).

- (41) m yan mvəm mi-ndzəv I walk inside 6-water 'I am walking in the water.'
- (42) *m yan i mi-ndzəv-mi* I walk with 6-water-? 'I am walking with water.'
- (43) a. *a-ŋwa?-a dzə sar ki-daŋ* 2-book-SM be under 7-desk 'The books are under the desk.'
- b. *a-na?-a dzə bam ki-či* 2-cow-SM be behind 7-tree 'The cows are behind the tree.'

4.3.2. Direct Object Nouns

In contrast with subject nouns or objects of certain prepositional phrases, direct object nouns, which in Lamnso, immediately follow the verb, have no marking, as can be observed with the direct object noun *šinən* 'bird' in (44). Interestingly, however, in sentences having conjoined objects, the second object following the verb does have a marker, as on *ki-tam-ki* 'elephant' in (45a).

(i) Ntaŋ wiy mi-ndzəv-**mi** Ntang come 6-water-? 'Ntang is bringing water.'

In this sentence, it may first appear that the noun is a direct object of the verb and therefore should not show up with a marker. However, though the preposition is elided, the sentence actually expresses accompaniment, a fact made clear by the presence of the marker on the noun.

¹⁴ In many instances, the preposition i 'to, with' is elided or realized as length on a preceding vowel. However, the absence of the preposition does not affect the marking on the noun. Consider the following example:

- (44) m yen ši-nən I see 19-bird 'I see a bird.'
- (45) a. *m yen ši-nən wuna ki-tam-ki*I see 19-bird COOR 7-elephant-?
 'I see a bird and an elephant.'
 - b. *m yen ki-tam wuna ši-nən-ši* I see 7-elephant COOR 19-bird-? 'I see an elephant and a bird.'

Note that when the order of the nouns is reversed, as in the sentence in (45b), it is still the second noun that appears with a marker. Additional nouns, as shown in (46), also occur with the appropriate enclitic. Again, it is only the first noun that is unmarked. Such common examples initially lead one to conclude that it is the direct object noun immediately following the verb that does not receive a marker, while subsequent ones do. However, while these sentences seem to be the preferred form, sentences like that in (47) are also found.

- (46) a. *m ker vi-soo wuna vi-yin-vi wuna mi-ŋka?-mi* I have 8-hoe COOR 8-bowl-? COOR 6-wood-? 'I have hoes, bowls and firewood.'
 - b. *m ker vi-yin wuna mi-ŋka?-mi wuna vi-soo-vi I have 8-bowl and 6-wood-? and 8-hoe-? 'I have bowls, firewood, and hoes.'*
- (47) *m ker ki-soo, ši-nrən, wuna ki-yin-ki*I have 7-hoe 19-bird and 7-bowl-?
 'I have a hoe, a bird, and a bowl.'

In this example, the second noun, like the first, is unmarked; only the third noun is marked. The crucial difference between the sentence in (47) and those in (46) is the presence of the coordinating element *wuna* between the first and second objects in the latter. Though *wuna* corresponds to English 'and' and is often glossed as such, it behaves not like a conjunction, but like a comitative preposition meaning 'together with' (apparently derived from the third person singular pronoun *wun* plus *a* 'and, with'). In other words, these constructions do not have true conjoined objects, but a direct object followed by one or more objects in prepositional phrases expressing the comitative. As such, *wuna*, which behaves like the preposition *i* 'to, with' in the comitative examples discussed previously in 4.3.1, requires that its object noun be marked.

4.4. Object Nouns: Case or Agreement?

In the previous section, we discussed the distribution of marking on object nouns. As the data presented show, object nouns are marked only if they occur in prepositional phrases expressing such roles as benefactive, recipient, instrumental, or comitative; they are not marked in the locative or when they are direct objects of the verb. How can we account for this distribution of object marking and what does this marking indicate?

It is not likely that the markers on object nouns indicate agreement as they do on subject nouns. As discussed in 4.2, marking agreement on nominals other than subject nouns or direct object nouns is very rare. Moreover, the Agreement Hierarchy predicts that one will not find languages that mark the subject and other nominals with agreement to the exclusion of direct objects (although Spanish and some northern Italian dialects may exhibit such patterns (Julie Auger, p.c.)).

The fact that it is only objects occurring in certain prepositional phrases that are marked suggests that case may be involved. In many languages, prepositions (or other adpositions) are like verbs in that they govern case. In such languages, combining a preposition with a case marker on the noun can serve to indicate the relation of the noun to the verb (Blake 1994). This claim, that Lamnso object nouns are marked for case, is once again supported by typological evidence.

4.4.1. Case Hierarchy

Just as languages mark agreement according to an implicational hierarchy of grammatical relations, languages also mark case according to a similar hierarchy (Whaley 1997). However, the grammatical relations hierarchy for case is the exact opposite of that for agreement.

(48) Case Hierarchy (Whaley 1997:154)

other > indirect object > direct object > subject

As in the Agreement Hierarchy, discussed in 4.2, case marking on one relation in the hierarchy implies case marking on those relations to the left of it. Conversely, if a grammatical relation on the hierarchy is zero-marked for case, then the grammatical relations to the right of it in the hierarchy are also zero-marked for case. One prediction of the hierarchy, then, is that there will be few, if any, languages that mark subjects with case to the exclusion of all other grammatical relations. Likewise, there should be no languages that mark both subjects and indirect objects with case, but not direct objects, and so on.

The pattern of marking on object nouns in Lamnso is in accordance with the patterns implied by the Case Hierarchy. Case marking in Lamnso extends only to the obliques, i.e., to objects in certain prepositional phrases. Direct object nouns are not marked. According to the predictions of the hierarchy, then, subject nouns should not be marked for case. Indeed, we have argued that subject nouns are marked for agreement. So far, the hierarchy supports the Lamnso data; however, it is not precise enough to distinguish among the obliques to account for why objects in the locative are not marked while those in other types of prepositional phrases are.

Blake, in his treatise on case (1994), discusses the organization of case systems of many different languages. In some languages, no distinction is made among the obliques; it is a kind of "elsewhere" case that covers a wide range of functions. However, in languages that make a finer distinction among the obliques, locative is typologically the first to emerge as a distinct case from the rest of the obliques. Incorporating this distinction into Whaley's hierarchy (49), we are able to discern a regular pattern of "case" marking in Lamnso: only the peripheral "other" (or truly oblique) cases are marked. Recall that the prediction of the Case Hierarchy as described by Whaley is that if case is marked on just one category of nominals, it will be the obliques (the initial tier "other" of the Whaley hierarchy in (48)). If locative is the first to emerge as being distinct from the rest of the obliques, it moves out of the initial tier. The lack of marking on objects in the locative then falls out from its lower position in the hierarchy with respect to the rest of the obliques (instrumental, comitative, etc.), which are marked for case.

(49) Case Hierarchy enhanced

other > locative > indirect object > direct object > subject

5. Subject Nouns Revisited: Between Agreement and Case

In the previous section, we argued that (C)V clitics on subject nouns indicate agreement with the verb. However, certain observations about marking on object nouns raise questions about whether the markers on subject nouns really indicate agreement or whether they might mark case as they do on oblique objects.

For instance, we have shown that certain constructions that appeared to involve conjoined direct objects actually comprised a direct object and a prepositional coordinate phrase headed by wuna. Since the noun is the object of the coordinating element wuna, it is marked with the appropriate enclitic for oblique case. But what of constructions with subject nouns conjoined by wuna? Does the nominal clitic marker on a noun function as a case marker, as it does for objects, or as an agreement marker, as it does for single subjects?

In sentences with two nouns preceding the verb, usually each of the nouns is followed by the appropriate enclitic, as shown previously in (26) and repeated below in (50). Reversing the order of the two nouns does not change the fact that both nouns are marked. We proposed in 4.1 that the marker on the first noun in such constructions is marking agreement with the verb; it is perhaps less clear

whether the marker on the second noun is also marking agreement or whether it is marking case, due to the presence of the preposition *wuna*.

- (50) a. *ši-nən-ši wuna ki-tam-ki du kwa?* 19-bird-SM COOR 7-elephant-? go.to field 'The bird and the elephant are going to the field.'
 - b. *ki-tam-ki* wuna ši-nən-ši du kwa? 7-elephant-SM COOR 19-bird-? go.to field 'The elephant and the bird are going to the field.'

Lamnso, like many languages that disallow or restrict constructions with conjoined noun phrases, employs constructions in the comitative as an alternative to conjunction. This was demonstrated for direct objects in 4.3.2. As such, the sentences in (50) do not contain two conjoined subjects, but only one subject followed by a noun in the comitative. While both nouns are marked, only the first noun or true subject is marked for agreement with the verb – the second noun in the comitative phrase is marked for oblique case. However, the sentences in (50) do not represent the only pattern of marking on nouns before the verb found in Lamnso. Consider the following examples.

- (51) a. *a-na? wuna mi-nən-mi du kwa?*2-cow COOR 6-bird-? go.to field
 'The cows and the birds are going to the field.'
 - b. *vi-yin wuna a-baar-i bvə?kirni* 8-bowl COOR 2-cup-? broken 'The bowls and cups are broken.'

While our informant claimed that each noun before the verb must have a marker, as in (50), she occasionally produced sentences like those in (51) – with only the second noun being marked. Later, she made a statement to the effect that the marker on the first noun is optional. This pattern of subject marking in (51) is the only pattern exhibited by the dialect of Lamnso described by Eastman (1980).

The pattern in (51) closely resembles a pattern of subject-verb agreement marking that is common in languages that allow conjoined subjects. In several of the Bantu languages, for example, when a sentence has conjoined subjects, there is full verb agreement with only one of the conjuncts, typically the one that is closest to the verb (Corbett 1991:264-5). It is quite possible, then, that the sentences in (51), in which only the second noun is marked, should be interpreted as having conjoined subjects rather than a subject followed by a noun in the comitative, as in (50). Many languages, including some of the Bantu languages, use the same morpheme for the conjunction 'and' and the comitative preposition 'with' (e.g., Hausa (Chadic) da, Chibemba (Bantu) na, Luganda (Bantu) ne). Likewise, it is possible that wuna is coming to mean 'and' as well as 'with' for certain speakers/dialects of Lamnso, thereby allowing constructions with conjoined subjects to emerge as an alternative to comitative constructions.

If this is indeed accurate, there are several reasons to conclude that the marker on the second noun in the sentences in (51) is, in fact, an agreement marker. Assume for the moment that it is, instead, a case marker. If it were possible to mark case instead of agreement on the second noun only while the first remained unmarked, this would imply that it would also be possible for there to be no marking on a single subject noun without a conjunct. However, this does not occur. Single subjects always have a subject marker. Therefore, it seems that agreement must be involved.

(i) *ki-ti na m-guu wa meza u-me-vunjika* (Bokamba 1985:45) 7-chair and 3-leg of table 3-PERF-broken

'The chair and the leg of the table are broken.'

In this example, the verb agrees only with the head noun of the conjunct that is closest to it (i.e., *mguu 'leg'*). If the order of the two conjuncts is reversed, agreement is with the class 7 noun *kiti 'chair'*.

(ii) *m-guu wa meza na ki-ti ki-me-vunjika* (Bokamba 1985:45) 3-leg of table and 7-chair 7-PERF-broken 'The leg of the table and the chair are broken.'

¹⁵ This is the case with Swahili.

A second reason to conclude that agreement rather than case is being marked on these nouns is because it coincides with the patterns predicted by the Case and Agreement Hierarchies we discussed throughout section 4. These two hierarchies, which we have discussed separately, can both be operational in languages that employ both case and agreement to indicate the type of grammatical relation that a noun holds with the verb. Because the two hierarchies are the converse of one another, they fit together, operating in a complementary pattern, as illustrated in (52).

As Whaley notes, when languages use both case and agreement strategies, they are typically employed in a "maximally economical fashion" (1997:168). That is, where agreement stops in a language, case marking starts with little or no overlap. This is what we find in Lamnso if we assume subject nouns are marked for agreement.

If verb agreement in Lamnso is with subjects only, and all other relations are not marked with respect to agreement, this pattern is predicted by the Agreement Hierarchy. Likewise, the pattern of case marking in Lamnso, which extends only to the obliques (i.e., to the indirect objects or objects of a preposition), is also in accordance with the Case Hierarchy. After employing these two strategies, only the direct object is left unmarked for either case or agreement, its grammatical relation indicated solely by its position after the verb.

On the other hand, if we were to assume that Lamnso subjects were marked for case and not for agreement, we would have a counter-example to the Case Hierarchy which predicts that languages will not mark subjects and indirect objects for case while excluding direct objects. And there appear to be virtually none that do so. Furthermore, since direct objects are not marked for case in Lamnso, then, according to the hierarchy, subjects should not be marked for case either. Though these patterns are not impossible, they do seem unlikely, especially in light of the alternative just discussed: Marking agreement on subjects and case on objects in Lamnso fits in typologically with other language systems that utilize both agreement and case.

Typological considerations notwithstanding, what makes this pattern of subject marking in Lamnso so unusual is that it has many characteristics of case marking. For instance, the way subject-verb agreement is marked in Lamnso differs from the way it is marked in most of the languages that exhibit this type of agreement. The most common way to mark subject-verb agreement is on the verb ('head marking'), rather than on the noun ('dependent marking'), as in the Bantu languages which exhibit the head-marking pattern of clause level agreement. Case, on the other hand, is predominantly marked on the noun, a form of dependent marking. Thus, because the subject-verb relation in Lamnso is marked on the dependent instead of on the head, it could be considered to resemble more closely case marking than typical agreement marking in this respect.

Blake (1994:13) goes even further than pointing out a mere resemblance, suggesting that both agreement and word order, which are two different strategies for indicating head-dependent relations, could even be viewed as forms of case marking in its most general definition – as a system of marking nouns for the type of relationship they bear to their head. What these observations are meant to suggest is that case and agreement are not categorically different phenomena. If one were to mark case and agreement along a continuum, where canonical examples of agreement languages such as the Bantu languages would be at one end and canonical examples of case languages such as Latin or Finnish would be at the other, Lamnso would lie somewhere in between.

6. Conclusion

In this paper, we have identified and analyzed the different functions of certain (C)V enclitics occurring both within the noun phrase and phrase-finally within the clause. At the phrasal level, Lamnso behaves similarly to the Bantu languages, exhibiting concordial agreement between the head noun and its modifiers. At the clausal level, we have shown that Lamnso employs elements of three different morphosyntactic strategies to indicate the grammatical relationship that a noun bears to the verb: word order, case marking, and agreement. Of these, agreement and case are used in complementary ways. Subject nouns are marked for agreement with the verb. Object nouns occurring in prepositional phrases expressing certain semantic roles are marked for oblique case. Direct object nouns are not

marked for either case or agreement, but are indicated by their position after the verb. The Lamnso pattern of marking agreement on subjects and case on oblique objects fits in typologically with other language systems that utilize both agreement and case according to an implicational hierarchy of grammatical relations.

References

Blake, Barry. 1994. Case. Cambridge: Cambridge University Press.

Bokamba, Eyamba G. 1985. Verbal agreement as a noncyclic rule in Bantu. African Linguistics: Essays in Memory of M. W. K. Semikenke (Studies in the Sciences of Language 6), ed. by D. L. Goyvaerts, 9-54. Amsterdam: John Benjamins.

Corbett, Greville. 1991. Gender. Cambridge: Cambridge University Press.

Croft, William. 1990. Typology and universals. Cambridge: Cambridge University Press.

Eastman, Carol. 1980. Concordial agreement in Lamnso. Africana Marburgensia, 13. 25-51.

Givón, Talmy. 1970. The resolution of gender conflicts in Bantu conjunction: when syntax and semantics clash. Papers from the Sixth Regional Meeting, Chicago Linguistic Society, 250-261. Chicago Chicago Linguistic Society.

Givón, Talmy. 1976. Topic, pronoun and grammatical agreement. Subject and Topic, ed. by Charles N. Li, 149-188. New York: Academic Press.

Grebe, Karl. 1984. The domain of noun tone rules in Lam Nso. Master's Thesis, University of Calgary, Alberta.

Grebe, Karl and Winnifred Grebe. 1975. Verb clusters of Lamnsok. Network Grammars, ed. by Joseph E. Grimes, 85-105. Norman: Summer Institute of Linguistics.

Grimes, Barbara (ed.) 2000. Ethnologue Volume 1: Languages of the world. Dallas: SIL International.

Hyman, Larry M. 1980. Babanki and the Ring group. Les Classes Nominales dans le Bantou des Grassfields (vol. 1 of L'Expansion Bantoue: Actes du Colloque International du CNRS: Viviers (France) – 4-16 avril 1977), ed. by Larry M. Hyman & Jan Voorhoeve, 225-258. Paris: Société d'études linguistiques et anthropologiques de France.

Nichols, Johanna. 1986. Head-marking and dependent-marking grammar. Language, 62. 56-119.

Schaub, Willi. 1985. Babungo. London: Croom Helm.

Watters, John R. & Jacqueline Leroy. 1989. Southern Bantoid. Niger-Congo Languages: a Classification and Description of Africa's Largest Language Family, ed. by John Bendor-Samuel, 437-445. Lanham: University Press of America.

Welmers, William E. 1973. African language structures. Berkeley: University of California Press.

Whaley, Lindsay. 1997. Introduction to typology: the unity and diversity of language. Thousand Oaks: Sage.