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Form and meaning in Fulfulde: a morphophonological study of Maasinankoore

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Chapter 8

Nominal modifiers and pronominals

8.1 ADJECTIVES

In Fulfulde, the difference between a noun and an adjective is determined by the function of the noun class suffix. The class suffix in nouns has a derivational and classifying function. The class suffixes of nouns are used to derive nouns from nominal or verbal stems and they indicate which concord should be used to refer to that noun. The number of class suffixes with which the stem of a noun can combine is limited.

The noun class suffix of adjectives functions as a concord: it refers to the noun which is modified by the adjective. In principle, adjectives can occur with suffix forms of all twenty-two noun classes. There are instances when an adjective cannot occur with a suffix of a certain class. This can often be explained on semantic grounds: there is no word in that class which can be associated with the semantic content of that particular modifying adjective. McIntosh (1984:47-51) disagrees with this criterion (the number of classes with which a stem can combine) as the basis for distinguishing nouns from adjectives. She states that both nouns and adjectives occur in whichever classes their semantic compatibility allows them to. She claims that the combination of the (adjectival) root **rew-** 'female' with a suffix of the 'DAM class denoting liquids is as ridiculous as the combination of the (noun stem) root **nag-** 'cow' with a suffix of the 'O class denoting persons.

There are however a number of arguments for classifying **rew-** 'female' as an adjective. To illustrate this point, examples involving the adjective **wor-** 'male' will also be given. Firstly, these words always follow those words which can more clearly be defined as nouns. This is the typical slot for modifiers in Fulfulde noun phrases.

pullo debbo	'a Fulbe woman'	[lit: 'a female Pullo']
pullo gorko	'a Fulbe man'	[lit: 'a male Pullo']

A noun in the adjectival position following the noun would result in a genitive construction 'the Pullo of the woman', but this is not the meaning of these noun phrases.

Secondly, in Maasina the adjectival stems **rew-** 'female' and **wor-** 'male' do combine with a suffix of the 'DAM class. The term **"diyam "dewam** 'female water' describes the calm water, streaming at the lower bank of the river, where more fish can be caught. The idiomatic expression **"diyam "goram** 'male water' describes the water streaming more wildly at the higher bank of the river. Below a few more idiomatic uses of these adjectives are given to contradict the claim that they are semantically incompatible with certain classes denoting only inanimate nouns, stated by Arnott (1970a:78) and McIntosh (1984:50).

NGO	fɔŋ ^{ng} ɔ rɛwɔ	‘lower bank’	[lit: ‘female side’]
'DAM	ⁿ diyam ⁿ dewam	‘water at lower bank’	[lit: ‘female water’]
NGAL	leggɔl dewal	‘shorter stick of type of fish net’	[lit: ‘female stick’]
NGA/BA	ⁿ gelɔɔba ⁿ gɔra	‘male camel’	
NGE	nagge wɔre	‘male cow’	
NDU	fede ⁿ du wordu	‘thumb’	[lit.: ‘male finger’]
KA	haala ⁿ gɔra	‘commitment’	[lit: ‘male word’]
NGO	fɔŋ ^{ng} ɔ wɔrɔ	‘higher bank’	[lit: ‘male side’]
'DAM	ⁿ diyam ⁿ gɔram	‘water at higher bank’	[lit: ‘male water’]
NGAL	leggɔl gɔral	‘longer stick of type of fish net’	[lit: ‘male stick’]

Adjectives are defined here by their (potential) occurrence in all noun classes. The most important criterion is the fact that the adjective modifies another noun which is present in the discourse and the concordial class suffix of the adjective refers to this noun. Adjectives also differ from nouns with regard to the distribution of the initial consonant series (see section 3.1.3).

The adjectives in the Maasina dialect can be divided into three groups based on the type of suffix they take, either grade A, grade B or grade D. Grade C does not occur with any adjective in Maasina. The three categories of suffix forms in adjectives can perhaps explain why Gaden (1913:21) distinguishes only these sets of suffix forms coinciding with the suffix forms found for adjectives in Maasina. Grade C occurs only in nouns, and in only one adjective in the eastern dialects, and this grade has later been added by Klingenberg (1941:15-19) as an additional fourth set of suffix forms.

Arnott (1970a:77) states that each stem combines with one grade. The grade from which an adjective takes its suffix forms is traditionally considered to be a lexical feature of the (adjectival) stem. As shown in chapter 6, the hypothesis defended here is that the type of word formation determines which suffix grade is chosen. The formation of these three groups of adjectives is different. Grade A adjectives are the “basic” adjectives, that is the stems are non-derived forms. These stems are nominal. Adjectives that combine with grade B suffix forms are denominal adjectives. These stems are full nouns, sometimes even full phrases, which act as an adjectival stem. The concord expresses the fact that the modified noun shares a semantic feature with the word in the adjectival stem. Grade D adjectives are deverbal. These stems are formed by a verb stem that can be followed by verbal markers. The concord signals that the modified noun has the semantic role of the subject of the verb stem. The adjectives in Grade D are participles.

The absence of adjectives in grade C is remarkable. It should be noted that in the Fulfulde dialects of Gombe and Aadamaawa there is one adjective, i.e. wɔr- ‘male’, which combines with suffix forms of grade C, the same adjectival stem combines with suffixes of grade A with an irregular suffix -kɔ in the 'O class in Maasina.

Gombe, Aadamaawa: grade C		Maasina: grade A	
'O	gor-ko	'O	gɔr-kɔ
'BE	wor-ʃe	'BE	wɔr-ʃe
NGEL	gor-gel	NGEL	gor-el
NGUM	gor-gum	—	—
KON	ɲgor-kon	KOY	gor-oy, ⁿ gor-oy
NGA	ɲgor-ga	—	—
KO	ɲgor-ko	—	—
NDE	wor-de	NDE	wɔr-de
NDI	ɲgor-di	NDI	wor-di, ⁿ gor-di
NDU	wor-du	NDU	wor-du
NGA	ɲgor-ga	NGA/BA	wɔr-a, ⁿ gɔr-a
NGE	wor-ge	NGE	wɔr-e
NGO	wor-go	NGO	wɔr-ɔ
NGU	ɲgor-gu	NGU	wor-u, ⁿ gor-u
NGAL	gor-gal	NGAL	gɔr-al
NGOL	gor-gol	NGOL	gor-ol
KOL	gor-kol	KOL	gor-ol
KA	[ɲgor-ka]	KA	wɔr-a, ⁿ gɔr-a
KI	gor-ki	KI	wor-i, ⁿ gor-i
KO	[wor-kɔ]	KO	wɔr-ɔ
KOL	gor-kol	KOL	gor-ol
'DAM	[ɲgor-dam]	'DAM	gɔr-am, ⁿ gɔr-am
KAL	[gor-kal]	KAL	gɔr-al
'DUM	gor-dum	'DUM	gor-um
'DE	gor-dɛ	'DE	gɔr-ɛ
'DI	gor-di	'DI	gor-i

The grade C form of this adjective in the eastern dialects is thought to be an innovation. The occurrence of the grade C suffix forms is triggered by the stem final consonant [r], which is identical to the [r] form of the circumstantial extension which is postulated as the grade marker in the underlying form of grade C suffix forms.

8.1.1 GRADE A: BASIC ADJECTIVES

The following adjectives combine with grade A suffix forms. All stems which combine with a grade A suffix are (underlyingly) consonant final. The adjectives in grade A are basic. They are not derived from a verb or a noun. On the contrary, verbs are derived from these stems by adding the inchoative extension -(i)d- to the stem. The number of these basic adjectives is restricted.

adjectival stem		derived verbal stem	
ʔɔɔl-	'yellow'	ʔɔɔl-d-	'be(come) yellow'
hes-	'new'	hey-d-	'be(come) new'
hecc-	'fresh'	hecc-id-	'be fresh'
lobb-	'good, nice'	lobb-id-	'be nice'

butt-	'big, fat'	butt-id-	'be big, fat'
fur-	'grey, dusty'	fur-d-	'be(come) grey'
lugg-	'deep'	lugg-id-	'be(come) deep'
fam-ar-	'small'	fam-d-	'be small'
faŋk-ar-	'ugly'	faŋk-id-	'be ugly'
raḅḅ-	'short'	raḅḅ-id-	'be short'
mɔjj-	'good'	mɔjj-	'be(come) good'
ḅɔl-	'empty, nude'	ḅɔl-	'strip, pluck'
wɔr-	'male'		
rew-	'female'		
janan-	'belonging somewhere else'		
wɔɔt-	'one'		
d'id-aḅ-	'second' [centre of Maasina]		
d'id-ɔḅ-	'second' [Gimballa]		

The verbal stems in the right column are derived from the adjectives in the left column. Not all the adjectival stems listed here need the inchoative extension **-(i)d-** to form a verb. A few adjectival stems like **mɔjj-** 'good' can be either an adjectival stem, combining with grade A suffix forms, or a verb stem, combining with verbal conjugations. And all verb stems can occur with suffix forms of grade D, to form a participle or a deverbal adjective. The following table gives the stem **mɔjj-** in combination with the suffix forms of different grades.

stem + grade + class	->	nominal	
Adj. + A + 'O	->	ned'dɔ mɔjj-ɔ	'good person'
V + D + 'O	->	ned'dɔ mɔjj-u-d'ɔ	'good person; has become good'
V + C + NDE	->	mɔjj-u-dɛ	'to be(come) good'
Adj. + A + NDE	->	huu^adɛ mɔjj-ɛɛ	'good thing'
V + D + NDE	->	huu^adɛ mɔjj-u-ⁿdɛ	'good thing; has become good'

The fact that one stem can occur with different grades (i.e. different suffix forms) is an indication that the choice of the suffix form is not determined by the shape of the stem, but rather by the type of word being formed, deverbal, denominal etc. There are two possibilities to treat the stem **mɔjj-** 'good'. One way is to mark the adjectival stem **mɔjj-** 'good' for the category Nominal and to mark the stem **mɔjj-** 'to be good' as Verbal in the lexicon so that one can predict correctly the choice of the suffix form. But if the nominal and the verbal stem are considered to be one polysemic stem, it should not be listed twice, once as nominal and once as verbal, but then the nominal and verbal derivations in themselves should provide the correct suffix form.

There seems to be a slight semantic difference between an adjective formed from the basic adjectival stem and the deverbal form where the participle is used as an adjective. This semantic difference becomes clear in the following two examples.

grade A: fur-ɛ	'a cow with a dusty skin colour'
grade D: fur-d-u-ⁿgɛ	'a cow that has become dusty coloured, e.g. covered with mud'

The two examples above refer to the noun **nagge**. It is considered stylistically not correct to put this noun before these words. **nagge fure** would be a pleonasm, because by **fure** alone it is already understood that a cow is meant. In the adjective **fure** the skin colour of a cow is described, it is supposed to have been born like that. In the deverbal adjective (participle) a change of colour is expressed, possibly because the cow has been rolling through the mud. When the basic adjective is used, a general unchanging state of the noun concerned is described. When the deverbal form is used, emphasis is put on the change of state undergone by the noun described. The change of state is expressed by the choice of the verb and its inchoative extension **-(i)d-** 'to become, to be', its meaning indicating a change of state.

The following table gives examples of grade A adjectives, in combination with all class suffixes. The forms of the grade A suffixes are discussed in Chapter six.

class	'good, nice'	'grey'	'strange'	'new'
'O	lobb-ɔ	pur-ɔ	janan-ɔ	kes-ɔ
'BE	lobb-u-ʃe	fur-ʃe	janam-ʃe	hey-ʃe
NGEL	lobb-el	pur-el	janan-el	kes-el
KOY	lobb-oy	pur-oy	ⁿ j, janam-oy	kes-oy
NDE	lobb-ere	fur-de	janan- ⁿ de	hey-re
NDI	lobb-iri	p, fur-di	ⁿ j, janam- ⁿ di	k, hey-ri
NDU	lobb-uru	fur-du	janam- ⁿ du	hey-ru
NGA/BA	lobb-a	p, fur-a	ⁿ j, janam-a	k, hes-a
NGE	lobb-e	fur-e	janam-e	hes-e
NGO	lobb-ɔ	wɔr-ɔ	janam-ɔ	hes-ɔ
NGU	lobb-u	p, fur-u	ⁿ j, janam-u	k, hes-u
NGAL	lobb-al	pur-al	janam-al	kes-al
NGOL	lobb-ol	pur-ol	janam-ol	kes-ol
KOL	lobb-ol	pur-ol	janam-ol	kes-ol
KA	lobb-a	p, fur-a	ⁿ j, janam-a	k, hes-a
KI	lobb-i	p, fur-i	ⁿ j, janam-i	k, hes-i
KO	lobb-ɔ	fur-ɔ	janam-ɔ	hes-ɔ
'DAM	lobb-am	pur-am	ⁿ j, janam-am	kes-am
KAL	lobb-al	pur-al	janam-al	kes-al
'DUM	lobb-um	pur-um	janam-um	kes-um
'DE	lobb-e	pur-e	janam-e	kes-e
'DI	lobb-i	pur-i	janam-i	kes-i

The possible variation of the initial consonant of adjectives is indicated by the addition of the initial consonants {p, ⁿj, k} which are used when the adjective does not follow the noun which it modifies. A sonority constraint does not allow the occurrence of the fricatives [s] or [ʃ] in syllable final position. The change of these fricatives to approximants is productive when basic adjectival stems ending in these segments occur before the suffix forms **-rV** and **-ʃe**. These phonological rules describing the allomorphy of the adjectival stems in this table, such as ATR vowel harmony, the application of syllable final sonority constraints, the initial consonant alternation etc., apply to all nominals and are described in part one.

8.1.2 GRADE B: DENOMINAL ADJECTIVES

The number of adjectives which take a suffix form of Grade B as class concord is restricted. Like the nouns that are formed with a suffix of grade B, the adjectives formed with a suffix form of grade B are also built on full words that function as a stem. These are what Klingenheben (1963:127-132) describes as secondary adjectives. The formation of adjectives on the basis of full nouns or even phrases seems more productive in the Aadamaawa dialect. The adjectives **ladde-** 'wild' and **mæere-** 'worthless' derived from **ladde** 'wilderness' and **mæere** 'nothing' can occur in all classes in Aadamaawa. In Maasina the same roots occur only in a few derived nouns, e.g. **laddeeru** 'lion' [lit: "wild (cat-like) one"] and **mæereɛjɔ** 'a good-for-nothing' [lit: "person of nothing"]. The fact that grade B adjectives are denominal and have full words as their stem is further discussed in section 8.1.3 on colour terms.

The agentive nominal is also denominal and takes the suffix form of grade B discussed in section 8.1.4. It is also built on a full noun, i.e. a stem which includes a class suffix.

In the table below a few examples of adjectives that combine with suffixes of grade B are given.

	'old'	'red'	'first'	'leaving'
'O	nayɛɛ-ɔ	bɔdɛɛ-ɔ	ʔaran ⁿ dee-ɔ	bittɔɔ-wɔ
'BE	nayɛɛ-ɓɛ	wɔdɛɛ-ɓɛ	ʔaran ⁿ dee-ɓɛ	wittɔɔ-ɓɛ
NGEL	naye-wel	bodɛ-wel	ʔaran ⁿ dee-wel	bittoo-wel
KOY	naye-woy	^m b, bodɛ-woy	ʔaran ⁿ dee-wol	^m b, bittoo-woy
NDE	nayɛɛ-rɛ	wɔdɛɛ-rɛ	ʔaran ⁿ dee-rɛ	wittɔɔ-rɛ
NDI	nayee-ri	^m b, wodɛɛ-ri	ʔaran ⁿ dee-ri	wittoo-ri
NDU	nayee-ru	wodɛɛ-ru	ʔaran ⁿ dee-ru	wittoo-ru
NGA/BA	nayɛɛ-wa	^m b, wɔdɛɛ-wa	ʔaran ⁿ dee-wa	wittɔɔ-wa
NGE	nayɛɛ-wɛ	wɔdɛɛ-wɛ	ʔaran ⁿ dee-wɛ	wittɔɔ-wɛ
NGO	nayɛɛ-wɔ	wɔdɛɛ-wɔ	ʔaran ⁿ dee-wɔ	[wittɔɔ-wɔ]
NGU	nayee-wu	^m b, wodɛɛ-wu	ʔaran ⁿ dee-wu	wittoo-wu
NGAL	naye-wal	bɔdɛ-wal	ʔaran ⁿ dee-wal	bittɔɔ-wal
NGOL	naye-wol	bodɛ-wol	ʔaran ⁿ dee-wol	bittoo-wol
KOL	naye-wol	bodɛ-wol	ʔaran ⁿ dee-wol	bittoo-wol
KA	nayɛɛ-wa	^m b, wɔdɛɛ-wa	ʔaran ⁿ dee-wa	wittɔɔ-wa
KI	nayee-wi	^m b, wodɛɛ-wi	ʔaran ⁿ dee-wi	wittoo-wi
KO	nayɛɛ-wɔ	wɔdɛɛ-wɔ	ʔaran ⁿ dee-wɔ	[wittɔɔ-wɔ]
'DAM	naye-jam	^m b, bɔdɛ-jam	ʔaran ⁿ dee-jam	^m b, bittɔɔ-jam
KAL	naye-wal	bɔdɛ-wal	ʔaran ⁿ dee-wal	[bittɔɔ-wal]
'DUM	naye-jum	bodɛɛ-jum	ʔaran ⁿ dee-jum	bittoo-jum
'DE	nayɛɛ-je	bɔdɛɛ-je	ʔaran ⁿ dee-je	bittɔɔ-je
'DI	nayee-ji	bodɛɛ-ji	ʔaran ⁿ dee-ji	bittoo-ji

The word based on the stem **wittɔɔ-** 'leaving' is an agentive nominal. The word is put here to show the similarity in word formation between the agentive and the adjective nominals with regard to the choice of the grade B suffix form. The verbal stem of the agentive nominals is followed by a morpheme **-ɔɔ-**. This morpheme is cognate with the marker of the 'O class denoting persons, persons being prototypical agents. The length of the morpheme

-ɔɔ- is caused by a merger of the stem final vowel with the associative marker *ɥ which occurs in grade B word derivations. The two initial consonants, [ᵐb, b] or [ᵐb, w] indicate that there is fluctuation in the initial consonant of this adjective form as described in Chapter three. The agentive form only shows fluctuation in the 'DAM and KOY classes.

8.1.3 GRADE B: COLOUR TERMS WHITE, BLACK, AND RED

Adjectival colour terms which refer to the nouns they modify with a concord suffix prototypically describe the skin colour of cows. Other colour terms, like **haako hecco** 'green, lit. fresh leaves' and **bulabula** 'blue', are not inflected, they do not show agreement with a suffix concord. Different types of cows are used as environmental reference points for colour. The adjectival colour terms are based on the following Fulfulde nouns in the NGE class denoting cows.

wɔɔ-ɛ	'red cow' (proper name)
ran-ɛ	'white cow' (proper name)
ɓal-ɛ	'black cow' (proper name)
wun-ɛ	'beige, very light yellowish brown cow' (proper name)
say-ɛ	'copper, goldish yellow cow'

The nouns **ɓale**, **wɔɔɛ**, **rane**, **wune** are used to call the cows. They are terms of address, proper names. When used like this, the stems **ɓal-**, **wɔɔ-**, **ran-**, and **wun-** take a grade A suffix form. These words are nouns, their stems can only combine with the suffix -ɛ of the NGE class.

The word **ɓale** 'name of a black cow' was given by town-dwellers, it is not used by herdsman. The following quotation is given by a herdsman in Tenenku: "only someone who doesn't know anything about cows would use those words, a black cow is called **wane**". In the word **wane** 'black cow' the root **wan-** can be recognized. It is also found in **ᵐbana** 'black donkey', a word that has the meaning of 'buffalo' in Fuuta Tooro and Ringimaaji. Even though the word **ɓale** 'name of a black cow' was disapproved of as a correct name for a cow, its significance as a name of a cow was clearly understood, since the herdsman corrected it with another name.

The following adjectival colour terms occur in Maasina. The nouns which are proper names of cows form the adjectival stem to which a grade B suffix of any class can be added.

wɔɔɛ-	'red'
rane-	'white'
ɓale-	'black'
wune-	'beige, very light yellowish brown' (in Duwansa the general term for brown)
saye-	'copper, goldish yellow'

The associative grade marker in the colour terms formed with a grade B suffix indicates that there is a shared feature in the meaning of the full noun in the stem and the meaning of the adjective formed on that stem. This shared feature of any object modified by an adjective formed from a cow's name and such a cow is its skin colour. The feature of the skin colour of a cow is associated with the object to which the adjectival concord refers. Thus **foo^odu**

wodeeru ‘a red bird’ is not “a bird like a red cow”, but rather “a bird with the same feature, i.e. colour, as a red cow”. Something with a red colour shares this colour feature with a red cow.

The adjectives **wune-** ‘brown’ and **saye-** ‘copper, goldish yellow’ were only found in Haayre as productive adjectives. In the centre of Maasina these words could only occur as nouns in grade A denoting proper names of cows of this colour.

The colour terms white, red, and black have two possible forms with either the suffix **-e** or **-we** of the NGE class, a class marker which denotes cows.

	‘white’	‘red’	‘black’	‘brown, beige’
1. (noun)	ran-e	fal-e	wɔd-e	wun-e
2. (adjective)	ran-ee-we	fal-ee-we	wɔd-ee-we	wun-ee-we
3. (verb)	rawn-	fawl-	wɔjj-	--

To describe a cow with the colours mentioned, the adjective is used. The long vowel **-ee** in the stem is the vowel of the NGE class suffix of the nouns used by the herdsman when naming and calling this cow, lengthened because of its merger with the grade marker ***ɥ** of grade B. The colour adjectives have two suffixes: the suffix **-e** of the NGE class which occurs in the stem and the concordial suffix referring to the object which it modifies.

Inchoative verbs are derived from the basic stems for red, white, and black with the associative extension ***ɥ**. This derivation is not productive. The vowel **-e** is not attached to these verb stems. This also shows that the **-e** is an affix and not part of the root of the colour terms. The associative extension expresses an association of the subject of the verb with a feature in the nominal stem from which the verb is derived. This associated feature is the colour in inchoative verbs attributing colour.

wɔd + ɥ + u + de	>	wojj-u-de	‘to be(come) red’
ran + ɥ + u + de	>	rawn-u-de	‘to be(come) white’
fal + ɥ + u + de	>	fawl-u-de	‘to be(come) black’

Metathesis resulting in the consonant sequences **[wn]** and **[wl]** occurs to avoid a violation of the sonority hierarchy.

The associative verb stem can be used to form a deverbal adjective taking class suffixes of grade D. Thus, there are three stems for the colours white, red and black in the lexicon. All three forms require a different suffix form determined by the type of word formation involved. In this case the different suffix forms correspond to different syntactic categories. The difference between derivations from a nominal, an adjectival or from a verbal stem also implies a semantic difference: the description of an item, the description of a state or the description of a change in state.

Nominal stem:		Noun: (grade A; only NGE class)	
ran-	‘white (cow)’	rane	‘white (cow)’ (proper name)
wɔd-	‘red (cow)’	wɔde	‘red (cow)’ (proper name)
fal-	‘black (cow)’	fale	‘black (cow)’ (proper name)

Adjectival stem:	Adjective: (grade B; all classes)
rane- ‘white’	raneewe ‘(any) white (cow)’
wɔɖɛ- ‘red’	wɔɖɛewe ‘(any) red (cow)’
ɓale- ‘black’	ɓaleewe ‘(any) black (cow)’
Verbal stem:	Participle: (grade D; all classes)
rawn- ‘white(ned)’	rawnu^{ngɛ} ‘whitened (cow), that has become white’
wɔjj- ‘red(dened)’	wojju^{ngɛ} ‘reddened (cow), that has become red’
ɓawl- ‘black(ened)’	ɓawlu^{ngɛ} ‘blackened (cow), that has become black’

The difference in morphological derivation of these three stems: nominal, adjectival, and verbal is important for the choice of the suffix form. The same stem in the same class also yields different semantic interpretations, depending on the word formation.

The word “cow” is put between parentheses in the translations because as such the word “cow” is not present in the words **rane**, **raneewe** or **rawnu^{ngɛ}**. It is however understood in the meaning of the words and indicated by the presence of the NGE class denoting cows.

The adjectival stem **naye-** ‘old’ and the related associative verb **naywude** ‘to be(come) old’ suggests an etymology which is similar to that of adjectival colour terms in Fulfulde. The full noun which forms the stem of this adjective is **naye**. One of the informants translated the word **naye** as ‘old, when speaking of a cow’. Perhaps the adjective **naye-** ‘old’ is based on the root **nay-** ‘four’, found in the numbers **nay-i**, **nay-on**, **nay-oy** ‘four’, and the class suffix **-ɛ** of the NGE class. Possibly this combination could have described a cow which has delivered four calves. A cow which calved four times is considered old shortly after that. When she has stopped giving milk it will be among the first animals that will be sold, because it is known to have troubles persisting in the dry season (Bonfiglioli 1981). Such a cow is quite mature and old. This meaning should then be applied metaphorically to creatures other than cows as well as cows. Something or someone that is old shares the feature of being considered old with a cow that has calved four times.

8.1.4 GRADE B : AGENTIVE NOMINAL

The agentive nominal in Fulfulde behaves morphologically like an adjective. The agentive nominal, like other adjectives, can occur in all classes. Like an adjective, the agentive nominal can be used as a modifier, and its pattern of initial consonant alternation is like that of adjectives.

The formation of the agentive nominal is very productive. It can be based on all verb stems in the active voice. The agentive nominal can not be formed from middle or passive voice verbs. This is consistent with the semantic content of the agentive nominal, because the subject of active verbs is always the agent. This is not the case with middle and passive verbs. The subject of the middle voice is both agent and patient. The subject of a verb in the passive voice is the patient.

The hypothesis is that, like the word formation of the other adjectives in Grade B, the agentive nominal is also a denominal word formation, based on a stem that is/was a full word. The vowel **-ɔɔ-** is a suffix form **-ɔ** of the ‘O class, lengthened because of its merger with the grade marker ***ɥ** of grade B. In the following text from the story of Sillamakka and Pulloori (Seydou 1972:86) the agentive form **maayoowo** ‘dying person’ occurs with only the **-ɔɔ** suffix in the form **maayoo** with the same agentive meaning.

maayoo ladde walaa e maɓɓe say wuro

die-AGENTIVE bush be-N with of-them only village

‘None of them met his death in the wilderness, only in the village.’ (Seydou 1972:86)

The initial consonant alternation of the agentive nominal is different from the alternation as found in nouns (see section 3.1.3). The fluctuation of initial consonant alternation shows similarity with the alternation that occurs in adjectives. In general only plosive and continuant initial consonants occur. The classes NDI, BA, KA, NGU, KI which have a prenasalized initial consonant in nouns occur with a continuant initial consonant in agentive nominals. The difference is that when the agentive nominal occurs at the beginning of a noun phrase, it has the initial consonant from the continuant series and not from the prenasalized series. The classes 'DAM and KOY which have a plosive initial consonant in modifying adjectives occur with a prenasalized initial consonant in nouns. The forms are **mbittoowoy** ‘who are leaving’ and **mbittoojam** ‘which is leaving’ with a prenasalized initial consonant when the adjective is the head of a noun phrase and **bittoowoy** and **bittɔɔjam** when it is used as a modifier.

	‘the one(s) speaking’	‘the one(s) leaving’
'O	kaalɔɔ-wɔ	bittɔɔ-wɔ
'BE	haalɔɔ-ɓɛ	wittɔɔ-ɓɛ
NGEL	kaaloo-wel	bittoo-wel
KON	kaaloo-woy	mb, bittoo-woy
NDE	haalɔɔ-rɛ	wittɔɔ-rɛ
NDI	haaloo-ri	wittoo-ri
NDU	haaloo-ru	wittoo-ru
NGA/BA	haalɔɔ-wa	wittɔɔ-wa
NGE	haalɔɔ-wɛ	wittɔɔ-wɛ
NGO	haalɔɔ-wɔ	[wittɔɔ-wɔ]
NGU	haaloo-wu	wittoo-wu
NGAL	kaalɔɔ-wal	bittɔɔ-wal
NGOL	kaaloo-wol	bittoo-wol
KOL	kaaloo-wol	bittoo-wol
KA	haalɔɔ-wa	wittɔɔ-wa
KI	haaloo-wi	wittoo-wi
KO	haalɔɔ-wɔ	[wittɔɔ-wɔ]
'DAM	kaalɔɔ-jam	mb, bittɔɔ-jam
KAL	[kaalɔɔ-wal]	[bittɔɔ-wal]
'DUM	kaaloo-jum	bittoo-jum
'DE	kaalɔɔ-je	bittɔɔ-je
'DI	kaaloo-ji	bittoo-ji

Another difference between the agentive nominals and other adjectives is that the long vowel **-ɔɔ-** of agentive nominals does not shorten in the penultimate syllable, before a heavy syllable, i.e. before a class suffix with a CVC shape.

8.1.5 GRADE D: DEVERBAL ADJECTIVES

Participles are formed on verb stems which combine with one of the following verbal markers and a class suffix.

	active voice	middle voice	passive voice
incomplete aspect	(<i>agentive</i>)	-ṽṽ-	-ete-
completive aspect	-u- / Ø (zero)	-ii-	-aa-

The participle formed with the incomplete aspect marker of active voice verbs (which is **-an-** in other dialects) is not attested in the Maasina data. The derivation of the agentive nominal is used instead. Participles can be paraphrased as “that (of class X) which V”. The following participles are formed with a suffix of the 'O class, and refer to a person. The verb stems are **ṽṽ-** ‘wash’ and **war-** ‘come’.

	incomplete		completive	
active	(<i>agentive</i>)		lootudṽ	‘who has washed’
			gardṽ	‘who has come’
middle	ṽṽṽṽṽṽṽṽ	‘who washes himself’	lootiṽṽ	‘who has washed himself’
passive	ṽṽeteṽṽ	‘who is washed’	ṽṽtaadṽ	‘who has been washed’

The suffix forms of the deverbial adjectives are identical with the pronouns of these classes. Only the class marking for humans is different, the suffix is **-ṽṽ** but the pronoun of this class is **mṽ** in Maasina.

The majority of the adjectives are derived from a verb stem and take a suffix form of Grade D, the same suffix form which is used for participles. The hypothesis is that Grade D adjectives are in fact participles. These deverbial adjectives are nothing more than participles used as a modifier, following a noun in a noun phrase. The only adjective in Grade D whose base verb stem is not clear is the adjective **wṽṽṽ**- ‘another’ with an assimilating final consonant. Could it have been derived from **wṽṽṽ**- ‘exist’, or from **wal-/wṽn-** ‘be’, or from **wṽṽṽ**- ‘be far’?

adjectival stem		verb stem	
wṽṽṽ -	‘another’	—	
maw-	‘big’	mawn-ude	‘to be(come) big, to grow’
ṽard-	‘beautiful’	ṽard-ude	‘to be(come) beautiful’
wṽṽṽ-	‘beautiful, good’	wood-ude	‘to be(come) beautiful, good’
waaw-	‘mighty’	waaw-de	‘to be(come) able’
juut-	‘long’	juut-ude	‘to be(come) long’
sell-	‘healthy’	sell-ude	‘to be(come) healthy’
leef-	‘wet’	leef-ude	‘to be(come) wet’
tunn-	‘dirty’	tunn-ude	‘to be(come) dirty’
yṽṽr-	‘dry’	yṽṽr-ude	‘to dry (up)’
haad-	‘bitter’	haad-ude	‘to be(come) bitter’
lamm-	‘salty’	lamm-ude	‘to be(come) salty’
wel-	‘sweet, good’	wel-de	‘to be(come) sweet, good’

ḡuuf-	'cold'	ḡuuf-ude	'to be(come) cold'
wul-	'hot'	wul-de	'to be(come) hot'
heew-	'many, much'	heew-de	'to be(come) many, much'
sew-	'thin'	sew-de	'to be(come) thin'
fɔɔj-	'meagre'	fooj-ude	'to be(come) meagre'
jaas-	'good for nothing'	jaas-ude	'to be(come) good for nothing'

Adjectival participles can also be formed with middle voice and passive voice verb stems.

voice	adjective/participle	verb	
middle	taŋ-ii-	'ugly'	taŋ-aade 'to be(come) ugly'
middle	dar-ii-	'upright'	dar-aade 'to stand'
middle	ḡett-ii-	'last'	ḡett-aade 'to pass'
middle	jaŋⁿg-ɔɔɔ-	'readable'	jaŋⁿg-aade 'to be readable'
passive	waaw-eteē-	'possible'	waaw-eede 'to be possible'
passive	jaaⁿg-aa-	'having cold'	jaaⁿg-eede 'to feel cold'

The following table shows some adjectives combining with all suffix forms of Grade D.

	'another'	'big'	'dry'	
'O	gɔɔf-dɔ	maw-dɔ	[jɔɔr-dɔ]	
'BE	wɔɔb-ḡe	maw-ḡe	[yɔɔr-ḡe]	
NGEL	gɔŋ-ⁿgel	maŋ-ⁿgel	[joor- ⁿ gel]	
KOY	ⁿg, gok-koy	maw-koy	[ⁿ j, joor-koy]	
NDE	wɔɔn-ⁿde	maw-ⁿde	yɔɔr- ⁿ de	
NDI	ⁿg, won-ⁿdi	maw-ⁿdi	ⁿ j, yoor- ⁿ di	
NDU	won-ⁿdu	maw-ⁿdu	yoor- ⁿ du	
BA/NGA	{ ⁿg, wɔɔb-ba	maw-ba	ⁿ j, yɔɔr-ba	}centre Maasina
	{ ⁿg, wɔŋ-ⁿga	maŋ-ⁿga	ⁿ j, yɔɔr- ⁿ ga	}rest
NGE	wɔŋ-ⁿge	maŋ-ⁿge	yɔɔr- ⁿ ge	
NGO	wɔŋ-ⁿgɔ	maŋ-ⁿgɔ	yɔɔr- ⁿ gɔ	
NGU	ⁿg, won-ⁿgu	maŋ-ⁿgu	[ⁿ j, yoor- ⁿ gu]	
NGAL	gɔŋ-ⁿgal	maŋ-ⁿgal	jɔɔr- ⁿ gal	
NGOL	gɔŋ-ⁿgol	maŋ-ⁿgol	joor- ⁿ gol	
KOL	gɔŋ-kol	maw-kol	joor-kol	
KA	ⁿg, wɔk-ka	maw-ka	ⁿ j, yɔɔr-ka	
KI	ⁿg, wok-ki	maw-ki	ⁿ j, yoor-ki	
KO	wɔk-kɔ	maw-kɔ	yɔɔr-kɔ	
'DAM	ⁿg, gɔɔf-dam	[maw-dam]	ⁿ j, jɔɔr-dam	
KAL	gɔk-kal	[maw-kal]	jɔɔr-kal	
'DUM	godf-dum	[maw-dum]	joor-dum	
'DE	gɔɔf-dē	maw-dē	jɔɔr-dē	
'DI	godf-di	maw-di	[joor-di]	

The pattern of the initial consonant alternation of deverbal adjectives or participles is similar to the distribution of the initial consonants of other adjectives. There is some fluctuation between a prenasalized initial consonant or a continuant initial consonant in words with the class prefixes of the NDI, BA, KA, NGU and KI classes. There is some fluctuation between a prenasalized initial consonant and a plosive initial consonant in words with the 'DAM and KOY classes. In both cases the prenasalized variant seems less preferred, sometimes even rejected. The distribution of the alternative forms depends again on the syntactic context.

ⁿgaari selluⁿdi	‘healthy bull’
celluⁿdi	‘healthy one’

The prenasalization seems to be used to introduce the noun phrase that is governed by a marker of the NDI class. There is no prenasalized initial consonant when the adjective is used as a modifier following the head noun.

8.2 PRONOUNS

The pronouns can be divided into two groups: personal pronouns and pronominal concords. Personal pronouns refer to and index the participants in the discourse, i.e. the discourse referents. Pronominal concords refer to a noun. Pronominal concords are formed with all twenty-two noun class concords in the Fulfulde of Maasina. Discourse referents are all pronouns that refer to a first or second person. The (subject forms of the) discourse referents are **mi** ‘I’, **[?]a** ‘you sg.’, **min** ‘we exclusive’, **[?]en** 1+2pl. ‘we inclusive’, and **[?]ɔn** ‘you pl.’ (cf. Arnott 1970b, 1971).

In the first person plural, there is a distinction between the pronouns **min** 1pl. ‘we exclusive’ and **[?]en** 1+2pl. ‘we inclusive’. The semantic difference is created by the inclusion or exclusion of the person to whom the speech is directed, the listener, usually the person addressed with **[?]a** ‘you’ 2sg. in the discourse. That is why the pronoun **[?]en** ‘we inclusive addressee’ is indicated as 1+2. The pronoun **[?]en** can refer to only the speaker (**mi** ‘I’) and the listener (**[?]a** ‘you’), but it can also refer to more than just these two persons. Other persons who are either associated with the speaker or with the listener can also be included in the persons referred to with the pronoun **[?]en**. The pronoun **min** only refers to the speaker (**mi** ‘I’) and other persons associated with the speaker, but not with the listener (**[?]a** ‘you’). The listener is excluded from the persons referred to with the pronoun **min**, that is the reason for calling this pronoun ‘we exclusive’.

The marker **dum** is a pronominal concord. There are actually two paradigms of the marker **dum**, one is used to refer to names, relationship terms (without a class suffix), and unidentified persons, another paradigm (slightly different in form) is used to refer to unidentified things (see section 7.3.4).

The marker **dum** which refers to persons contrasts with the pronoun of the 'O class (denoting persons). These two pronouns can be used to make a difference between anaphoric and logophoric reference. This is illustrated in the following sentences.

kɔla wii	lɔnn-an-aa	dum kaasa	mun ka
Kola _i	say-COM wash-DAT-SUB-2sg	him _i	woollen cloth his _i the
‘Kola _i said you should wash for him _i ; his _i woollen cloth.’			

kɔɔla wii lɔnn-an-aa mɔ kaasa makkɔ ka
 Kola_i say-COM wash-DAT-SUB-2sg him_j woollen cloth his_j the
 'Kola_i said you should wash for him_j his_j woollen cloth.'

The object pronoun **dum** [dũ] and the possessive pronoun **mum** [mũ] of the 'DUM class in the first sentence refer to **kɔɔla**, a name without a class suffix. The 'DUM class pronouns are co-referential with **kɔɔla**: Kola's woollen cloth should be washed for Kola. In the second sentence, the use of the forms of the pronouns **mɔ** and **makkɔ** (of the 'O class) expresses the fact that there is another person for whom Kola wants the woollen cloth (belonging to that other person) to be washed. The pronoun **mɔ** is not co-referential with the name **kɔɔla**. The difference between the 3rd person singular pronouns of the 'O class and the 'DUM class is summarized as follows:

- 'DUM class: anaphoric with names of persons, inalienable relationship terms, also when subject is Ø (zero); not referring to persons indicated with a concord of the 'O class
 'O class: anaphoric with persons indicated with a class concord of the 'O class; not referring to persons presented by names, inalienable relationship terms, or when subject is Ø (zero)

The following examples with the possessive pronouns **-um** ('DUM class) and **-iikɔ** ('O class) found in relationship terms list all possible combinations of reference and non-reference.

Ø ('DUM) _i + -kɔ ('O) _j : baaba fii fiy-ii-kɔ father _i beat-COMPL child-of-him _j 'Father _i has beaten his _j (s.o. elses) child.'	mɔ ('O)_i + -um ('DUM)_j: mɔ fii fiy-um he _i beat-COMPL child-of-him _j 'He _i has beaten his _j (s.o. elses) child.'
mɔ ('O)_i + -kɔ ('O)_j: mɔ fii fiy-ii-kɔ father _i beat-COMPL child-of-him _j 'He _i has beaten his _j (own) child.'	Ø ('DUM) _i + -um ('DUM) _j : baaba fii fiy-um father _i beat-COMPL child-of-him _j 'Father _i has beaten his _j (own) child.'

The generalization on the co-reference of these pronouns is only disturbed by the fact that the pronoun **dum** can sometimes refer to nouns formed with a suffix of the 'O class.

The forms of the pronouns do not show much variation. In general the pronouns have the same form in different syntactic functions, notably as subject and as object pronouns. There are subject, object, locative, possessive and independent pronouns. In addition, the pronominal concords can form demonstrative and interrogative words. The pronominal forms are independent words. They are usually unstressed. The independent pronouns, demonstratives, and interrogatives are stressed words.

8.2.1 SUBJECT PRONOUNS

The subject pronouns have the following forms when they refer to a noun in one of the twenty-two noun classes.

Pronominal object concords:

'O	mɔ or ʔɔ	NGA/BA	ba in centre of Maasina, ⁿga elsewhere
'BE	ʃɛ	NGE	ⁿge
NGEL	ⁿgel	NGO	ⁿgɔ
KOY	koy	NGU	ⁿgu
NDE	ⁿdɛ	NGAL	ⁿgal
NDI	ⁿdi	NGOL	ⁿgol
NDU	ⁿdu	'DAM	d'am
KA	ka	KAL	kal
KI	ki	'DUM	dum (things), ∅ (persons)
KO	kɔ	'DE	dɛ
KOL	kol	'DI	dɪ

The subject pronoun of the 'O class in Maasina is mostly **mɔ**, sometimes the near demonstrative **ʔɔɔ** can function as the subject. The subject pronoun **ʔɔ** (which is the form in other dialects) is understood in Maasina but not frequently used. The class concords BA and NGA refer to the same nouns, the distribution of this dialectal variation of the form of the concord is discussed in section 7.2.14.

The personal subject pronouns have two different forms. The subject pronoun in a normal SVO sentence differs from the subject pronoun which is a verbal affix in a sentence with a V-SPro order.

Subject forms of discourse referents as separate words in SV order sentences:

singular:	1	mi	'I'
	2	ʔa	'you (sg.)'
plural:	1	min	'we (excl.)'
	1+2	ʔɛn	'we (incl.)'
	2	ʔɔn	'you (pl.)'

Some of the subject pronouns are suffixed in particular verbal conjugational categories: the relative and the subjunctive categories. The following table shows the subject pronominal affixes (and the personal pronouns that are not affixed in these conjugational categories).

		REL 1	REL 2	SUB 1	SUB 2
singular	1	...-mi	...-mi	mi	mi
	2	...-d'aa	...-aa	...-d'aa	...-aa
plural	1	min	min	min	min
	1+2	...-d'ɛn	...-ɛn	...-d'ɛn	...-ɛn
	2	...-d'ɔn	...-ɔn	...-d'ɔn	...-ɔn

REL 1: relative completive and middle and passive voice relative incomplete

REL 2: active voice relative incomplete

SUB 1: middle and passive voice subjunctive

SUB 2: active voice subjunctive

A hyphen preceding the pronominal form indicates that the subject pronoun has been inverted. The underlying forms of the inverted subject pronouns **-ɗaa** 'you sg.' **-ɗen** 'we incl.' and **-ɗɔn** 'you pl.' have an initial consonant [ɗ] which is lost after the verbal marker ***at** of the active voice relative incomplete marker (REL 2), and after the consonant final verb stem in the subjunctive (SUB 2). In all other inverted forms, the inverted subject pronoun is (mostly) preceded by a vowel.

8.2.2 OBJECT PRONOUNS

The forms of the pronominal object concords are similar to the forms of the pronominal subject concords. Only the object pronoun of the 'DUM class referring to persons differs from the form of the subject pronoun.

Pronominal object concords:

'O	mɔ or ʔɔ	NGA/BA	ba in centre of Maasina, ⁿ ga elsewhere
'BE	bɛ	NGE	ⁿ gɛ
NGEL	ⁿ gel	NGO	ⁿ gɔ
KOY	koy	NGU	ⁿ gu
NDE	ⁿ de	NGAL	ⁿ gal
NDI	ⁿ di	NGOL	ⁿ gol
NDU	ⁿ du	'DAM	ɗam
KA	ka	KAL	kal
KI	ki	'DUM	ɗum (things), mum (persons)
KO	kɔ	'DE	ɗɛ
KOL	kɔl	'DI	ɗi

When the personal pronouns occur in object position, it is only the singular discourse referents which have a form which differs from the subject form. The following table shows the object forms of personal pronouns.

singular	1	kam	-am
	2	maa	-ɛ
plural	1	min	
	1+2	ʔɛn	
	2	ʔɔn	

The first and the second person singular have different forms in combination with certain conjugations. The forms **kam** 'me' and **maa** 'you' are unstressed independent words. The forms **-am** 'me' and **-ɛ** 'you' are suffixed to certain verb forms. The clitic object pronoun **-am** 'me' is only found in combination with the singular imperative form.

ʔacc-am hakke
 leave-IMPsg-me sins
 'Pardon me.' [lit: leave me my sins]

In combination with all other conjugations, the object pronoun for the first person singular is **kam** 'me'.

ʔacc-ən-ən kam hakke
 leave-DAT-SUB-you me sins
 'You(pl) should forgive me.'

nel-d-aa kam
 send-COM-SUB-you me
 'You should send it to me.'

ʔa yaaf-ətə kam
 you forgive-M.INCOMPL me
 'You will forgive me.'

ʔada ʃad-ii kam
 LOC-you be close-M.R.INCOMPL me
 'You are close to me.'

The object forms **mi** or **mmi** 'me' that occur in Kaceccereere, (McIntosh 1984:256) do not occur in Maasina. The object pronoun **-e** 'you' combines with active verb forms which are conjugated with verbal markers of the subjunctive, the incomplete, the relative incomplete or the exhortative conjugations.

mi ʔdaart-ən-ε ʔde
 I search-DAT-SUB-you it
 'I should look for it for you.'

hənə mə wiʔ-et-ε
 how he/she say-R.INCOMPL-you
 'How does he call you?'

midə tər-r-ε
 I-LOC trouble-INT-SUB-you
 'I am troubling you.'

yə ʔalla rēn-ε
 that Allah protect-EXH-you
 'May Allah protect you.'

mi fill-ən-t-ε
 I tell-DAT-INCOMPL-you
 'I will tell you.'

Either the object pronouns **maa** or **-ε** can both occur when the subjunctive verb form is preceded by a locative subject pronoun.

ʔekoy ʔbel-ε
 LOC-they be sweet-SUB-you
 'They are sweet for you.'

ʔekoy ʔbel-maa
 LOC-they be sweet-SUB-you
 'They are sweet for you.'

The object pronoun **maa** is found in combination with all other conjugations. In the following sentences the pronoun **maa** 'you' is an independent (although unstressed) word.

debbə loot-ii maa
 woman wash-COMPL you
 'The woman has washed you.'

mə ʔanⁿd-aa maa
 he/she know-N you
 'He doesn't know you'

The object pronoun **maa** is not part of the verbal words in the above examples. The stress falls on the last heavy syllable in the verb, in this case on the [ii] in **lootii** 'has washed' and on the [aa] in **ʔanⁿdaa** 'doesn't know'. Another indication of the separate word status of **maa** 'you' is its vowel length. After the verb stem only one long vowel is allowed in the verbal word. The long form **maa** remains long because it is not within the verbal word.

It is however possible for the object pronoun **maa** to be a verbal clitic. The object pronoun **-maa** is clitic when it precedes an inverted subject pronoun, as in the following sentences where it occurs in a VOS morpheme order in the verbal word.

V	O	S		V	O	S
pill-am-maa-mi				maⁿdε dokk-u-maa-mi..		
tell-DAT-R.COMPL-you-I				when give-R.COMPL-you-I		
'I have told you'				'When have I given you ..'		

In Maasina, no verbal forms have been found where the object pronoun **maa** is shortened. In this respect the pronoun **maa** 'you' behaves differently in Kaceccereere (McIntosh 1984:210), where it is shortened in some verbal forms.

There is a variation in the forms of the concordial object pronouns of the 'O class **mɔ** and **moo** 'he/she/it'. The same variation in length also does occur in Kaceccereere (McIntosh 1984:199). The long form **moo** in Maasina occurs only in the relative completive and the relative incomplete verbal conjugations which combine with the inverted subject pronoun **mi** 'I'. The clitic pronoun **-moo-** 'him/her/it' can be found in the following sentences where the verbs have two pronominal affixes in a VOS morpheme order.

kɔ ʔanⁿd-ir-moo-mi lebbi tati
 that know-CIR-R.COMPL-him-I months three
 'It is three months that I have known him.'

maⁿdε dokk-u-no-moo-mi dum
 when give-R.COMPL-PAST-him-I it
 'When had I given it to him?'

dɔɔ jog-i-moo-mi
 here hold-M.R.COMPL-him/her/it-I
 'It is here that I held it.'

The hypothesis is that the length of the vowel in the object pronoun **-moo-** is caused by the underlying (assimilating) vowel which is used to mark relative conjugations. In Maasina, no examples are found where **mɔ** 'him/her/it' is a clitic object in a VOS-form of the relative incomplete. In the following sentences the pronoun **mɔ** 'him/her/it' is an independent (unstressed) word.

dɔɔ naŋⁿg-u-nɔ-daa	mɔ		dεε kulle kɔkk-an-noo-mi	mɔ
here catch-R.INCOMPL-PAST-you him			these things give-R.INCOMPL-PAST-I him	
'It's here that you had caught him.'			'It is these things that I would give him.'	

The object pronoun **mə** in the above example is not part of the verbal word. The pronoun **mə** ‘him/her/it’ is a separate word in all conjugations other than the relative completive, and in combination with all other inverted subject pronouns other than the inverted subject **mi** ‘I’.

8.2.3 LOCATIVE PRONOUNS

The subject pronouns can combine with a locative marker to form the locative pronouns (cf. Ard 1979, Miyamoto 1989, Endresen 1993a).

Locative pronominal concords:

'O	ʔomə	NGAL	ʔe ⁿ gal
'BE	ʔe ⁿ be	NGOL	ʔe ⁿ gol
NGEL	ʔe ⁿ gel	KA	ʔeka
KOY	ʔekoy	KI	ʔeki
NDE	ʔe ⁿ de	KO	ʔeko
NDI	ʔe ⁿ di	KOL	ʔekol
NDU	ʔe ⁿ du	'DAM	ʔedam
NGA/BA	ʔeba or ʔe ⁿ ga	KAL	ʔekal
NGE	ʔe ⁿ ge	'DUM	ʔedum
NGO	ʔe ⁿ go	'DE	ʔede
NGU	ʔe ⁿ gu	'DI	ʔedi

ie locative pronominal concords are a combination of the pronominal subject concords and the preposition ʔe ‘with’. The locative personal pronouns are formed by the personal subject pronouns, to which a locative morpheme is added, either ʔe ‘with’ preceding the subject pronoun, or a form like **de**, **den**, **dən**, following the subject pronoun.

Locative personal pronouns:

singular	1	midə , mide	plural	1	midən , medən
	2	ada		1+2	eden
				2	dən

There is some variation in the locative form of the first person singular. The form **midə** is most frequently used. The form **mide** is used more in Haayre than in Maasina. Both **midən** and **medən** ‘we incl.’ are heard in Mopti, although **midən** is the frequent form. The form **ana** is used in the same context to express location when the subject pronoun is zero, possibly preceded by a noun phrase. It is the locative copula (see section 5.6.1.2).

The locative pronouns are often called the “long forms” of the subject pronouns (Fagerberg 1984:292). Here they are called locative pronouns because of their use in locative predication.

ʔomə bamako	‘He is in Bamako.’
ʔe ⁿ di ley wowru	‘It (e.g. flour) is in the mortar.’
ʔedi ley ladde	‘They (e.g. cows) are in the bush.’

In combination with conjugated verbs, the use of the locative pronouns expresses duration, i.e. the fact that the event described by the verb takes place over a long span of time.

8.2.4 POSSESSIVE PRONOUNS: ALIENABLE AND INALIENABLE

In a genitive construction, it is the possessed item which precedes the possessor. There is no genitive marker between two nouns in a genitive construction. The different letters (a), (b) and (c) refer to the two parts that can be pronominalized in a genitive construction. The pronominal form (a) refers to the possessed. The form (b) pronominalizes an alienable possessor, whereas the (c) forms are special forms for possessors in an inalienable genitive construction.

barma fanta	‘the cooking pot of Fanta’
mɔ fanta	‘that (a) of Fanta’
suudu makko	‘her (b) house’ [lit: ‘the house of her (b)’]
baaba fanta	‘the father of Fanta’
mɔ fanta	‘the one (a) of Fanta’
baabiiko	‘her (c) father’ [lit: ‘the father related to her (c)’]

- (a) pronominalization of possessed
- (b) pronominalization of alienable possessor
- (c) pronominalization of inalienable possessor

In a genitive construction the possession is pronominalized as the relative pronoun (a) which is identical in form to the subject and object pronoun. The possessor can be pronominalized in two ways. The possessor in alienable genitive constructions, i.e. when the first noun (the possessed item) is not a relationship term, is pronominalized as in (b). The alienable possessive pronouns (b) are formed with the pronominal concord preceded by a genitive marker **maC-**. In inalienable genitive constructions, i.e. when the noun possessed is a relationship term, the possessive pronoun is a suffix added to the noun preceded by a morpheme **-ii-**. This possessive pronominal suffix (c) does not cause initial consonant alternation on the stem to which it is attached. The pronominal forms under (b) and (c) are the alienable and the inalienable possessive pronouns respectively.

	(a)	(b)	(c)
'O	mɔ	mak-kɔ	-ii-kɔ
'BE	ʃɛ	maʃ-ʃɛ	-ii-ʃɛ
NGEL	ⁿgel	mag-gel	-ii-gel
KOY	koy	mak-koy	-ii-koy
BA	ba	mab-ba	-ii-ba
KO	kɔ	mak-kɔ	-ii-kɔ
NDE	ⁿde	may-re	-ii-re
NDI	ⁿdi	may-ri	-ii-ri
NDU	ⁿdu	may-ru	-ii-ru
NGE	ⁿge	mag-ge	-ii-ge
NGO	ⁿgɔ	mag-gɔ	-ii-gɔ

	(a)	(b)	(c)
NGU	ⁿgu	mag-gu	-ii-gu
NGAL	ⁿgal	mag-gal	-ii-gal
NGOL	ⁿgol	mag-gol	-ii-gol
KA	ka	mak-ka	-ii-ka
KI	ki	mak-ki	-ii-ki
'DAM	d'am	maj-ji	-ii-jam
KAL	kal	mak-kal	[-ii-kal]
'DUM (things)	d'um	maj-jum	-ii-jum
'DUM (persons)	(mɔ)	mum (muud'um)	-um
'DE	d'e	maj-je	-ii-je
'DI	d'i	maj-ji	-ii-ji

The inalienable possessive forms (c) are added to the stem of relationship terms. Mohamadou (1985:149) includes the construction given under (c) among the adjectives. The formation of this genitive construction of relationship terms is indeed very similar to that of adjectives.

neɗɗɔ ^ʔe mij-ii-ko	'the person and his younger sibling'
nagge ^ʔe mij-ii-ge	'the cow and her younger sibling'
rawaaⁿdu ^ʔe mij-ii-ru	'the dog and his younger sibling'

The above formation is similar to adjectives in that it is formed by a stem to which a concord of all classes can be added. However, the main function of the class concord is the pronominalization of the possessor. The concord occurring in these constructions denotes the noun that is modified (*nomen regens*=possessed). This makes the genitive construction distinct from the adjectives. The concord here is acting as a pro-noun, it replaces the full noun that is the *nomen rectum* (possessor).

The personal possessive pronouns can have different forms, depending on the combination with an inalienable relationship term, or with an alienable noun.

Possessive personal pronouns:			
		(b)	(c)
singular	1	-am	^ʔam
	2	-a	maa (maad'a)
plural	1		^ʔamen, ^ʔamin
	1+2	-en	men (meed'en)
	2	-ɔn	mɔn (mɔɔɗ'ɔn)

The alienable possessive forms (c) of the personal pronouns can have a long or a short form. The long forms which are not used frequently in Maasina are given between parentheses. The inalienable possessive forms (b) are added to the stem of relationship terms.

^ʔinn-am wari	'my mother has come'
mawn-am wari	'my elder sibling has come'
jeek-a wari	'your sibling-in-law has come'

gɔr-a wari	‘your husband has come’
mij-a wari	‘your younger sibling has come’
mij-ii-kɔ wari	‘his younger sibling has arrived’

Some relationship terms lose their final vowel [a] when they combine with some of the possessive forms for alienable nouns.

baaba bɔɔkari	‘father of Bookari’	
ʔabba bɔɔkari	‘father of Bookari’	
ʔinna bɔɔkari	‘mother of Bookari’	
maama bɔɔkari	‘grandparent of Bookari’	
baammaa	‘your father’	
ʔabba maa	‘your father’	
ʔinna maa	‘your mother’	
maammaa	‘your grandparent’	
baammakkɔ	‘his/her father’	better: baabiikɔ
maammakkɔ	‘his/her grandparent’	better: maamiikɔ

Relationship terms only contract with the alienable possessive pronouns **maa** ‘your’ when they end in the vowel [a]. The form **maa** ‘your’ is used, because the form **baab-a** ‘your father’ with the inalienable possessive **-a** ‘your’ cannot be distinguished from the form **baaba** ‘father’ without a possessive pronoun. By analogy, the alienable possessive **makko** ‘his/her’ is sometimes used instead of the inalienable possessive **-iikɔ** ‘his/her’, although the latter form is said to be more correct.

8.2.5 INDEPENDENT PRONOUNS

The independent pronouns are used in topic clauses, which are adjuncts to the main clause, and also when a pronoun is focused within a sentence. The independent pronouns in the following sentences are underlined.

topic:	<u>ʔaan</u> , ʔa bɔndɔ	‘You, you are bad.’
	<u>kaŋkɔ</u> , mɔ warii	‘He, he has come.’
focus:	ʔ <u>aan</u> jali	‘It is you who has laughed.’
	<u>kaŋkɔ</u> warata	‘It is him who will come.’

The independent pronouns can be formed by adding the morpheme **kam** to the subject pronoun. This morpheme is the same as the topic marker **kam**, roughly translated as ‘concerning X’. The independent forms of the pronominal concords are given in the following table.

Independent concordial pronouns:

'O	kaŋkɔ	NGU	kaŋ^agu
BE	kamɓɛ	NGAL	kaŋ^agal
NGEL	kaŋ^agel	NGOL	kaŋ^agol
KOY	kaŋkoy	KA	kaŋka
BA/NGA	kam^mba or kaŋ^aga	KI	kaŋki
KO	kaŋkɔ	KOL	kaŋkol
NDE	kayrɛ	'DAM	kaŋ^ajam
NDI	kayri	KAL	kaŋkal
NDU	kayru	'DUM	kaŋ^ajum (things), kaŋum (persons)
NGE	kaŋ^age	'DE	kaŋ^aje
NGO	kaŋ^agɔ	'DI	kaŋ^aji

A number of personal independent pronouns have the same formation as the referential demonstratives, with a 'similar meaning "concerning the one referred to". The independent pronouns **miin** 'I', **ʔaan** 'you', **minin** 'we excl.', **ʔenen** 'we incl.' and **ʔɔnɔn** 'you pl.' are formed by the personal (subject) pronoun followed by a vowel that assimilates to the features of the preceding vowel and a final nasal [n]. The following table lists the independent forms of the personal pronouns.

Personal independent pronouns:

singular	1	miin	plural	1	minin
	2	ʔaan		1+2	ʔenen
				2	ʔɔnɔn

The referential demonstratives of the 'O class and the 'BE class **ʔɔnɔn** and **ɓeen** are not used as independent subject pronouns, instead the forms based on the morpheme **kam** are used.

8.3 DEMONSTRATIVES

The Maasina dialect has four series of demonstratives, the simple, near, far and referential demonstratives. The demonstratives are formed by the pronominal concords of the twenty-two noun classes. The referential pronouns have a very limited distribution in Maasina, they are only attested for a few classes. Each demonstrative can form a noun phrase by itself. When the demonstrative modifies a noun it will generally follow that noun. Only the simple demonstrative can both follow or precede the noun, as shown in the following two sentences.

mi yii ⁿdɛɛ huuⁿdɛ^ʔ	'I have seen that thing.'
mi yii huuⁿdɛ ⁿdɛɛ^ʔ	'I have seen the thing.'

There is a slight difference in meaning between the two sentences above. When the simple demonstrative follows the noun, its meaning is less strong, less deictic, it functions more as a definite article. When it precedes the noun, the meaning of the simple demonstrative is stronger, it functions as a true deictic demonstrative. The formation of the different

demonstratives on the basis of the pronominal consonant is represented in the following three formulas.

simple demonstrative:	Cd-(V _i)-(ʔ)	specification
near demonstrative:	Cd-(V _i)-ga	proximity
far demonstrative:	Cd-(V _i)-to-(ʔ)	non-proximity
referential demonstrative:	Cd-V _i -n	talked about

The simple demonstrative is formed by adding a vowel which assimilates to the vowel of the concord. However, when the vowel of the concord occurs in a closed syllable, the vowel is not lengthened to form the demonstrative. The simple demonstrative has the same form as the pronominal concords with a CVC shape. The hypothesis is that vowel lengthening has occurred, just as it happens in the case of the pronominal concords with a CV shape, but that the vowel has been shortened in a closed syllable. This is another indication that a CVVC syllable is a marginal syllable structure.

Both the simple demonstrative, expressing specification, and the far demonstrative, expressing non-proximity, are marked by final glottality. The final glottality is realized as either a final glottal stop or as laryngealization of the final vowel and is only realized before a pause. The absence of final glottality in the near demonstrative will generally mean that the final vowel of an utterance is devoiced before a pause.

	simple	near	far
'O	ʔɔɔ	ʔɔɔga	ʔooto
'BE	bɛɛ	bɛɛga	beeto
NGEL	ⁿ gel	ⁿ gelga	ⁿ gelto
KAL	kal	kalga	kalto
KOY	koy	koyga	koyto
NDE	ⁿ deɛ	ⁿ deɛga	ⁿ deeto
NDI	ⁿ dii	ⁿ diiga	ⁿ diito
NDU	ⁿ duu	ⁿ duuga	ⁿ duuto
BA/NGA	baa or ⁿ gaa	baaga or ⁿ gaaga	baato or ⁿ gaato
NGE	ⁿ geɛ	ⁿ geɛga	ⁿ geeto
NGO	ⁿ gɔɔ	ⁿ gɔɔga	ⁿ gooto
NGU	ⁿ guu	ⁿ guuga	ⁿ guuto
NGAL	ⁿ gal	ⁿ galga	ⁿ galto
NGOL	ⁿ gol	ⁿ golga	ⁿ golto
KA	kaa	kaaga	kaato
KI	kii	kiiga	kiito
KO	kɔɔ	kɔɔga	kooto
'DAM	d'am	d'am ⁿ ga	d'amto
'DUM	dum	dum ⁿ ga	dunto
'DE	d'ɛɛ	d'ɛɛga	d'eeto
'DI	d'ii	d'iiga	d'iito

The words **ga** and **to** also occur as independent locative adverbs meaning ‘here’ and ‘there’. The far demonstrative can be realized as a two word sequence, in which case no ATR harmony occurs.

mi yii huuⁿde ⁿdeeto[?] ‘I saw that thing (there)’ (“j’*ai* *vu* *cette chose là bas*”)
mi yii huuⁿde ⁿdɛɛ to[?] ‘I saw the thing there’ (“j’*ai* *vu* *la chose là bas*”)

The far demonstrative **ⁿdeeto[?]** ‘that there’ is one word, originating from two words **ⁿdɛɛ** ‘this’ and **to** ‘there’. In the second sentence there is a word boundary between the simple demonstrative **ⁿdɛɛ** ‘this’ and the adverb of place **to** ‘there’ which blocks ATR harmony. The simple demonstrative following the noun, in combination with the adverb of place **to** results in the translation equivalent of **ⁿdɛɛ** as the definite article “the”. The far demonstrative **ⁿdeeto** has a more prominent deictic meaning, as exemplified in the first sentence.

The adverb **ga** ‘here’ can in principle also follow the simple demonstrative as a separate word. The difference is less clear, because vowel harmony does not show the word boundary. The referential demonstrative is not used much in Maasina. Only four classes were attested with the referential form. This is different from other dialects.

Referential demonstratives:

ʔɔ **ʔɔɔn, ʔɔn**
ʃɛ **ʃɛɛn, ʃɛn**
ɗi **ɗiin, ɗin**
ɗɛ **ɗɛɛn, ɗɛn**
ⁿde **ⁿdɛɛn, ⁿɗɛn** ‘at that time, then’

The referential demonstrative forms an excessively heavy CVVC syllable which is often shortened to CVC. The referential occurs not as a modifier of a noun, but as a pronoun, referring back to the noun already mentioned earlier in the discourse.

ʔɔɔn wiy-an-i **mɔ, ʔɛʃɛ** **taw-ɛɛ** **ʔɛ dɛɛɗɛ ɗɛɛ kala**
 RDEM say-DAT-R.COMPL him LOC-they find-P.SUB at quarters DEM each
 ‘He (the one talked about) said to him that they are found in each of these quarters.’

ɗin bapaaʒi ʔana famɗ-i **kɔ ʔanⁿd-an-i** **wurɔ sanne**
 RDEM cowbirds LOC be small-R.COMPL what know-DAT-R.COMPL village much
 ‘These herdsmen (talked about) know little about the village.’

ʃɛn ʔana mbaaw-i **naŋⁿg-ude yɔgaaʃɛ** **hɛn**
 RDEM LOC be able-R.COMPL catch-INF some people in
 ‘They (talked about) can catch some among them.’

In other classes it is the simple demonstrative which is used to indicate reference.

8.4 INTERROGATIVES

The interrogative forms for ‘which/who/what’ can occur on their own in a noun phrase or as a modifier following a noun.

hɔmɔ wari	‘Who came?’
hɔⁿge wari	‘Which one (cow) came?’
wakkati hɔmɔ ⁿjogid^{aa}	‘What time do you have?’
nagge hɔⁿge wari	‘Which cow came?’
hodum ⁿjid^{aa}	‘What do you want?’

The interrogative forms of some classes have a special meaning: they function as the following question words, possibly, but not necessarily preceded by the morpheme ***he-** or ***hɔ-** marking the interrogative forms. The following table lists the forms of the question words that occur in Maasina.

hɔ- + ‘O class concord:	hɔ-mɔ	‘who’
hɔ- + ‘DUM class concord:	ho-d^{um}	‘what’
ma- + NDE class concord:	ma-ⁿde	‘when’
hɔ- + adverb to ‘there’:	ho-to	‘where’
hɔ- + adverb nɔ ‘thus’:	hɔ-nɔ	‘how’

These words do not show final glottality when they occur before a pause. This is because questions never end in final glottality. There is some dialectal variation in the form of the interrogative ‘which’ within Maasina where the following forms are found.

	centre of Maasina, Kunaari	Gimballa		centre of Maasina, Kunaari	Gimballa
‘O	hɔmɔ	hɔmɔ	NGO	hɔⁿgɔ	heⁿgɔ
‘BE	hɔbe		NGU	hoⁿgu	heⁿgu
NGEL	hoⁿgel	heⁿgel	NGAL	hɔⁿgal	heⁿgal
KOY	hokoy		NGOL	hoⁿgol	heⁿgol
BA	hɔba	—	KA	hɔka	heka
NGA	—	heⁿga	KI	hoki	heki
KO	hɔkɔ	hekɔ	‘DAM	hɔd^{am}	hed^{am}
NDE	hɔⁿde	heⁿde	KAL	hɔkal	hekal
NDI	hoⁿdi	heⁿdi	‘DUM	hodum	hedum, hodum
NDU	hoⁿdu	heⁿdu	‘DE	hɔde	hed^e
NGE	hɔⁿge	heⁿge	‘DI	hodi	hedⁱ

The nasal consonant in final position is deleted, leaving a nasalized vowel, like in [**hedū**] or [**hodū**] ‘what’. Vowels which are adjacent to laryngealized consonants become laryngealized, as in **hed^e** or **hɔd^e** ‘which’. The dialectal variation of these interrogative forms is geographically distributed. In the center of Maasina (Tenenku, Toggere Kumba) and in Kunaari the initial vowel is [ɔ] or [o], depending on the ATR value of the vowel in the

concord. In Gimballa the initial vowel of this word is [ɛ] or [e], depending on the ATR value of the vowel in the concord. But the form for the 'O class is **hɔmɔ** in all dialects of Maasina. Possibly the vowel of the suffix spread to the first syllable of the word.

neɸɸɔ hɔmɔ 'which person'

When asking for the specification of a certain noun, these interrogative words follow the head noun.

8.5 NUMERALS

The number 'one' is one of the cardinal numbers which is expressed by two words. The form **ɠɔʔɔ** is the name of the number one, used in counting without reference to objects. The adjectival stem **wɔɔt-** 'one, a certain, a' is used to indicate that the number of objects counted is one. The adjectival stem **wɔɔt-** 'one' agrees in concord with the nominal classes of all the (singular) classes. It is also used to express indefinite reference. This choice of the suffix form of this word is identical to that of the basic adjectives. The initial consonant of the stem **wɔɔt-** alternates with [g] and [ʔg] depending on the class of the suffix. This fluctuation of the initial consonant alternation is identical to the variation found in adjectives. Numerals, like adjectives, follow the noun. The combination of plural suffixes with this same stem **wɔɔt-** meaning 'some', as in other dialects, is not attested in Maasina, instead the adverb **sɛɸɸa** is used to express 'some' as in **yimɸɛ sɛɸɸa** 'some, a few people'.

The adjectival forms of **wɔɔt-** 'one':

'O	ɠɔɔtɔ	NGAL	ɠɔɔtal
'BE	—	NGOL	gootol
NGEL	gootel	KA	wɔɔta, ʔɠɔɔta
KOY	—	KI	wooti, ʔgooti
NDE	wɔɔtere	KOL	gootol
NDI	wootiri, ʔgootiri	KO	—
NDU	wooturu	'DAM	ʔɠɔɔtam
NGA/BA	wɔɔta, ʔɠɔɔta	KAL	—
NGE	wɔɔte	'DUM	gootum
NGO	wɔɔtɔ	'DE	—
NGU	wootu, ʔgootu	'DI	—

The plural, mass, and collective classes cannot combine with the word 'one' for semantic reasons. The other numerals have a more restricted possibility of agreement with the head noun. When referring to human beings, the suffix **-ɔ**, **-ɔm** or **-ɔn** [ɓ] is attached to the numeral. The forms are also prenasalized.

	counting form	things, animals	people	plural diminutive
1	gɔʔɔ	—	—	—
2	didi	didi	dɪdɔ	dɪdɔy
3	tati	tati	tatɔ	tatɔy
4	nay, nayi	nay, nayi	nayɔ	nayɔy
5	jɔy, joyi	jɔy, joyi	ⁿ jɔyɔ	ⁿ jɔyɔy
6	jɛɛgɔm	jɛɛgɔm	ⁿ jɛɛgɔ	ⁿ jɛɛgɔy
7	jeddi	jeddi	ⁿ jeddɔ	ⁿ jeddɔy
8	jetti	jetti	ⁿ jettɔ	ⁿ jettɔy
9	jeenay	jeenay	ⁿ jeenayɔ	ⁿ jeenayɔy
10	sappɔ	sappɔ	sappɔ	sappɔ
20	nɔɔgay	nɔɔgay	nɔɔgayɔ	nɔɔgayɔy

The -ɔ suffix, used for numerals referring to human beings is cognate with the marker of the 'O class denoting persons. The distribution of these different forms is regional. Within the Inner Niger-Delta the numerals of the plural of human beings end in -ɔ. In the dialect of Gimballa the numerals counting the plural of human beings end in -ɔ. The 'O class is used for the category 'human' in the singular. In the plural the 'BE class would be expected, but the singular/plural distinction is neutralized because the number itself already provides the plural.

The agreement of numerals with the nouns they modify is shown in the following examples. The prenasalized initial consonants in numerals agreeing with the plural KOY class and the plosive initial consonant in numerals agreeing with the plural 'DE and 'DI classes is consistent with the initial consonant conditioned by these noun classes. But there is no explanation for the prenasalized initial consonants in numerals for counting human beings. The suffixes of the numerals in the 'DI and KOY classes are the vowel initial allomorphs of these classes. There is also no explanation for the suffix -i to occur on numerals agreeing with the noun 'DE class.

'BE:	yimɓɛ ⁿ jeddɔ	'seven people'
	sukaabɛ nɔɔgayɔ	'twenty children'
'DE, 'DI:	daabaaji jeddi	'seven animals'
	kulle jeddi	'seven things'
KOY:	kulloy ⁿ jeddɔy	'seven small things'
	ɓikkoy nɔɔgay, nɔɔgayɔy	'twenty children'

Klingenheben (1949:74) says he found, in the Fulfulde dialect of Maasina, a form of the numerals ending in -ɔ agreeing with the augmentative plural class marker KO in the example **ngoro mbuumko kewko** 'many blind giants'. This class is not attested in my data of Maasina.

In Maasina there are two alternative ways of counting tens. The Mali forms in the first (left) column has many loan-words, e.g. the words **kemɛ** 'hundred' and **debe** 'forty' are from Bambara. The alternative forms in the second (right) column look more like the general forms in Fulfulde. In other dialects the full plural of ten **cappandɛ** is used to count tens, e.g. **cappandɛ didi** '20', **cappandɛ tati** '30'. The absence of the plural suffix **dɛ**

explains the different initial consonant [s] in the Maasina dialect. The plosive (affricate) initial consonant [c] is conditioned by this suffix -**ɗɛ**.

Mali forms		alternative forms
sappɔ	10	sappɔ
nɔɔgay	20	sappandidi
nɔɔgay ʔɛ sappɔ	30	sappantati
dɛbɛ	40	sappannay
dɛbɛ ʔɛ sappɔ	50	sappanⁿjɔy
mallihemrɛ	60	sappanⁿjɛɛgɔm
mallihemrɛ ʔɛ sappɔ	70	sappanⁿjed'di
hemrɛ	80	sappanⁿjetti
hemrɛ ʔɛ sappɔ	90	sappanⁿjeenay
tɛmedɛrɛ	100	
tɛmedde didi	200 etc.	
ʔujunere bam^mbara	800	
ʔujunere silaamu	1000	
ʔujunaaji didi	2000 etc.	

In Mopti counting in the market was generally done with the Mali forms, but the alternative forms were used when calculating the price of milk, which was 50 CFA or exactly 10 **buudi** per spoonful (The price per spoon did not change but the size of spoon is adapted to the amount of milk available in the season). One consultant had the impression that the system with **sappan-** 'tens' is more used by elderly persons, and by the Jaawamɓe, the Fulbe traders. To buy a cow, he recently used the terms with **sappan-** 'tens' instead of the other terms, derived mostly from Bambara.

The word **hemrɛ** in 60, 70, 80, and 90 is very often pronounced **hemɛrɛ** to avoid the less well-formed sonority hierarchy of the [mr] sequence. The final nasal of **sappan-** assimilates in place features to the following consonant, this consonant is automatically prenasalized when voiced, resulting in a form like **sappanⁿjɔy** 'fifty'.

The word **sappɔ** 'ten' and numerals higher than twenty show no agreement with the noun they modify. The non-concording numerals precede the singular noun when they occur alone (not followed by other numbers).

sappɔ suka	'ten children'	[lit. ten of child]
sappɔ ⁿgaari	'ten bulls'	[lit. ten of bull]
dɛbɛ nɛdɗɔ	'forty people'	[lit. forty of person]
mali hemrɛ suka	'sixty children'	[lit. sixty of child]

Concording numerals follow the plural noun, also when they combine with non-concording numerals.

lebbi jɔy	'five months'
duubi nɔɔgay ʔɛ jɔy	'twenty five years'
daabaaji sappɔ ʔɛ gɔ^ɔ	'eleven animals'

8.6 NOMINAL ADPOSITIONS, PREPOSITIONS

Most prepositions in Fulfulde are derived from nouns, and like other nominals they end in a class marker. Sometimes the word is clearly polysemous, with a meaning as a preposition and as an independent noun.

caggal	‘at the back of, behind’	caggal ɲgal	‘the back (body part)’
yeeso	‘in front of, before’	yeeso ɲgo	‘the face’
sella	‘at the outside of’	sella ka	‘the outside’
yaasin	‘at the outside of’	yaasi ʔo	‘the outside’
ɓaŋɲe	‘next to’	ɓaŋɲe ʔo	‘the side, the river bank’

A marker *n is added to the prepositional, locative form of **yaasi** ‘outside’. If the noun which follows the preposition is pronominalized, all prepositions are followed by possessive pronouns. This agrees with the nominal status of the prepositions. The possessive pronouns indicate that a prepositional noun phrase has a structure that is identical to a genitive construction.

yaasin suudu	‘outside of the house’
yaasin mayru	‘outside of it’

Some prepositions are derived from verbs, but the form they take is the infinitive. The infinitive is also a noun ending in a class marker.

ʔiwde	‘from’	ʔiwde	‘to come from’
yaade	‘to’	yaade	‘to go to’
faade	‘in the direction of’	faade	‘to go in the direction of’

There are a few prepositions which are not marked by the presence of a class suffix. The hypothesis is that historically they were derived from nouns ending in a class marker but they have been shortened.

ley	‘under, on, in’	leydi	‘ground’
dow	‘up, on’	dowdi	‘shadow’
faa	‘until’	faade	‘going towards’

The preposition **ley** ‘on’ is related to the word **leydi/leyde** ‘ground, land’. The preposition is probably derived from the noun. The meaning of the preposition can be paraphrased as “on the ground of”.

ley lekki	‘under the tree’ (on the ground of the tree)
ley ɲdiyam	‘on the water’ (on the surface level of the water)
ley tum^mbude	‘in the bowl’ (on the ground, bottom of the bowl)

That the preposition **ley** is derived from the noun can also be deduced from the syntactic behaviour of pronouns following the prepositions: they take the genitive form.

ley makki	'under it'
ley majjam	'on it'
ley mayre	'in it'

Even the preposition **ʔe** 'with, and', which is not derived from a noun, is followed by the possessive pronoun. This may have been due to syntactic levelling.

ʔe makko	'and, with him/her'
ʔe makki	'and, with it' (KI class)
ʔe majji	'and, with them' (DI class)

The study of the combination of the pronouns with prepositions leads into the study of syntax, which is beyond the scope of the present work. The present study has provided an overview of the formation of words in the Fulfulde dialect of Maasina with special emphasis on its semantic aspects. The lexical meaning of these words serve as an input to more complex structures which need further interpretation. The syntactic structures add additional meanings to the lexical meanings of the words, thus forming messages. The study of the words in sentences and in discourse is left for future research.