Form and meaning in Fulfulde: a morphophonological study of Maasinankoore
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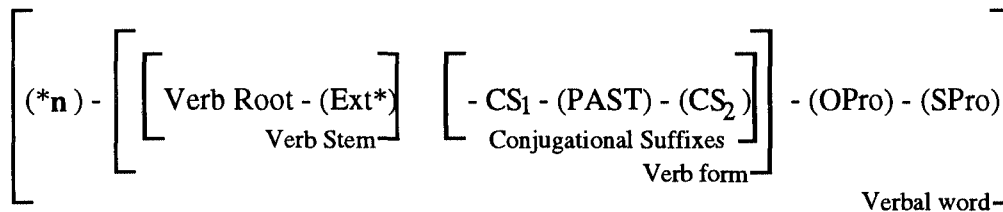**Issue Date**: 1995-05-30

Part II

Word formation

Chapter five
Verbs, adverbs and particles

5.1 INTERNAL STRUCTURE OF THE VERB

A verb in Maasina, as in the other dialects of Fulfulde, consists minimally of a verb stem (VS) and a conjugational suffix (CS). The minimal verbal word only consists of the verb form. The verb form is the combination of the verb stem with the conjugational suffixes. The verb stem (VS) consists of a verb root (VR) to which a number of extensions (Ext*) can be attached. The conjugational suffixes are fused forms of different verbal markers expressing tense, mood, aspect, discourse related meanings (focused, focalizing), and polarity (negative, affirmative). They follow the verb stem. The conjugational suffix (CS) is the form that resulted from the fusion of the conjugational verbal markers, without the past tense marker. The past tense marker (PAST) occupies a distinct place within the conjugational suffixes. The verb form can also be inflected for person and number. When the subject is plural, a morpheme (*n) precedes the verb form, causing the first consonant to be prenasalized. The prenasalized series of the first consonant of the verb also occurs when the subject pronoun follows the verb form. The verbal word maximally consists of the verb form and additional pronominal inflection. The following figure shows the order of (fused and plain) morphemes in the inflected verb form.

$$\left[(^*n) - \left[\left[\text{Verb Root} - (\text{Ext}^*) \atop \text{Verb Stem} \right] \left[- CS_1 - (\text{PAST}) - (CS_2) \atop \text{Conjugational Suffixes} \right] \atop \text{Verb form} \right] - (\text{OPro}) - (\text{SPro}) \atop \text{Verbal word} \right]$$

Conjugational suffixes

In the literature, the conjugational suffixes have been described as single morphemes. In fact the conjugational suffixes are a set of complex portmanteau morphemes. Historically and probably even synchronically, the conjugational suffixes consist of several morphemes. Only the verbal marker that indicates past tense (PAST) is one indivisible morpheme. Sometimes, the past tense marker seems to follow the conjugational suffix, and in some cases it has the appearance of an infix, breaking up the conjugational suffix into two parts, (CS1) and (CS2). The latter is shown in the following example. Position (CS2) is only filled when the past tense marker behaves like an infix.

> mi   jaab-a-nòo-ki   mɔ-ʔ
> I (SPro)   answer-CS1 (N.M.COMPL)-PAST-CS2 (N.M.COMPL)   him (OPro)-FG
> 'I had not answered him.'

The further analysis of the conjugational suffixes is discussed in section 5.5.

Separate pronouns and pronominal affixes

The most commonly occurring word order in Fulfulde is SVO. This order is also followed when subject and object are pronouns. Most pronouns are not part of the verbal word, they are considered to be separate words. Subject pronouns normally precede the verbal word. Object pronouns always follow the verbal word. These subject and object pronouns have a special status in the sense that they can never attract stress, and neither do they influence the placement of stress on the verbal word. As described in section 4.7, primary stress in verbal words falls on the last heavy syllable, when no heavy syllable is present it falls on the first syllable. The stressed syllables are underlined in the examples of this section.

?acc-<u>en</u>- èɛ   kam   hakkɛ

leave-Ext (DAT)-CS (IMPpl) me (OPro) sins
'Forgive me.'

The position of stress in the previous sentence shows that the object pronoun **kam** 'me' (a heavy syllable) is not considered to be part of the verbal word, because if it were, it would have received stress.

mi   <u>til</u>-ɛkɛ-nɔ   ?ɛ   huttudɛ lɛlla

I (S Pro) end-CS (M.COMPL)-PAST with skin-INF antelope
'I had finished skinning the antelope.'

Here the stress falls on the first syllable of the verbal word **tilɛkɛnɔ** 'had finished' as it consists of only light syllables. The stress placement indicates that the subject pronoun **mi** 'me' is not the first syllable of the verbal word, because it would have received stress in that case. All pronouns preceding the verb form do not influence the stress placement in the verbal word. Most pronouns following the verbal word show the same lack of influence on the placement of stress in the verb. These pronouns are considered to be separate words

Some pronominal forms do influence the stress placement and trigger ATR-harmony in the verbal word, they are considered to be pronominal affixes. These pronominal affixes occur only in combination with certain conjugational suffixes. In combination with the subjunctive and relative verb forms, the subject can follow the verb form. This morphological order of verb form and subject pronoun (SPro) within the verbal word is called inversion (Klingenheben 1961). Inversion is also marked by prenasalization of the first consonant of the verbal word (see section 3.1.4.). Only certain subject pronouns can be inverted, these are the subject pronouns of the 2nd person singular (-aa or -daa), the 2nd person plural (-ɔn or -dɔn), the 1st person plural inclusive (-en or -den), and in the case of the relative verb forms also the 1st person singular (-mi). When inversion of the subject pronominal affix occurs, only one pronominal object affix can follow the verb form and precede the subject pronominal affix. Only the 2nd person singular (-maa-) or the 3rd person singular (-moo-) can occur in this position. The pronominal affixes are clearly part of the phonological verbal word, because they can influence the stress assignment within that word.

kɔ   ⁿjim-at-àa ?

what sing-CS (INCOMPL)-you (SPro)

'What will you sing?'

pati ⁿgar-àa

don't come-CS (SUB)-you (SPro)

'You should not come.'

pil-am-màa-mi

tell-Ext-you (OPro)- I (SPro)

'I tell for you (a story)'

kɔ   ʔanⁿd-ir-mòo-mi   lebbi tati

that know-Ext-him (OPro)-I (SPro) months three

'It's three months that I know him.'

In the imperative, incompletive, and subjunctive verb forms of active verbs without inversion, the 1st person singular object pronoun (-**am**) and the 2nd person singular object pronoun (-**ɛ**) can be attached as pronominal affixes to the verb form. Together with the last consonant of the verb form, they form the last syllable of the verbal word.

hɔkk-àm   ⁿdiyam   mi   hɔkk-ɛt-ɛ   dam

give-CS (IMPsg)-me (OPro) water   I (SPro) give-CS (INCOMPL)-you (OPro) it (OPro)

'Give me water!'   'I will give it to you.'

The locative marker or locative copula is not considered to be part of the verbal word. It is a separate word, which can precede the verb. Although the locative marker is a morpheme expressing aspect (duration) the locative is not considered to be one of the verbal markers. This is contrary to the opinions expressed by Arnott (1970a:279-289) and McIntosh (1984:77-81), who do consider this marker part of the verb form (for further discussion see section 5.6.1.1). The locative can also merge with the subject pronoun to form the locative pronoun, which is a separate (although unstressed) word.

suka ʔana jàl-a-ʔ

child LOC laugh-CS (SUB)--FG

'The child is laughing.'

mi-dɔ   jàl-a-ʔ

I (SPro)-LOC laugh-CS (SUB)--FG

'I am laughing.'

The order and form of subject, object and locative pronouns are discussed in more detail in the discussion of the different verb conjugations (5.4) and in the section on pronouns (8.2).

Final glottality

Certain verbal conjugations are characterized by final glottality at the end of the verbal word. Final glottality is only realized when the verbal word occurs before a pause at the end of the sentence (see section 2.6.2). The imperative, subjunctive, and relative verb forms are marked by final glotallity in Maasina. The verbal word can only be extended by the past tense **nɔ** and by certain pronouns, in which case the final glottality is carried by the past tense morpheme or by the affixed pronoun.

ʔɔmɔ   ʔanⁿd-aa-ʔ

he/she+LOC know-P.R.COMPL-FG

'He is known.'

ʔɔmɔ   joocf-i-nɔɔ-ʔ

he/she+LOC   sit-M.R.COMPL-PAST-FG

'He sat.'

ʔattey ⁿgadd-u-noo-mi-ʔ

tea   bring-R.COMPL-PAST-I (SPro)-FG

'It's tea that I have brought.'

Final glottality is also found on concordial pronouns. Object pronouns which are discourse referents are marked by the absence of final glottality with the exception of the long form of the 2nd person singular object pronoun **maaʔ** which is marked by final glottality (Arnott 1970a:232), even when it follows verbal forms which are not marked by final glottality.

mi   jaab-a-noo-ki   maaʔ

I (SPro)   answer-N.M.COMPL   you (OPro)-FG

'I had not answered you.'

The paradigms of verbal words combining with object pronouns in Gombe (Arnott 1970a:232) show that the final glottality is related to the object pronoun and not to the verbal conjugational category. This is another argument to separate the object pronoun from the verbal word.

	Completive	Subjunctive
1 sg.	ʔo wall-ii yam	ʔo wall-a yam
1 pl. excl.	ʔo wall-ii min	ʔo wall-a min
3 sg.	ʔo wall-ii cfum	ʔo wall-a cfum
2 sg.	ʔo wall-ii ma (short form)	ʔo wall-a maaʔ (long form)
'O class	ʔo wall-ii moʔ	ʔo wall-a moʔ
'BE class	ʔo wall-ii ɓeʔ	ʔo wall-a ɓeʔ
NGEL class	ʔo wall-ii ⁿgelʔ	ʔo wall-a ⁿgelʔ
'DUM class	ʔo wall-ii cfumʔ	ʔo wall-a cfumʔ

The final glottality is indicated in the examples, it is not taken into account in the description of the distribution of the different forms of the conjugational suffixes.

The order of elements in verbal words can only be shown by comparing a number of examples, since all the possible slots in a verbal word are not filled at the same time. The morphemes that can occupy the different slots in a verbal word are discussed and exemplified in the following sections. First the verb roots are discussed, followed by a short introduction to the distinction between active, middle and passive verbs (5.2). Then an overview of all the possible verbal extensions that occur in Maasina is given (5.3). Subsequently, the conjugational suffixes are first described as units, conform the tradition in the literature on the Fulfulde verb system (5.4). Then some hypotheses on the analysis of the underlying structure of the conjugations will be explored, on the basis of the semantic

grouping of the conjugations (5.5). This chapter ends with a discussion of some minor word classes which are linked to the verb, for example by their function as modifiers (5.6).

5.2 VERB ROOTS

Verb roots in Maasina usually have a CV(V)C shape . There are a number of verb roots that have a CVCC form. Although they are common, they are also suspect as the last consonant will often prove to be an old verbal extension.

Allomorphy of the verb root

The changes that a verb root can undergo involve all segments of its structure. The initial consonant of a verb root can be subject to consonant alternation. This has been discussed in detail in section 3.1.4. The vowel of the verb root can undergo assimilation as discussed in section 2.9. The most dominant vowel assimilation occurring in Fulfulde is ATR-harmony. A few verb stems containing the vowel [a] undergo frontness assimilation when they precede a morpheme with the vowel [i]. The vowel in the verb root is frequently shortened when a following consonant initial morpheme causes the occurrence of the less preferred CVVC syllable structure. The last consonant of the verb root can change, especially when it occurs in a syllable final position. The rules that change syllable final consonants are discussed in section 4.5. Examples of the changes in the verb root mentioned above are given below.

initial consonant alternation:	**mi haal-ii**	'I have spoken'	**ɓe kaal-ii**	'they have spoken'
vowel shortening:	**weer-ude**	'to camp'	**wer-n-ude**	'to install'
ATR-vowel assimilation:	**heew-aa**	'it is not much'	**heew-i**	'it is much'
frontness assimilation:	**mi yah-an**	'I will go'	**mi yeh-ii**	'I have gone'
assimilation final consonant :	**kɔ juut-ii**	'it is long'	**kɔ juun-n-i**	'it makes long'

Meaning of the verb root and the conjugational suffix

For a correct application and interpretation of the conjugational suffixes, the verbs must be classified semantically. The temporal structure and the possible argument structure of the action or process expressed by a particular verb has its consequences for the choice of conjugations with which it can combine, and for the readings of the meaning of the verb forms. As an example the completive verb forms of the action verb **warde** 'to come' and the inchoative verb **jɔɔɗaade** 'to sit' are compared.

sɔ	ɓe	**war-ii**		sɔ ɓe	**ⁿjooɗ-ike**
if	they	come-COMPL		if they	sit-M.COMPL
'If they have come...'				'If they sit (are seated)...'	

In combination with the completive conjugational suffix, the verb **warii** 'have come' signifies that the action of coming has been completed. When the verb stem **jɔɔɗ-** 'sit, get seated' combines with the completive marker in the form **ⁿjooɗike** 'sit', the verb expresses a present state of sitting. This is because the completive indicates that the change of state, the precise moment of getting seated is completed, 'they sit', perhaps 'they are seated' is a better paraphrase of the Fulfulde meaning.

Meaning of the verb root and voice

The possible argument structure of the verb is important for the possibility of a verb to combine with the active, middle and passive voice. Voice is also expressed in the conjugational suffixes. All conjugational suffixes have different forms for the different voices. Semantically the derivation of active, middle and passive verbs is a process that shows a lot of similarity with the derivation of an extended verb stem. One semantic similarity is the fact that extensions can also change the argument structure of the verb. There are verb stems that can combine with all three voices, there are also verb stems that can combine with only one of the voices.

The middle voice has received some attention in the literature (cf. Abu-Manga & Jungraithmayr 1988, Arnott 1956). The middle voice implies that the action or process expressed by the verb affects the subject. In Fulfulde, verbs stems that combine with the middle voice are verbs which can signal (1) actions of grooming or body care, (2) actions of moving the body without a change in overall position, (3) actions describing a change in body posture, (4) actions in which the agent entity is normally also a recipient or beneficiary in the verbal action, (5) actions or states in which the relationship among two participants is usually or necessarily mutual or reciprocal, (6) actions describing a self-induced motion of an animate entity along a path in space, (7) actions or states that describe an emotional reaction, (8) mental states or processes, (9) spontaneous events, and (10) actions where the subject of the verb corresponds thematically to the object of the verb stem without the middle voice marker (Kemmer 1993:16-20). Middle voice verbs mark the infinitive with the suffix -aade.

(1)	grooming or body care	ɓɔɔrn-aade	'to get dressed'
(2)	nontranslational motion	dejjin-aade	'to keep still, not move'
(3)	change in body posture	lel-aade	'to lie down'
(4)	indirect (self-benefactive) middle	lan^{n}d-aade	'to ask'
(5)	naturally reciprocal events	gans-aade	'to converse'
(6)	translational motion	dam^{m}b-aade	'to move to wedding house'
(7)	emotion middle	ŋɔɔrŋ-aade	'to grieve, to be sad'
(8)	cognition middle	miij-aade	'to think, to ponder'
(9)	spontaneous events	laat-aade	'to become, to change into'
(10)	passive, impersonal, facilitative middle	ʔudd-aade	'to be open(-able)'

Kemmer also lists semantic verb classes that express emotive speech actions, other speech actions with emotional overtones, and the logophoric middle as possible categories expressed by the middle voice. These verb classes, however, do not occur in the middle voice in Fulfulde.

Passive voice verbs are verbs where the subject has the thematic role of the patient, i.e. the subject undergoes the action expressed by the verb. Passive verbs can be transitive. This is shown by the examples yeew-eede 'to miss' and hill-eede 'to be interested' found in the Maasina data. Passive voice verbs mark the infinitive with the suffix -eede.

lɔɔt-eede	'to be washed'
ɓɔɔrn-eede	'to be dressed'
fiy-eede	'to be beaten'
yeew-eede	'to miss' (e.g. one's family, one's village)
hill-eede	'to be interested in' (e.g. the city, farming)

All verbs that do not belong to the passive and middle voice verbs are active voice verbs. At first sight this group looks like a large residual category. The active voice verbs signal that the subject of the verb is the agent of the action expressed by the verb, or that the subject is the patient when the verb expresses a process. Active voice verbs mark the infinitive with the suffix -de or -ude.

yaa-de	'to go'
jal-ude	'to laugh'
ʔanⁿdoⁿdir-de	'to know each other'
wojj-ude	'to be red'
mawn-ude	'to be big'

Some verb stems can combine with all voices. There are semantic restrictions on the voice potential of a verb stem. An action verb that occurs in the active voice must allow for an agent in its argument structure. Verbs that only combine with the active voice are often intransitive. The semantic interpretation of the active, middle and passive voice markers has consequences for the argument structure of the verb.

loot-ude	'to wash' (someone)	S = agent	O = patient
lɔɔt-aade	'to wash oneself'	S = agent and patient	
lɔɔt-eede	'to be washed (by someone)'	S = patient	

ʔudd-ude	'to open' (something)	S = agent	O = patient
ʔudd-aade	'to be open(-able)' (of something)	S = patient	
ʔudd-eede	'to be opened (by someone)'	S = patient	

The argument structure of the verb stem lɔɔt- allows the subject to be agent, patient, or both at the same time. The facilitative passive meaning of the middle voice verb ʔudd-aade 'to be open(-able)' does not allow for the agent to be expressed. Sometimes there is a dialect difference in the voice used by a certain verb stem. For example, the verb stem miil- 'think' expressing a mental event is miilde 'to think' in the active voice in Maasina, but miilaade 'to think' in the middle voice in Fuuta Tooro. More research is needed to describe fully the meaning and use of the three voices in Fulfulde.

5.3 EXTENSIONS

The verbal extensions in Fulfulde are many. There have been valuable studies on the verbal extensions in different Fulfulde dialects by Arnott (1970a:333-370), Endresen (1994), Fagerli (1993, 1994), Gaden (1913:60-66), Gnalibouly (1990), Gnalibouly & Koval (1982), Gottschligg (1990), Labatut (1982a:151-164, 223-225), Mohamadou (1985:53-100), Ouane

and Koval (1976), Sow (1966), Sylla (1982:115-120), De Wolf (1985b, 1986a, 1986b, 1987, 1991), and others. This voluminous literature still leaves numerous issues undiscussed, e.g. concerning the semantic content of the individual extensions and the syntactic consequences for the verb phrase when a verb stem combines with these extensions.

This section gives an overview of the verbal extensions that occur in the Maasina dialect. A comparison of the Maasina forms with cognate forms in other dialects is sometimes needed to discuss a verbal extension, and to put the Maasina data in the wider context of Fulfulde. The description differs in some places from what is available in the existing literature. For example, the reversive extension with the form -t- or -it- is treated as one polysemic form (following Gaden's analysis), rather than as a number of homophonous extensions that occur under many different names (contra Arnott 1970a, De Wolf 1985b). The denominal associative extension -w- is distinguished here from the inchoative extension -ɗ- or -iɗ- (confirm Gaden 1913, contra Arnott 1970a a.o.). Some very rare extensions which are not often considered in the literature are also listed, like the intensive extension -l-, the extensive extension -is-/-s-, the brusque extension -6-, and the resultative extension -ⁿd-/-iⁿd-. They were noted before by Gaden (1913:65-66), Klingenheben (1963:204, 214), and Mohamadou (1985:78-86) in other dialects.

The reduplication of a verb stem is a type of stem formation that differs from an extended verb stem in that a reduplicated verb stem consists of two identical verb roots, whereas an extension has a distinct form of itself. Reduplication is treated together with the extensions because both are processes of derivation resulting in a verb stem that is the basic form to which inflection is added. The reduplicated verbs in the Maasina dialect show a clear additional meaning of "not succeeding" and the meaning of the reduplicated verb form is therefore called the evasive, its meaning is clearly different from the repetitive-intensive meaning given to reduplicated verbs in other descriptions (Klingenheben 1963:212, Arnott 1970a:362, Mohamadou 1985:88). It is not clear whether this difference is caused by dialect variation.

The middle voice and the passive voice forms of the same verb root are not treated as verbal extensions, even though this process is on the boundary between derivation and inflection. The semantics of middle and passive verb derivations is not fully predictable, and the passive and middle voice derivations are not productive: they cannot occur just on any verb. But the fusion of the markers for voice with the verbal inflection (the conjugations) makes it practically impossible to treat them as verbal derivational extensions, they are too intermingled with the verbal inflectional conjugations. The marking of voice is discussed in section 5.2.2. There are very productive extensions like the altri-locative and the dative extensions which are almost inflectional. The verbs that combine with these extensions are usually not put in the lexicon because their meaning is very predictable, so the divisions derivation vs. inflection, extensions vs. conjugation, and semantic predictability vs. unpredictability do not always coincide in Maasina verb forms.

Before describing the individual extensions, the following list will give the terms used for the verbal extensions in this thesis, a short indication of their meaning between square brackets, followed by the forms under which they occur in Maasina.

(rare extensions:)

ASS	associative	[be like]	*ɥ > -w-
INCH	inchoative	[become]	-iɗ-, -ɗ-
EVAS	evasive	[try without success]	reduplication
INT	intensive	[intensely]	reduplicated final C (*-ʔ-)
EXHA	exhaustive	[exhaustively]	-l-
BRU	brusque	[brusquely]	-ɓ-
PART	partitive	[a little]	-is-, -s-
RES	resultative	[achieve]	-iⁿd-, -ⁿd-

(more productive extensions:)

REC	reciprocal	[each other]	-oⁿdir-
SIM	simulative	[pretend]	-iŋkin-
REV	reversive	[back, again]	-it-, -t-
CAUS	causative	[cause]	-in-, -n-
COM	comitative	[together, all]	-id-, -d-, -ɔd-
CIRC	circumstantial	[how, with what, where]	-ir-, -r-, -ɔr-
ALT	altri-locative	[elsewhere]	-ɔy-
DAT	dative	[for, on behalf of]	-an-

The extensions are ordered partly according to how they are ordered when they co-occur in one verb, partly according to their frequency, starting with the most rare extensions and the extensions that are closest to the verbal root, going to the most frequent and productive extensions that are furthest away from the verbal root.

Up to three verbal extensions are found in one verb root in the Maasina data. The distance of the extension vis-à-vis the root has an influence on the form of the extension. The first extension that follows the verb root is mostly shortened, i.e. it consists of only the consonant. This shortening does not occur if the omission of the vowel would cause ill-formed sequences. So after stems ending in two consonants or a consonant that cannot precede the consonant of the extension, the first extension following the verb root keeps its underlying vowel. When an extension follows in second or third place, it always has its full form, i.e. it consists of a vowel and a consonant. The extensions which have only one form consisting of one consonant, are only found directly following the verb root.

In the literature the vowel [i] occurring in many of the extensions is often called epenthetic. In this study the vowel [i] is considered to be part of the verbal extension that can be omitted in a few contexts. This is because there is no phonological conditioning of its precise vowel quality, which is always [i]. In the Gombe dialect (Arnott 1970a:249), the vowel [u] can also occur in the context of the reversive extension -ut- , but this vowel [u] can be explained as the result of vowel assimilation of the underlying unstressed short vowel [i] to the vowel [u] in the last syllable.

maɓɓ-ut-u	'Open up!' [Gombe]
open-REV-IMPsg	
maɓɓ-it-in	'Open up, uncover!' [Maasina]

In Maasina, the allomorph -ut- is not attested. The imperative of verbs with an extension combines with a morpheme -in. A verbal extension is never followed by the active voice marker -u in Maasina. The active voice marker -u does however occur in the imperative in Gombe when the stem final consonant cannot occur syllable or word finally. In the following sections examples of verbs combining with the different extensions will be given.

5.3.1 ASSOCIATIVE *ɥ

The associative verbal extension, *ɥ, is realized as -w- in Maasina. It is found in only a few verbs . In the literature on other dialects this extension is usually cited as an irregular form of the "denominal" extension -id- (here called the inchoative extension) (Klingenheben 1963:187, Labatut 1982a:224, Mohamadou 1985:65-67, Arnott 1970a:339). Only Gaden (1913:66) lists the extension -w- separately, as an unproductive and rare extension. The associative extension is indeed rare, it combines only with a few noun stems to form inchoative verbs that signal the association to a particular semantic feature of the noun stem from which the verb stem is derived. The associative extension is also important in the formation of Grade B nouns (see sections 6.1.3 and 6.2.2). The following examples are the only verbs that combine with the associative extension in Maasina.

ran-	+ *ɥ >	rawnude	'to be(come) white'
6al-	+ *ɥ >	6awlude	'to be(come) black'
wɔd-	+ *ɥ >	wojjude	'to be(come) red'
nay-	+ *ɥ >	naywude	'to be(come) old'
ɲal-	+ *ɥ >	ɲawlude	'to go out late in the day, be at the middle of the day'

Both the forms of the verbs and the meanings need further explanation. First the phonological changes that occur will be described, then a further semantic analysis of the associative derivation will be given.

The form of the verbs with the associative derivation are more regular in the eastern dialects. Their forms in the Ringimaaji dialect are given for a phonological comparison. In the Ringimaaji dialect the associative extension *ɥ is realized as -β- and it follows the verb root. The following examples are verbs with the associative extension in Ringimaaji.

ran	+ β >	ranβugɔ	'to be white'
6al	+ β >	6alβugɔ	'to be black'
nay	+ β >	nayβugɔ	'to be old'
ɲal	+ β >	ɲalβugɔ	'to rise high (of the sun)'

In Maasina the approximant [w] cannot occur following the less sonorant consonants [r] or [l]. Metathesis occurred to prevent an ill-formed consonant sequence. In Maasina the metathesis does not occur in the verb **naywude** 'to be(come) old', because a consonant sequence [wy] does not violate the sonority hierarchy. The metathesis is confirmed by the comparison with the form in the Ringimaaji dialect. The fricative [β] is less sonorant than [r] and [l]. The associative extension -β- can remain in its position following the verb root ending in the consonants [r] or [l] without violating the sonority hierarchy. The underlying

nominal roots can be constructed by comparing the verb with existing nouns derived from the same stem. The noun stems on which these verbs are based are given below:

noun		feature
ran-ɛ	'white cow' (address term)	"white"
ɓal-ɛ	'black cow' (address term)	"black"
wɔɗ-ɛ	'red cow' (address term)	"red"
ɲal-aaⁿdɛ	'day'	"daylight"

The associative extension derives verbs only from noun stems. The associative extension *ɥ differs from the inchoative extension *-iɗ- described below which derives verbs from nouns, but also from adjectives (contra Mohamadou 1985:67, 71). The hypothesis is that the verbs are derived from the noun stems given above, expressing a resemblance with these nouns according to the following formula for the associative extension.

N + ASS (*ɥ) --> V [inchoative]
|
"be(come) associated with a salient feature of N"

Something that becomes red, receives the feature red, which is associated with (the skin of) red cows. The adjectives expressing colour terms are derived from the cow names that are characterized by the colour of the skin of the cow (see section 8.13), which is morphologically indicated by the presence of the NGE class marker, associated with cows. The stem *wɔɗ- 'red (cow)' is a nominal stem, as in wɔɗ-ɛ 'red cow (address term)'. The hypothesis is that the verb is derived from the noun stem *wɔɗ-, used to name a red cow, even if the NGE class marker is not present in the verb stem wojjude 'to be(come) red'. The laryngealized stem final [ɗ] and the palatal labial [ɥ] of the associative extension merged into the geminate consonant [jj].

The verb ɲawlude 'to be daylight' is derived with the associative extension from the same stem *ɲal- found in the noun ɲalaaⁿdɛ 'day' and in the verb ɲallude 'to pass the day'.

The derivation of the verb naywude is semantically more complicated. The semantic link between the morphemes *nay found in the word nayi 'four' and the suffix -ɛ of the NGE class referring to cows and the verb naywude 'to be old' is further discussed in section 8.1 on adjectives. The hypothesis is based on the image of a cow with four calves, that is already a bit worn out, and thus provided a metaphorical image for "old".

nay-w-ude	'to be old'	[infinitive]
nay-ɛɛ-jɔ	'old person'	[adjective 'O class]
nay-ɛɛ-we	'old cow'	[adjective NGE class]
nay-i	'four'	[numeral]

The link of this verb with a metaphorical image related to cows is very dominant. This may seem strange, but it would perhaps be more strange if no metaphors relating to cows were

to be found in the language of the Fulbe society where herdsmanship is so central in the ideology and the economics of its people.

5.3.2 INCHOATIVE *id

The inchoative extension forms verbs from adjectival stems and from noun stems. Most verbs which combine with the inchoative extension are however derived from adjectival stems following the formula given below.

Adj. + INCH (*id) --> V [inchoative]
|
"become Adj."

The form of the extension *-id- can be shortened to -d- following the verb root immediately unless the result would be an ill-formed consonant sequence. If the form of the extension is -d- then the infinitive form is -ude, if the form of the extension is -id- then the form of the infinitive is -idde or -in^{n}de, i.e. *id + *de, i.e. a repetition of the extension followed by the infinitive marker. The repetition of the extension prevents the sequence of three unstressed light syllables (see section 4.2.2). This is shown in the following examples of adjectival stems combining with the inchoative extension.

*$^?$ɔɔl-	+ *id > $^?$oold-ude	'to be yellow'
*fam-	+ *id > famdude, fand-ude	'to be small'
*fur-	+ *id > furd-ude	'to be grey by dirt'
*hes-	+ *id > heyd-ude	'to be(come) new'
*nuur-	+ *id > nuurd-ude	'to be(come) bright, radiant'
*ŋar-	+ *id > ŋard-ude	'to be(come) beautiful'
*rim-	+ *id > rimd-ude	'to be(come) noble'
*faŋk-	+ *id > faŋkid-idde	'to be(come) ugly'
*lɔbb-	+ *id > lobbid-in^{n}de	'to be(come) good, nice'
*lugg-	+ *id > luggid-in^{n}de	'to be(come) deep'
*ɓutt-	+ *id > ɓuttid-in^{n}de, ɓuttid-idde	'to be(come) thick, big'

There are a few noun stems that combine with the inchoative extension.

dɔm-ka	'thirst'	dom-d-ude	'to be(come) thirsty'
goo^{n}g-a	'truth'	gon-d-ude	'to be(come) realistic; be right'

The following formulation is proposed for the derivation of these verb stems combining a noun stem with the inchoative extension.

N + INCH (*id) --> V [inchoative]
|
"be(come) with N"

The paraphrase "to be(come) with thirst" indicates the semantic derivation of the verb ɗomɗude 'to be(come) thirsty'. Likewise, the verb gonɗude 'to be(come) true' can be paraphrased as "to be(come) with truth".

5.3.3 EVASIVE: REDUPLICATION

The evasive verb stem is formed by reduplication of the verb stem. Often the reduplicated verb stem also combines with the reversive extension -t-. Contrary to previous views expressed in the literature (Klingenheben 1963:212, Arnott 1970a:362, Mohamadou 1985:88), repetition is not the most important semantic information expressed by the reduplicated verb stem. The repetition is expressed with the -t- extension. The fact that the action expressed in the verb stem is repeated is a consequence of the unsuccessful performance of the verb in the first place. This can be attested in the following examples of reduplicated verb forms, compared with the verbs from which they are derived. The verbs listed in this section are the only examples with reduplicated verb stems found in the data of the Maasina dialect.

ɓulɓultude	'to bubble up out of the sand (of water)'	ɓulde	'to run (of water)'
ferfertude	'to walk around, without destination'	ferde	'to migrate'
firfirtude	'to flap about, to learn to fly (of birds)'	fiirde	'to fly'
dardarnude	'to slow down to listen, spy or wait'	daraade	'to stop'
tartartude	'to struggle to prevent the falling off (of clothes)'	taarde	'to wrap'

A very illustrative example of the evasive meaning expressed by reduplication is the verb firfirtude 'to flap about' derived from the verb stem fiir- 'to fly'. The reduplicated verb firfirtude expresses the efforts of young birds, flapping with their wings, trying to fly. The fact that they do not (yet) succeed in flying makes repetition of the movement necessary. The repetition of the action is expressed by the reversive extension -t- in the same verb. Likewise, the verb tartartude 'to struggle to prevent the falling off (of clothes)' is derived from the verb taarde 'to encircle, wrap in clothes' with the reversive extension -t- forming the verb taartude 'to de-wrap clothes, to undress'. The reduplicated verb expresses the repetitive plucking, trying to hold on to one's clothes, to prevent them from falling off (from the shoulders). It is paraphrased as an action of unsuccesful repetitive efforts to dress and undress.

To sum up, the evasive extension expresses the trying and retrying of the action expressed in the single verb stem without achieving the goal of that action. This extension usually combines with reversive -t- that indicates repetition (in e.g. firfirtude and tartartude). The "unsuccessful, unattained goal" semantic aspect expressed by the reduplication of the verb stem is called the evasive extension. The following formula describes the formation of the evasive extension.

$$V \longrightarrow V + V (+ t)$$
$$\quad\quad | \quad\quad |$$
"try V (repeatedly), without succeeding"

There are some reduplicated verb stems where the meaning of the single stem has not been traced. They are given below.

nan-	>	nannan^{n}dɛ	'to be left-handed'
dam-	>	damdamtudɛ	'to go back and forth; to stamp (one's feet) on one place'
far-	>	farfartudɛ	'to burst out in anger'
gɔl-	>	golgoltude	'to tremble heavily, shiver'
ŋur-	>	ŋuruŋurdɛ	'to peep, to squeak (of mice)'

The verb nannan^{n}dɛ 'to be left-handed' occurs without the reversive extension -t- The verb is possibly derived from the adjectival stem *nan- 'left'. The evasive extension is possibly chosen to express the negative image about left-handedness as unsuccessful.

5.3.4 INTENSIVE *ʔ

The intensive extension is formed by the gemination of the stem final consonant. The change of a stem final single continuant into a non-continuant geminate suggests that the underlying consonant of this extension is a glottal stop. The hypothesis is that the extension marked by stem final consonant gemination is not a reduced form of the reduplication of the verb stem, but rather an assimilation to a morpheme of the form *ʔ, resulting in a [-continuant] geminate consonant.

The addition of the intensive extension to a verb stem results in a range of semantic changes. Klingenheben (1963:212-213) describes the gemination of the final consonant of the verb root as a reduced form of the reduplication of the full verb root, implying that both verb stem derivations have the same iterative/intensive meaning. In addition, he states that the extension that is formed by a final reduplicated consonant (-CC-) often has a causative meaning. And Klingenheben (1963:200) suggests that a reduplicated final consonant is an older form of the causative. The intensive extension indeed occurs frequently in combination with the causative extension -in-. The following examples are verbs with an extension consisting of final consonant gemination (CC) in Maasina that are also cited by Klingenheben in his description of Aadamaawa.

fejjude	'to split (wood)'		fej-	'split (wood)'
fuɗɗude	'to begin, to start'		fuɗ-	'come up, rise'
torrude	'to bother, to trouble someone'		tɔr-	'ask, beg'
wiccude	'to sprinkle, to make wet with drops'		wis-	'sprinkle water'
luttude	'to deny authority'		luut-	'deviate, disobey'

The extension with the final consonant gemination is considered to be different from the verb stem reduplication. The extension will be called the intensive extension, although it is a provisional hypothesis about the meaning of this extension. A verb like torrude 'to bother, to trouble, to tease' can be interpreted and paraphrased as "asking/begging intensely". The verb stem luut- 'disobey' could express a single event of disobedience, while the verb luttude 'to deny authority', implies a permanent and therefore more intense state of disobedience. The verb fuɗude 'come up (of grass), rise (of the sun)' expresses a natural event: the moment the grass or the sun appears on the horizon, whereas the same

stem in combination with the intensive extension **fudfdude** 'to begin, to start' expresses a conscious effort of a person to commence a process. The tentative formula for the intensive extension formed by gemination of the stem final consonant is given below.

V + INT (*ʔ) --> V
                   |
           "V intensely"

The meaning of the extension formed by stem final consonant gemination is not always clear. In a few verbs, given in the examples below, the translation equivalents of both the stem ending in a single consonant and the stem ending in a geminate consonant do not show an apparent difference in meaning.

d'illude	'to sneeze'	**d'iilude**	'to sneeze'
fejjude	'to split (wood)'	**fejude**	'to split (wood)'
hidfdude	'to be old, worn-out'	**hiidude**	'to be old'
ʔillude	'to sneeze'	**ʔiil-**	'sneeze' (Z)
ʔubbude	'to bury'	**ʔuw-**	'bury'
hippude	'to turn over (recipient)'	**hif-**	'turn over' (Z:G-A)
yoppude	'to leave behind, abandon; let'	**yof-, yoof-**	'leave, liberate, abandon'(Z)
hoocude,		**hoos-**	'collect; give, present' (Z)
hooccude	'to collect what was lost; give presents to a guest'		

Examples of their usage will help distinguish some of these verb forms. The assumption is, however, that the translation equivalents are too rough and that further semantic research will reveal a difference in meaning.

In Maasina the geminate consonants in the verb forms in the following examples are also thought to be derived from roots ending in a single consonant. When the stem ending in a single consonant is not attested in Maasina, the source was often found in Zoubko (1980). This source is indicated with a (Z) between parentheses, sometimes followed by an abbreviation of the dialect in which the example is attested. If there is no such indication, both verb stems have been attested in Maasina. The following similar looking verb forms are possibly also examples of this final geminate extension.

jaɓɓ-aade	'to welcome'	**jaɓ-ude**	'to accept, to receive'
hedd-ude	'to be left, to remain'	**heed-ude**	'to be located, to belong'
ɓill-ude	'to press, push, oppress'	**ɓil-de**	'to hang, suspend'
dabb-ude	'to pass the cold season'	**daw-de**	'to travel'
waɲɲ-eede	'to be hateful'	**waɲ-eede**	'to be hated'
hecc-ude	'to be fresh'	**hes-, heydude**	'new, to be new'
tapp-ude	'to castrate; beat'	**taf-ude**	'to forge'
dejj-ude	'to be silent'	**deʔ-**	'stop, cease'(Z)
dupp-ude	'to burn, roast'	**duf-**	'crush' (Z:FJ)
hamm-ude	'to worry, be concerned'	**haam-**	'wring, knead'(Z)
hepp-ude	'to be impatient, irritate o.s.'	**heef-**	'pluck, scratch' (Z)

sadf-ude	'to be poor'	sadf-	'be rare, lack' (Z)
wecc-ude	'to change'	wes-	'winnow, sive, shift'
wann-ude	'to calve'	wan-, waan-	'foal' (Z)
jabb-ude	'to put millet grains in earth'	jaw-	'come out of a hole' (Z:FJ)
tepp-ude	'to throw (shuttle between warp threads)'	tef-	'intervene' (Z)

The verb **sadfdude** 'to be poor' could be paraphrased as "to be in an intense state of lacking things", derived from the verb stem **sadf-** 'lack'. The verb stem **sadf-** 'lack' expresses the lack of one particular entity at one particular time, whereas **sadfdude** 'to be poor' expresses a more intense state of lacking basic things. Sometimes the intensive extension changes the argument structure of the verb stem, and it can also have an additional causative meaning. The causative meaning is only found in a few deverbal derivations with this extension. The verb **heddude** 'to remain, to be left' could be paraphrased as "to cause to be located (in the same place)" derived from the verb **heedude** 'to be located, to belong'. The verb **waɲeede** 'to be hated' seems to express a state where something or someone is hated because of a particular dislike by someone else. When the passive verb with the intensive extension **waɲɲeede** 'to be hateful' is used, the hatefulness seems to be an inherent, more intense feature of the hated subject.

There are also a number of verb stems with a geminate consonant that are derived from a noun stem ending in a single consonant. The denominal derivations with the intensive extension are listed below.

niɓɓ-ude	'to be dark'	nim-re / niɓ-ɛ	'darkness'
ɲall-ude	'to pass the day'	ɲal-aaⁿde	'day'
sudd-ude	'to cover'	suud-u	'house, shelter'
wujj-ude	'to steal'	ⁿguy-ka	'theft'
dojj-ude	'to cough'	doy-ru	'cough'

The denominal derivation does not especially show any kind of meaning that is common for a reduplicated verb form, such as a repetitive or an intensive meaning. In the verbs **wujjude** 'to steal' and **dojjude** 'to cough' some kind of causative, or agentive meaning seems present in the extension. The verb **suddude** 'to cover' can be paraphrased as "to provide a shelter". The verb stem **sudd-** 'to cover' occurs also in the noun **suddamaare** 'a blanket which covers a person when sleeping'.

The treatment of these verbs with a single and geminate stem final consonant as having only a coincidental similarity in shape and meaning is theoretically possible. However, there are too many forms where the meaning of the two verb stems show a resemblance in form and meaning to reject the existence of this extension formed by gemination of the stem final consonant. It is not simply a reduced form of verb stem reduplication. The general meaning of this extension seems hard to grasp, but it seems to add an intensive, a more durative and sometimes a causative meaning to the verb roots.

5.3.5 EXHAUSTIVE *l

Gaden (1913:66) describes the extension -l- as the addition of a nuance of intensity added to the verb stem. Gaden gives the following examples:

awlude	'to turn upside down, move, touch, affect'	**awde**	'to seek what is hidden'
momlude	'to rub energetically with open hand'	**moomde**	'to rub with open hand'
heblaade	'to be ready to leave immediately' (at an undetermined moment)'	**heɓaade**	'to be prepared to leave

Klingenheben (1963:214) calls the same extension the intensive ("intensiv"). He gives the following additional examples.

yaal-	'visit, attend, pass'	**yah-**	'go, walk'
ɲaml-	'borrow'	**ɲam-aa^{n}de / ɲam-aale**	'debt'

The hypothesis is that the following examples in Maasina also contain this extension.

see-l-ude	'to cut leather into strings, tear up'	**seek-ude**	'to cut leather'
ceel-ol / ceeli	'leather string'		
way-l-ude	'to change, transform'	**way-de**	'to resemble'
yarr-aade < *yar-l-	'to tolerate, accept'	**yarde**	'to drink'
saw-l-ude	'to be destroyed by insects'		
ɓoy-l-ude, ɓoydude	'to twist (arm, rope)'		
dew-l-ude	'to marry'	**rew-de**	'to obey, follow'
dew-l-eede	'to get married'		
dew-gal / dew-l-e	'marriage'		
ɲam-l-aade, ɲalmaade	'to lend, borrow, to be in debt'	**ɲaam-ude**	'to eat'
ɲam-aa^{n}de / ɲamaale	'debt' (lit: what has been eaten)		

The following figure gives a tentative formula for the exhaustive extension.

V --> V + l
      |
"V totally, exhaustively, until finished"

The appropriateness of the formula for the exhaustive extension is obvious from an example such as **seelude** 'to tear up, to cut into (leather) straps' which is the cutting of leather until it is finished, derived from the verb **seekude** 'to tear, to cut (leather)'. The root final consonant [k] has been dropped because the sequence *kl is not permitted. The more sonorant [l] cannot follow the less sonorant [k] in the underlying form *seek-l-ude.

The verb **yarraade** 'to tolerate' has a cognate form **yarlaade** in Fuuta Jallon (Zoubko 1980:532). The sequence *rl becomes *rr in Maasina. The paraphrase "to drink until finished" describes **yarraade** 'tolerate' metaphorically as the taking in of both the good and bad aspects of s.o. or sth., which is basically the concept of tolerance, not only the

acceptance of the good side which is easy, but ultimately also the acceptance of the bad sides.

In a verb such as **dewlude** 'to marry' the exhaustive extension is less clear, it could be derived from the verb **rewde** 'to obey'. Possibly the extended verb alludes to the total obedience, following and respecting of cultural customs that have to be performed by the man in the procedures leading to marriage. The same morpheme -l- appears in the plural form of the noun **dewgal/dewle** 'marriage'. This word refers to the matrimonial union, the marital bond, when all the obligations have been completed, and the marriage is finally a fact.

The consumption of money is a metaphor that is more often used to denote the concept of borrowing in West Africa. The exact role of the exhaustive meaning in the derivation from **ɲaam^{n}de** 'to eat' to **ɲamlaade**, **ɲalmaade** 'to borrow' is less clear. But the hypothesis remains that stems ending in two consonants, of which one is an -l- are likely to be formed with the exhaustive extension. Gaden (1913:12) already stated that most roots in Fulfulde are of the form CVC (or CVVC). The majority of the roots with a CVCC form have to be considered as CVC roots that combine with an ancient derivational element. This may be what has happened, but this is sometimes difficult to prove because the derivational history may be lost.

5.3.6 BRUSQUE *ɓ

Another unproductive and rare ancient derivational element is the extension with the form -ɓ-. Gaden (1913:66) gives the following examples, and he states that this element adds an idea of brusque violence.

hul-ɓ-in-^{n}de	'to frighten'	**hul-de**	'to fear'
mar-ɓ-aade	'to throw oneself with force on'	**mar-de**	'to keep and raise'

Klingenheben (1963:214) says that the extension indicates the sudden occurrence of an event. His examples are given below.

hul-ɓ-in-	'frighten s.o. suddenly'	**hul-**	'fear'
hol-ɓ-	'rustle (of a new cloth)'	**kol-t-al**	'garment, dress'

A tentative formula for the brusque extension is given below. The action of the verb is performed brusquely, i.e. in a sudden manner, and often with force.

V --> V + BRU (ɓ)
       |
"V brusquely (suddenly and with force)"

The following examples of verb stems with the brusque extension are found in Maasina.

hol-ɓ-ude	'to make a sound, cry for help'	**hool-**	'make noise' (Z:A)
hul-ɓ-in^{n}de	'to frighten'	**hul-de**	'to fear'
yaa-ɓ-ude	'to tread, to step'	**yaa-de**	'to go, to walk'

The translation equivalent of the verb **holɓude** given in Maasina by the consultants was 'to make a sound'. The translation 'to cry for help' found in Zoubko (1980:216) confirms even more the meaning of this extension. The verb **holɓude** 'make a sound' is derived from the verb stem **hɔɔl-** 'to make noise' which does not occur in Maasina, but it does occur in Aadamaawa (Zoubko 1980:243).

The verb **hulɓinⁿde** 'to frighten' also combines with the causative extension. Further research should verify whether the idea of brusqueness is implied by this verb. Of course frightening is much more successful if done suddenly and forcefully, so the brusque meaning of this extension is probable.

The verb **yaaɓude** 'to tread, step' seems to put more emphasis on the forcefulness of the action, forcefully putting down one's foot. However, the unproductiveness of the brusque extension makes it difficult to find many examples on which the hypothesis of its meaning can be tested.

5.3.7 PARTITIVE *is

Klingenheben (1963:214) describes the extension -s- as denominal. He has only one example, given below, and does not specify the meaning of this extension further.

new-s- 'be fat' **new-ee-** 'fat' (adjective grade B)

Mohamadou (1985:84) describes the meaning of the extension as the addition of the idea that the action of the verb is realized only partially. The adverbs he uses to describe this meaning are 'a little, a bit, almost' ["peu, quelque peu, quasi, presque"]. He found the following examples in Aadamaawa. These are followed by a tentative formula for the partitive extension.

ɲaw-s-a	'be continuously a little bit ill'	ɲaw-a	'be ill'
hee-s-a	'approach'	hej-a	'reach a fixed limit'
mar-s-a	'have sth. as (last) resort; boast, brag'	mar-a	'possess, have'
hor-s-a	'hollow, deepen (wells, recipients)'	hor-oo	'remain; dry up (of wells)'

V --> V + PART (s)
  |
"V a little"

In the data of Maasina the following examples are formed with the partitive extension.

tam-s-ude	'to take in arms and hold tight'	tam-ude	'to hold in a closed hand'
ɓur-s-ude	'to remove seeds from cotton'	ɓur-de	'to surpass, be worth more'
fell-is-idde	'to decide'	fell-	'assure, convince' (Z)
her-s-ude	'to be ashamed (about sth.)'	her-a	'be solid' (Z)
hɔl-s-ere	'a hoof'	hɔɔl-	'make noise' (Z:A)
ŋom-s-ude	'to touch s.o. softly to draw attention'	ŋom-in-oo	'sit on one's heels with arms crossed on knees' (Z)

Some of the above examples are more convincing than others. The verb **fellisidde** 'to decide' combines with **-idde**, the infinitive form that is typical for verbs with an extension of the form **-iC-**. It can be paraphrased as "convincing oneself a little", which is necessary for a decision. The word **hɔl-s-ere** 'a hoof' is possibly derived from the verb stem *__hɔls-__ 'make a little bit of noise'. The semantics of the extension seems possible in a verb like **ŋom-s-ude** 'to touch someone softly to draw attention'. The stem *__ŋɔm__ that should have a meaning like 'touch' is found in combination with the causative extension **-in-** and the middle voice in the verb stem **ŋom-in-oo** 'sit on one's heels with arms crossed on knees' (Zoubko 1980:382) that can be paraphrased as "make one touch oneself".

5.3.8 RESULTATIVE *i^{n}d

Gaden (1913:65), describing the dialect of Fuuta Tooro, suggests that the extension with the form -^{n}d- is an allomorph of the comitative extension -d-. Gaden says it expresses the same meaning, i.e. an idea of association between the subjects that can occur in relation of the meaning of the verb. The examples provided by Gaden are given below.

fon^{n}dude	'to equal, compare to'	**fot-**	'be equal to' (< *fot^{n}dude)
saw^{n}daade	'to be parallel with'	**saaw-**	'pack'
hir^{n}dude	'to travel in the evening'	**hiir-**	'be evening, pass the evening'

Gaden admits that the meaning of the extension is not always very obvious. The present meaning of a lexicalized verb stem with an unproductive extension can be far from the original meaning of the verb root from which it is derived, because of semantic shift. This can obscure the discovery of the correct meaning of this extension.

Klingenheben (1963:204) also expresses some reservation about the meaning of the extension -^{n}d- that it is a bit obscure and also that the number of examples is rather small. He attributes a resultative meaning to the extension. His examples are given below.

tam^{n}d-	'close the hand, form with hand'	**tam-**	'hold in hand'
laar^{n}d-	'look into the eyes, test, investigate'	**laar-**	'look'
tefi^{n}d-	'study, investigate'	**tef-**	'ask for sth.'
heɓi^{n}d-	'get, receive; make/be possible; torment'	**heɓ-**	'get; bump into sth.'
heri^{n}d-	'attract someone's attention, call with hmm'	**her-**	'cackle, gabble'
ɲaw^{n}d-	'treat, cure, make healthy again'	**ɲaw-**	'be ill'
huuɓi^{n}d-	'overrun, place around'	**huuɓ-**	'enclose, cover, be abundant'
ʔom^{n}d-	'cover, close'	**ʔomt-**	'open, uncover'
ʔom^{n}d- dow	'destroy'		
ʔom^{n}duki	'hidden meaning, ambiguity'		
yeri^{n}d-	'equip, prepare'		
mel²i^{n}d-,			
melɟi^{n}d-	'put out one's tongue'		
hoo^{n}d-	'be a gentleman'	**koohoho / hoohoɓɓe**	'lord, gentleman, leader'

Mohamadou (1985:78-83) puts forward the hypothesis that the extension -^{n}d- is a combination of the causative extension -n- and the comitative extension -d-. He gives the following examples:

laarndugo	'to predict'	**laar-**	'see'
foondugo	'to compare, measure'	**fot-**	'be equal'
ɲawndugo	'to treat, cure, heal'	**ɲaw-**	'be ill'
faand-	'approach'	**fa$^?$-**	'go in direction'
yimnd-	'sing praise'	**yim-**	'sing'
wamnd-	'make a baby dance'	**wam-**	'dance'

Mohamadou (1985:78) suggests that the causative/comitative extension ["dérivatif factitif associatif"] adds the idea of causing the association between either the subject or the object and the verb, or the idea of causing the finishing of the action of the verb. The latter idea seems very different from the first. Although some examples probably combine the causative and the associative, the latter meaning is too different and will therefore be considered as a separate extension. The verb stem **wamnd-** is rejected here as an example of the -^{n}d- extension, firstly because there is no phonetic difference possible between a sequence *nd and n^{n}d. The consonant [d] will automatically become prenasalized when it follows a nasal consonant. Secondly, the verb stem **wamnd-** 'dance with; make (a baby) dance' could very well be from the verb stem **wam-** 'dance' with the comitative extension -d-, since a baby only dances in the company of an older person who moves the baby as if it were dancing.

Another reason why the extension -^{n}d- cannot be the combination of the causative and the comitative extension is the fact that when two extensions combine, the second extension has a full -VC- form synchronically. A tentative formula for the resultative extension is given below.

V --> V + RES (^{n}d)
|
"achieve V, achieve goal of V"

The verb **dan^{n}dude** 'to save' can be paraphrased as "to achieve escaping misfortune". The verb **han^{n}dude** can be paraphrased as "to achieve the goal of denying sth." These and some more examples found in Maasina are given below.

loo-^{n}d-ude	'to wash (clothes)'	**loot-ude**	'to wash'
ɲaw-^{n}d-ude	'to make someone invulnerable'	**ɲaw-de**	'to be ill'
riw-^{n}d-ude	'to load an animal'	**rif-t-**	'to unpack, stop a caravan' (Z)
seen-^{n}d-ude	'to separate, make a distinction'	**seed-ude**	'to leave, divorce'
fon-^{n}d-ude	'to make equal, divide equally'	**fot-ude**	'to be equal'
han-^{n}d-ude	'to prevent, obstruct'	**hadʼ-ude**	'to deny, refuse, forbid'
han-^{n}d-aade	'to restraint oneself, hold back'		

roo-^{n}d-uɗe	'to put a load on s.o.'s head'	**roo-t-**	'unload, take s.o.'s load' (Z)
rɔɔ-^{n}d-aaɗe	'to carry on the head'		
dan-^{n}d-uɗe	'to save s.o.'	**daɗ-uɗe**	'to be first in competition, to escape misfortune'

Some verbs ending in two consonants, with a final consonant [^{n}d] could also be stems combining with the resultative extension, because any root of the form CVCC is suspicious. The following examples are verbs with suspicious CVCC root forms.

ren-^{n}d-uɗe	'to fight'
sun-^{n}d-uɗe	'to get used to bitter taste by eating bitter leaves'
gan-^{n}d-aaɗe	'to be directed towards, go in the direction of'

5.3.9 RECIPROCAL *o^{n}dir

The reciprocal extension has only the form -o^{n}dir- in Maasina. In other Fulfulde dialects the forms of this extension are different. The forms are -indir- and -ootir- in Gombe (Arnott 1970a:357-360), where the latter form occurs especially in combination with middle voice verbs. In Noŋaare (De Wolf 1987:61) the form of the reciprocal extension is -odir-, in combination with reduplicated verbs the forms -itir- and -otir- occur. In Aadamaawa the form of the reciprocal extension is -indir- (Mohamadou 1985:83), or more precisely -i^{n}dir- (Klingenheben 1963:211). Mohamadou (1985:99) also mentions the form -ootir- that is used in middle voice verbs. The following examples of verbs formed with the reciprocal extension are found in Maasina.

jokk-o^{n}dir-de	'to follow one another'	**jɔkk-**	'follow'
woɗɗ-o^{n}dir-de	'to be far away from each other'	**wɔɗɗ-**	'be far away'
yiɗ-o^{n}dir-de	'to love each other'	**yiɗ-**	'love'

The formula for the formation of verb stems with the reciprocal extension is given below.

V --> V + REC (o^{n}dir)
        |
    "V each other"

The reciprocal extension -o^{n}dir- does not combine with other extensions. It is possible that the reciprocal extension itself contains three extensions in a fixed combination. Possibly the reciprocal extension is a combination of the causative -n-, the comitative -d-, and the circumstantial -ir-. The vowel [o] could be a trace of the middle voice indicating a reflexive meaning. (The middle voice marker is not considered to be an extension.) The meaning of these markers combined could give a reciprocal meaning.

middle voice [ɔ]:	action of verb affects the subject, e.g. S=patient + agent
causative [n]:	cause
comitative [d]:	together
circumstantial [ir]:	how, with

The middle voice expresses the fact that the (plural) subject is affected by the action of the verb. The causative extension expresses the fact that the action of the verb is made to affect another agent (the co-subject). The comitative extension expresses the fact that the (plural) subjects perform the action of the verb together. The circumstantial extension expresses how the action is done (in a manner where the plural subjects together affect each other).

5.3.10 SIMULATIVE *iŋkin

The simulative extension -iŋkin- is also mutually exclusive with most verbal extensions. It can be preceded by the reversive extension -t-. Possibly the form -iŋkin- is derived from two extensions. The causative extension -in- might be one of them. The extension with the form -kin- only occurs in the simulative extension. In some dialects it is only this form, -kin-, that marks the simulative extension.

The simulative extension expresses the idea of someone pretending to perform the action or to be in the state expressed in the verb root. The formula for the verb stems combining with the simulative extension is given below.

V --> V + SIM (iŋkin)
|
"pretend to V, cause the impression of V-ing"

There are not many examples of verb stems that combine with the simulative extension, but the meaning of the derived simulative verb stem is very transparent. Simulative verb stems always combine with the middle voice, this is because the subject affects itself, it both performs and undergoes the pretending action. The following examples of simulative verb stems occur in Maasina.

ɲaamiŋkinaade	'to pretend to be eating'	ɲaamude	'to eat'
ɲawiŋkinaade	'to pretend to be ill'	ɲawde	'to be ill'
waawiŋkinaade	'to pretend to be capable'	waawde	'to be able'
ɗaaniŋkinaade,			
ɗaantiŋkinaade	'to pretend to be asleep'	ɗaanaade	'to sleep'
ɓurtiŋkinaade	'to be haughty, arrogant, to pretend to be superior'	ɓurde	'to surpass'

The simulative extension in other dialects has different forms. The form in Aadamaawa is -kikin- according to Klingenheben (1963:210). Mohamadou (1985:100) describes the forms -kin- or -ikin- for southern Aadamaawa. Sylla (1982:117) also gives the form -kin- for the simulative extension in Fuuta Tooro. In Gombe the form is -kin- or -ikin- (Arnott 1970a:357). Like in Maasina, the Gombe simulative verb stems only combine with the middle voice inflections.

5.3.11 REVERSIVE *it

The extension with the form -it- or -t- is not always treated as one verbal extension. Some authors enumerate a number of homonymous extensions with this form. Arnott (1970a:334) distinguishes five different extensions that are morphologically identical. De Wolf

(1985b:209) describes the same five homonymous extensions for Noɲaare, a Fulfulde dialect spoken in Western Niger. The following homonymous extensions are distinguished by Arnott and De Wolf.

I	-t-	Reversive
I	-t-	Repetitive
III	-t-	Reflexive
IV	-t-	Retaliative
V	-t-	Intensive

Gnalibouly (1990) distinguishes two extensions with this form that are homonyms in Maasina, one reflexive extension -t- and one polysemous extension -t- with the repetitive, reversive, and intensive meaning.

Mohamadou (1985, 1988) lists six meanings for the reversive extensions in Aadamaawa. Some of these meanings are also found in the work of other authors, like repetition, inversion, and intensification. Others are distinct, like the meanings "in detail", "comparative, increasing", and "change of state". One of his examples **soppit-** 'cut into pieces' seems to involve a combination of the repetitive and intensive meaning rather than a separate meaning "in detail" for the reversive extension -it-. Equally the verb stems **hoy-** 'be easy' and **hoyt-** 'be more easy' seem to be examples of the intensive meaning and not a separate "comparative, increasing" meaning for the reversive. The meaning indicating "a change of state/become" in **ɓalwi** 'be black' and **ɓalit-** 'be blackened' is not expressed by the extension -it-. The verb **ɓalw-** actually also means 'to become black'. It is only in combination with the stative conjugation that the verb means 'to be black'. The meaning of **ɓalit-** is more likely to imply the fact that something is made black again, as it was in a previous state. Of course the last hypothesis has to be checked against examples of sentences where the verb **ɓalit-** is used in Aadamaawa.

Klingenheben (1963:187) only lists one verbal extension with the form -t-, to which he ascribes four different meanings, i.e. an intensive, repetitive, reversive, and reflexive meaning.

In this study the extension -it- will be treated as one polysemous reversive extension. The derived verb stem can have different interpretations, such as the reversive, repetitive, and intensive meanings as represented in the formula below.

V --> V + REV (*it)
            |
"V back"
"undo V"
"V again, V for the second time"
"V repeatedly"
"V intensively"

The paraphrases given are all possible interpretations for the phrase "V back", representing one meaning that gets contextualized. The different interpretations of the meaning expressed by the reversive extension are linked. The best translation equivalent of the basic

meaning of the extension -**it**- seems to be the adverb "back". From this basic paraphrase of the reversive extension "V back" the polysemy of the extension can be easily demonstrated. The following list gives a schematic linking of the different interpretations of the reversive meaning.

reversive, separative: V back, undo V
repetitive, iterative: V back, V again, V a second time, V repeatedly
intensive: V back, V repeatedly, V intensively

The paraphrase "V back" can be interpreted in several ways. It can be interpreted as the undoing of an action, whereby the process expressed in the verb root is turned back. This is what is called the "reversive" in the literature. Some examples of the reversive extension given by Arnott (1970a:340-343) are the following:

war-t-a	'come back'	**war-a**	'come'
meet-it-o	'take off a turban'	**meet-o**	'put on'
taar-t-a	'unwind'	**taar-a**	'wind'
ʔom-t-a	'open, uncover'	**ʔommb-a**	'close, cover'
seŋ-t-a	'un-haft (hoe, axe)'	**seŋg-a**	'haft'
fiɓ-t-a	'untie'	**fiɓ-a**	'tie'
saɗ-(i)t-a	'be easier'	**saɗ-a**	'be difficult'

Undoing an action is a possible interpretation of the extension -**it**-. The verb stem with this extension always expresses the fact that two things are separated away from each other. This is the reason why Schadeberg (1982) proposes the term "separative" for this extension in his description of (proto-)Bantu. The action expressed by the verb stem **meetito**, the unwinding of a turban can be paraphrased as the "winding back" of a turban (reversive), it can also be paraphrased as the separation of the turban from the head (separative). The following examples of separative-reversive verb stems occur in Maasina.

soottude	'to sell'	**soodude**	'to buy'
ʔomtude	'to take away the lid'	**ʔommbude**	'to cover with lid'
ɓiltude	'to unhook, detach'	**ɓilde**	'to hang on hook'
fimtude	'to untie'	**fiɓude**	'to tie'
sentude	'to uncouple, de-link'	**seŋude**	'to couple, link'
duwtaade	'to loosen one's belt'	**duhaade**	'to fasten belt'
ɓɔɔrtaade	'to undress o.s.'	**ɓɔɔrnaade**	'to dress o.s.'
ʔudditidde	'to open'	**ʔuddude**	'to close'
sudditidde	'to remove cover, uncover'	**suddude**	'to cover'

When the extension -**it**- is interpreted as "to undo V" the derived verb stem expresses the converse or opposite action of the verb root without the extension, and two entities are taken away from each other. For example the verb **ʔom-t-ude** 'to open', a lid is removed from a bowl, this is the reverse from **ʔommbude** 'to cover, close' where the lid is put on the bowl; **ɓil-t-ude** 'to unhook' is the reverse of **ɓilde** 'to hang' where something is brought to

the hook; **soot-t-ude** 'to sell' is the reverse of the action expressed in **soodude** 'to buy';
duw-t-aade 'to loosen one's belt' is the opposite action from fastening one's belt,
ɓɔɔr-t-aade 'to undress oneself' describes the removal of clothes from the body.

The paraphrase "V back" can also be interpreted as "V again", this happens in what is
traditionally distinguished as the iterative or repetitive extension. The following examples
of the repetitive (iterative) are provided by Arnott (1970a:341).

mah-it-o	'rebuild'	**mah-a**	'build'
wii-t-a	'say again'	**wiʔ-a**	'say'
rem-t-o	'do a second hoeing'	**rem-a**	'hoe'

The verb **mahit-o** 'to build something again' implies that something has been destroyed or
damaged, and the building is put back as it was before. The relation between "V back" and
"V again" is also clear from the verb stem **wiit-** 'to say again' where something is repeated,
played back, like it had been said before.

From the reversive meaning "V back" to the repetitive meaning "V a second time" also
there is only a small step, as in the verb **remtude** 'to hoe a second time'. The following
verbs are examples showing a repetitive meaning expressed by the reversive extension in
Maasina

remtude	'to hoe a second time'	**remude**	'to hoe'
yimtude	'to sing for a second time'	**yimude**	'to sing'
samtude	'to be recovering (from illness)'	**samude**	'to improve'
yiitude	'to see again, find back'	**yiide**	'to see'
ɗaantaade	'to sleep again'	**ɗaanaade**	'to sleep'
saltaade	'to refuse again, what had been accepted before'	**salaade**	'to refuse'

The repetitive meaning of **samtude** can be found in the paraphrase "to improve again (after
illness)". Sometimes the repetition literally indicates a second time as in **remtude** 'to hoe,
to cultivate a second time'. It can also be interpreted as 'to hoe again' but it has got this
specific meaning in the agricultural setting of the Fulbe.

The retaliative meaning, which some authors give to the extension -it- follows from the
meaning of the verb to which it is attached, rather than from the extension itself. The
following words are Arnott's examples of the retaliative extension.

fii-t-o	'hit again, hit back'	**fiy-a**	'hit'
lat-it-a	'kick back'	**lat-a**	'kick'
jal-t-a	'laugh at in turn'	**jal-a**	'laugh at'

The above examples can simply be paraphrased as **fiita** "hit back", **latita** "kick back" and
jalta "laugh back".

The semantic interpretation of "V intensively" from "V back" has to be made via the
repetitive meaning "V again" of the extension -it-. The repetition of an action can imply a

stronger, more intense manifestation of the action or state expressed by the verb root. The following examples are reversive verb stems with an intensive meaning in Maasina.

ⁿdaartude	'to look for, search'	ⁿdaarde	'to look'
heltude	'to smash, shatter '	helde	'to break'
tewtude	'to search for'	tefude	'to look for'
ɓurtude	'to be superior, be better'	ɓurde	'to surpass'
foowtude, fowtude	'to rest'	foofaade	'to breathe'

The comparison of the verb **yoppude** 'to drop' in Maasina and **yooft-** 'drop' in Gombe shows an interesting difference in the use of extensions across dialects. Both verbs are derived from the verb stem **yoof-** 'release, leave, liberate, abandon (Zoubko 1980:543, Arnott 1970a:344). In Maasina the verb **yoppude** 'to drop' is formed with the intensive extension *ʔ causing a geminate final consonant. In Gombe the verb stem **yooft-** is formed with the reversive extension **-t-** that also expresses the intensive meaning. The intensive meaning can be expressed both with the more petrified intensive extension, and with the more productive reversive extension.

Arnott (1970a:342) and Klingenheben (1963:187) also list the reflexive meaning as one of the meanings of the extension(s) with the form **-t-/-it-**. This study rejects the reflexive as a possible meaning of the extension **-it-**. Arnott's examples of extended verb stems with a reflexive meaning do not have only the extension **-t-/-it-** added, they also involve a change in voice. The verb root from which the reflexive examples are derived are often in the active voice. The extended reflexive verb stems are in the middle voice. It is the middle voice that adds the reflexive meaning to the verb root, not the reversive extension. In the following list of verb stems, which Arnott gives as examples of the reflexive extension, the ending **-a** represents the active voice inflections, Arnott lists verb stems which combine with middle voice inflections with the ending **-o**.

ⁿdaar-t-o	'look at oneself'	ⁿdaar-a	'look at'
war-t-o	'kill oneself, commit suicide'	war-a	'kill'
jal-it-o	'laugh at oneself'	jal-a	'laugh'
wol-it-o	'talk to oneself, talk secretly'	wol-w-a	'speak, talk'
ʔug-it-o	'throw at in turn'	ʔug-o	'throw at'
yim-t-o	'sing to oneself'	yim-a	'sing'
jam-it-o	'ask oneself'	jam-a	'ask'
taj-it-o	'cut oneself'	taj-a	'cut'

A verb stem like **jalit-o** 'laugh at oneself' can also be compared with the reversive (according to Arnott "retaliative") active verb stem **jalt-** 'laugh back at'. The addition of the middle voice will change the meaning in "laugh back at oneself". The verb stem **wolit-o** combines with the reversive extension and the middle voice to form a meaning that can be paraphrased as "talk back at oneself". The reflexive meaning in all the so-called reflexive verb stems can clearly be attributed to the middle voice. The middle voice inflections are used when the subject is affected by the event expressed in the verb stem, and the subject can be both the agent and the patient of the action expressed in the verb stem.

5.3.12 CAUSATIVE *in

The causative extension expresses the idea that the subject causes the action or process that is expressed in the verb root. The semantic effect of the causative extension is represented in the following formula.

$$V \dashrightarrow \quad V + CAUS \text{ (in)}$$
$$|$$
$$\text{"cause V"}$$

The causative extension can have different forms in Maasina. The underlying form of the causative extension is *in. This form can be shortened to -n- after verb roots that end in a single consonant. When the sequence of the root final consonant followed by [n] is ill-formed, then either the extension will keep its form -in- or assimilation will occur resulting in a geminate nasal [nn]. There are a few causative verb stems where, in addition to the extension -in-, the stem final consonant is also geminated. The gemination of the root final consonant is thought to be the intensive extension that combines with the causative in a restricted number of causative verb stems, as in the following examples.

fammin-ⁿde	'to explain, make understand'	faam-ude	'to understand'
hebbin-ⁿde	'to fill'	heew-de	'to be much'
laɓɓin-ⁿde	'to make clean, purify'	laaɓ-ude	'to be clean'
ɲammin-ⁿde	'to feed, make s.o. eat'	ɲaam-ude	'to eat'
joʔʔin-ⁿde	'to put down, put on sth.'	jɔɔɗ-aade	'to sit'
ɗannin-ⁿde	'to put s.o. to sleep'	ɗaan-aade	'to sleep'

Klingenheben (1963:200) assumed that the root final consonant gemination is an old causative form, the same as found in the intensive extension described in section 5.3.4. The root final consonant gemination cannot be explained phonologically, since the same consonant can combine with the causative extension without gemination. Most productive causative verb stems are formed without verb root final consonant gemination.

yaaw-n-ude	'to hurry'	yaaw-de	'to be fast'
jam-n-ude	'to make accept, agree'	jaɓ-ude	'to accept, receive'
tiin-n-ude	'to make difficult'	tiiɗ-ude	'to be difficult'
doom-in-ⁿde	'to cause to wait'	doom-ude	'to wait'
bonn-u-de	'to destroy'	bon-ude	'to be bad'

The forms -in-/-n- are described in the literature as allomorphs. Their distribution is complex. There are environments where the choice is obvious, for example the form -in- occurs after stems ending in two consonants, the form -n- occurs after stems ending in a consonant that is [+continuant, +voiced] like {w, y, r, l}. The following examples show causative verb stems where the allomorph -n- occurs after [+continuant, +voice] consonants.

ɓur-n-ude	'to improve, ameliorate'	ɓur-de	'to surpass'
diw-n-ude	'to cause to fly; shake (illness)'	diw-de	'to fly'
juul-n-ude	'to lead in prayer'	juul-de	'to pray'
naaw-n-ude	'to hurt, make difficult'	naaw-de	'to ache'
sey-n-ude	'to make happy'	sey-aade	'to be happy'
wuur-n-ude	'to make live'	wuur-de	'to live'
yar-n-ude	'to make drink, water'	yar-de	'to drink'

A [-voice, +continuant] consonant cannot occur in syllable final positions, i.e. it cannot precede another consonant. There are two strategies to prevent such an ill-formed sequence. Consider first the following examples of verb roots ending in [-voice, +continuant]:

his-in-ⁿde	'to save'	his-ude	'to escape danger'
ⁿduus-in-ⁿde	'to live many years'	*ⁿduus-	
leew-n-ude	'to make wet'	leef-ude	'to be wet'
ɓey-n-ɛɛde	'to be born'	ɓey-ɗɔ	'mother with children'
ɓey-n-ude	'to give birth (humans)'	ɓes-ɗo	'person with children' (Z)

The first two examples above combine with the -VC- form of the extension -in-. In the last three examples the [-voice, +continuant] consonants {s, f} change to [+voice +continuant], thus becoming glides {w, y}. The combination with the form -in- seems more productive. The verb stem *ɓes- cannot be found as such in Maasina, it occurs always as ɓey-. Only dialectal comparison shows that the underlying root final consonant is (or was) [s]. A similar pattern can be found when the root final consonant is [-continuant]. A [-continuant] consonant cannot be found in syllable final position, i.e. it cannot occur before another consonant. Such an ill-formed sequence can be prevented by the occurrence of the vowel initial form -in- or by assimilation of the root final consonant to the form -n-. The final [-continuant] consonant in the following verb roots assimilates to the consonant -n- of the causative extension.

donn-ude	'to drive'	dog-ude	'to run'
funn-ude	'to make sprout'	fuɗ-ude	'to rise, sprout'
honn-ude	'to found, establish'	hoɗ-ude	'to settle'
juunn-ude	'to lengthen, extend'	juut-ude	'to be long'
seenn-ude	'to make or call as witness'	seed-ude	'to witness'
wann-ude	'to cause s.o. do sth.'	waɗ-ude	'to do'
luum-n-ude	'to cause to smell bad'	luuɓ-ude	'to smell bad'
ɓaan-ude	'to glue, put glue on'	ɓaat-ane	'a glued cardboard'
suunn-ude	'to tame a horse'	cuud-al	'a trot (of a horse)'

There are only a few verb roots ending in a single consonant that combine with the -VC-form of the causative extension. The following examples show verb roots ending in a single obstruent which combine with the -in- form.

wub-in^{n}de	'to steam'	wub-	'throw, lance'
laɓ-in^{n}de,			
lam-n-ude	'to cause to shave'	laɓude	'to shave'
wooɗ-in^{n}de,			
woonn-ude	'to make good, beautiful'	wooɗude	'to be good'
jiim-in-aade	'to be pensive, dreamy'	miijaade	'to think'

The causative verbs derived from the stem wɔɔɗ- 'be good, beautiful' and laɓ- 'shave' occur with both the -in- and the -n- form of the causative extension. The verb jiiminaade 'be pensive, dreamy' occurs as jimmin-oo with a geminate consonant [mm] in other dialects (Zoubko 1980:269). The verb is also exceptional because a verb miijaade 'think' with a similar meaning seems to point to the fact that the consonants have undergone a strange change of position.

The general impression is that the causative extension has the form -n- after roots ending in a single consonant, and it has the form -in- after verbal roots ending in two consonants. This distribution is disturbed only by a few exceptions, where the consonant could not precede the nasal [n]. For reasons that are not yet clear the root final consonant did not assimilate to the form -n-, but it combined with the form -in- of the causative extension. The following examples show that the causative extension has the form -in- without exception after verbal roots ending in two consonants.

ʔan^{n}d-in-^{n}de	'to inform, make known'	ʔan^{n}d-ude	'to know'
dejj-in-aade	'to keep silent, be silent'	dejj-ude	'to be silent'
darj-in-^{n}de	'to show respect, repute well'	darj-ude	'to be respected'
goll-in-^{n}de	'to cause to work'	goll-ude	'to work'
hors-in-^{n}de	'to love, cherish'	hors-ude	'to be cherished'
lamm-in-^{n}de	'to make salty/sour'	lamm-ude	'to be salty, sour'
majj-in-^{n}de	'to loose'	majj-ude	'to be lost'
mojj-in-^{n}de	'to make, fabricate'	mojj-ude	'to be good'
lugg-in-^{n}de	'to deepen'	lugg-ere	'a hole'
woɗɗ-in-^{n}de	'to make go further away, to cause progress'	woɗɗ-ude	'to be far away'

In view of the partial overlap with the causative meaning of the intensive extension, and the fixed number of verb stems that combine with both the intensive and the causative extension, it is necessary to conduct further research into the semantics of these two extensions.

5.3.13 COMITATIVE *id

The comitative extension expresses the idea that the subject is made up of more than one individual who perform the action or process expressed in the verb root together. The plurality of the action of the verb can also indicate that the action of the verb is performed on all objects of the verb. There is no need to distinguish subject and object roles, because the comitative meaning can apply to both the subjects and the objects of the verb. The

meanings of verb stems with the comitative extension are represented in the following formula.

$$V \rightarrow V + COM \, (*id)$$
$$|$$
$$\text{"V all, V together"}$$

Arnott (1970a:344-345) gives the first meaning the name associative, the second meaning he calls the comprehensive. Both extensions are treated as homonymous forms. De Wolf (1991) also distinguishes the associative and comprehensive extension. He defines the associative as the association of two or more agents or referents with the same verb. The comprehensive extension (De Wolf 1991:52) refers to "all" possible subjects when the verb root expresses a state or process. When the verb root is an action verb, the comprehensive meaning can refer to the subject or to the object (patient or goal), but not both simultaneously. In this study these two meanings are considered to be linked to the polysemous comitative extension *id. The allomorphs of the comitative in Maasina are -id- , -d- and -ɔ-d-, as shown in the following examples.

war-d-ude	'to come with s.o.'		**war-de**	'to come'
wonⁿd-ude	'to be, live together'		**wɔnⁿde**	'to be'
yimⁿd-ude	'to sing together'		**yimⁿde**	'to sing'
nel-d-ude	'to send sth. with s.o.'		**nel-de**	'to send'
yii-d-ude	'to have the same parents, be the same'	**yii-de**	'to see'
waal-d-ude	'to pass the night with s.o. or without having eaten'		**waal-de**	'to pass the night'
ʔar-d-aade	'to go in front, be first, lead'		**ʔar-an-ⁿde**	'first'
ʔanⁿd-id-idde	'to know all, come to know s.o.'		**ʔanⁿd-ude**	'to know'
far-id-aade	'to put oneself in danger'		**farati**	'danger'
sey-ɔ-d-aade	'to be happy together'		**sey-aade**	'to be happy'

The form -id- occurs when the stem ends in two consonants, like ʔanⁿdididde 'know all', which is also an example of the association of two or more objects with the verb stem. The form -ɔ-d- occurs in middle voice verbs like seyɔdaade 'be happy together', which is also an example of the association of two or more subjects with the verb stem. The form -ɔ-d- has the underlying form *id whereby the vowel assimilates to another underlying vowel *ɔ marking the middle voice.

The verb faridaade seems to be derived from a noun farati, this may explain why it does not combine with the form -ɔ-d- as other middle voice verbs do, and why it does not combine with the form -d- as other roots ending in a single consonant do. Perhaps the derivation is *farati-d-aade > *far(at)idaade > faridaade with haplology occurring because the sequence of three unstressed light syllables is not allowed.

The comitative extension is considered to be polysemous, it can add the expression of "all subjects together" (associative) or the expressions of "all objects together" (comprehensive).

There is a relation of homonymy between the comitative extension and the circumstantial extension. The underlying form of the circumstantial extension is *ir but after stems ending in [l] or [r] the circumstantial extension has the form -d- because of a head-strengthening rule (see section 4.5.1). The following examples show the homonymy between the allomorph -d- of the comitative extension and the allomorph -d- of the circumstantial extension.

ɓir-d-ude	'milk with' + 'milk all'	ɓir-de	'milk'
yar-d-ude	'drink with' + 'drink together with'	yar-de	'drink'
haal-d-ude	'speak with sth.' + 'speak with s.o.'	haal-de	'speak'

The circumstantial derivation adds an additional association with an instrument or with a manner. The similarity and difference in meaning between the comitative and circumstantial extensions with the form -d- could be interpreted as follows:

V + comitative: "V with another subject and/or with another object"
V + circumstantial: "V with another circumstance (instrument, manner)"

The comitative extensions -d-/-id- might historically be derived from the circumstantial extension -r-/-ir-. Synchronically the comitative and the circumstantial extension have to be distinguished, as shown in the following two sentences.

hoɗum narrataa ?	ɓe nan^{n}dii jimol
what hear-CIRC-R.INCOMPL-you (SPro)	they hear-COM-COMPL song
With what do you hear? [answer: with your ear]	Together they heard the song.

The verb stem nan^{n}dude < *nan+*d+*ude 'hear together' which contains the comitative extension has a form that is different the verb narrude < *nan+*r+*ude 'to hear with sth.' combining with the circumstantial extension. So the circumstantial extension can have a clearly distinctive form from the comitative extension, even though the circumstantial can (through a phonological rule of onset strengthening) sometimes have the same form -d- as the comitative extension -d-.

5.3.14 CIRCUMSTANTIAL *ir

The circumstantial extension introduces arguments into the frame of a verb stem which expresses the manner in which the action of the verb is performed, or the instrument with which the action of the verb is performed. The meaning of the circumstantial extension is represented in the following formula.

V --> V + *ir
        |
"V with (instrument/manner)"

Klingenheben describes the extension -ir- as polysemous, its basic meaning being "modal". Mohamadou (1985:96) describes a polysemous extension -ir- as "circumstantial", its

polysemy is caused by the different arguments that it can link to the meaning expressed in the verb root: an instrument, a manner, a place, a time. The assumption of Arnott (1970a:348-353) and De Wolf (1991) that the modal and locative extension are homonyms is rejected here. Following Klingenheben and Mohamadou the assumption is that there is only one circumstantial extension, the context indicates whether manner, time, or place is the additional argument related to the verb. The allomorphs of the circumstantial extension are -ir-, -r-, -d-, and -ɔ-r-. The form -ir- occurs after the following verb roots.

fij-ir-de	'to play with; commit adultery'	fij-ude	'to play'
jaɓ-ir-de	'to accept with, because'	jaɓ-ude	'to accept'
jaŋⁿg-ir-de	'to learn with'	jaŋⁿg-ude	'to learn'
wart-ir-de	'to bring back'	war-de	'to come back'
ʔinⁿd-ir-eede	'to be baptized with (a name)'	ʔinⁿde	'a name'

The form -ir- occurs after verbal roots ending in two consonants and after single consonants that are more sonorant than -r-. The form -r- occurs after verbal roots ending in a single consonant that is less sonorant than [r], or that can assimilate to [r] if it is more sonorant. The form -r- occurs in the following circumstantial verb stems.

waa-r-ude	'to be equal to, to be like'	waa-de	'to resemble'
woow-r-ude	'to be used to'	wɔɔw-de	'to be used'
fii-r-ude	'to hit with'	fii-de	'to hit'
rem-r-ude	'to cultivate with'	rem-ude	'to cultivate'
narr-ude	'to hear with'	nan-ude	'to hear'
naarr-ude	'to enter (of water)'	naat-ude	'to enter'
warr-ude	'to do because of'	waɗ-ude	'to do'
tew-r-ude	'to look for by s.o., request s.o.'	tef-ude	'to look for'

The form -d- occurs after verb roots ending in a single consonant [r] or [l], as is shown in the following circumstantial verb stems.

ɓir-d-ude	'to milk with' (also 'milk all')	ɓir-de	'to milk'
yar-d-ude	'to drink with' (also 'drink together with')	yar-de	'to drink'
haal-d-ude	'to speak with sth.' (also 'speak with s.o.')	haal-de	'to speak'

The following sentence shows the syntactic and semantic similarity of the form -d- in **wuldi** 'be hot with' (< **wul-de** 'be hot') and -r- in **keewri** 'be many with' (< **heew-de** 'be many').

kaa	**no**	**naange**	**wul-d-i**		**e**	**no**	**duluuji**	**keew-r-i,**
But	how	sun	be hot-CIRC-R.COMPL	and	how	winds	be many-CIRC-R.COMPL

mo	**yoor-aa**	**yonki**	**fuu**
he	dry-NEG	soul	at all

'But however hot the sun was and however many the whirlwinds were, he wouldn't dry his soul at all.' (Tioulenta 1980a:26)

The adverb of manner **nɔ** 'how' requires the circumstantial extension **-r-** on the verb, which appears as the allomorph **-d-** after the stem **wul-**.

Historically the form **-ɔ-r-** has the underlying form **-ir-** which assimilated its unstressed short vowel to a following underlying vowel [ɔ] of the middle voice. The middle voice marker only occurs fused with other morphemes. The hypothesis is that the form **-ɔ-r-** is a merged form of both the middle voice and the circumstantial extension. This gives a more complicated semantic derivation than simply the addition of an instrumental or modal argument, as can be seen in the following examples of circumstantial verb stems with the **-ɔ-r-** form.

taj-ɔ-r-de	'to be sure of'	**taj-ude**	'to cut'
jatt-ɔ-r-de	'to be obliged to accept'	**jatt-ude**	'to take back'

The circumstantial extension occurs often in the formation of nouns in Grade C. The circumstantial extension in these nouns indicates the manner in which the place or room is used, i.e. it indicates the purpose of the place or room. This analysis disputes the attribution of a locative meaning to the circumstantial extension. The long lists of nouns given by Arnott (1970:353) and De Wolf (1991:62-63) are meant to demonstrate the locative meaning of the circumstantial extension. The following examples are nouns with the circumstantial extension in nouns in Gombe.

dur-d-ude	'grazing pasture' ("place used for grazing")	**dur-de**	'to graze'
juul-ir-de	'mosque' ("place used for praying")	**juul-de**	'to pray'
wam-ir-du	'dancing room' ("room used for dancing")	**wam-ude**	'to dance'
wam-ir-de	'dancing place' ("place used for dancing")		

However, the locative meaning is expressed by the class markers, not by the circumstantial extension **-ir-**. The meaning "place, place outside" is associated with the NDE class. The meaning "room, place inside" is associated with the NDU class. This is also evident from the comparison of the words **wamirdu** 'dancing room' and **wamirde** 'dancing place'. The meaning of the circumstantial extension in grade C nouns is further discussed in section 6.1.4.

5.3.15 ALTRI-LOCATIVE *ɔy

The extension **-ɔy-** should give little reason for controversy. But different descriptions of its name and the precise indication of its meaning are found in the literature. Gaden (1913:62) described the meaning of the extension **-oy-** as indicating a change of place. Klingenheben (1963:210) called a stem with the extension **-oy-** an altri-locative stem ("altrilokale Stamm"). He describes the action of such a verb as taking place in another place, different from where subject is located. Arnott (1970a:356) calls the **-oy-** extension the distantive extension. He states that the distantive indicates that the action takes place at a distance, or originates from a distance, paraphrased with the adverb "yonder". Mohamadou (1985:93) also calls **-oy-** the distantive extension, but he describes its meaning differently. For him, it indicates that the action of the verb root is realized with movement.

The meaning described by Klingenheben implies all other meanings. If the action is performed in another place, it implies a distance between the subject and the place of action. If the action is performed in another place, it implies movement to that other place. The term altri-locative will be used, the meaning of this extension is represented in the following formula.

$$V \longrightarrow V + *_{\textbf{ͻy}}$$
$$|$$

"V elsewhere, go V elsewhere"

The following examples of altri-locative verb stems occur in Maasina.

dur-ͻy-dε	'to herd elsewhere'	**dur-dε**	'to herd'
sͻm-ͻy-aadε	'to do daily shopping'	**sͻm-aadε**	'to purchase'
ɓͻͻrn-ͻy-aadε	'to go dress oneself (elsewhere)'	**ɓͻͻrn-aadε**	'to dress oneself'
luum-ͻy-aadε	'to go to the market '	**luum-ͻ**	'a market'

In Maasina the altri-locative extension can have two forms -ͻy- or -ͻw- which seem to be regionally distributed.

wart-ͻy-ͻͻrε, wart-ͻw-ͻͻrε	'after next' (centre, Gimballa)
wart-ͻw-ͻͻrε	'after next' (Duwansa)

The form -ͻw- occurs more in the periphery, the form -ͻy- occurs in the centre of Maasina.

5.3.16 DATIVE *an

The dative extension is used frequently and productively to refer to the beneficiary. The extension has different names in the literature. Klingenheben (1963:209) calls it applicative, Noye (1974:34, 185) calls it destinative, Arnott (1970a:353) calls it dative, Mohamadou (1985:94) calls it attributive, Gnalibouly (1990:67) calls it the addressative. There are no considerable differences in the descriptions of its meaning. The meaning of the dative extension is represented in the following formula.

$$V \longrightarrow V + DAT\ (an)$$
$$|$$

"V for (someone), on behalf of (someone), to (someone)"

The following list of examples of dative verb stems can be supplemented with numerous other verbs that can combine with an indirect object.

fͻd-an^{n}dε	'to promise (s.o.)'	**fod-udε**	'to promise'
haal-an^{n}dε	'to say to (s.o.)'	**haal-dε**	'to speak'
ɲall-an^{n}dε	'to pass the day for (s.o.)'	**ɲall-udε**	'to pass the day'
heed-an^{n}dε	'to protect (s.o.) against, to be in favour of (s.o.)'	**heed-udε**	'to be located'

Sometimes the difference in meaning is difficult to establish, especially if the verb root can also combine with an indirect object without the dative extension. The following two sentences contain the verb stem **wiy-** 'say' with and without the dative extension -**an-** followed by an indirect and direct object.

> **suka pullɔ ʔɔɔ wiy-an-i   mɔ ʔinⁿdɛ ⁿgenⁿdi-ʔ**
>
> youth Pullo the say-DAT-R.COMPL him name   village-FG
>
> 'The young Pullo told him the name of the village.' (Tioulenta 1980a:25)

> **ʔaamadu wii   mɔ sɔ weet-ii   fati mɔ yah-a nokku**
>
> Aamadu   say-COMPL him if be morning+COMPL not he go-SUB place
>
> 'Aamadu told him not to go anywhere in the morning.' (Tioulenta 1980a:30)

The verb **wiide** 'to say' can combine with an indirect object without the dative extension. The impression is that the verb form **wiyan-** 'say to' with the dative is used in combination with an object (an utterance) that is considered to be useful information for someone. The form **wii-** 'say' without the dative is especially used when the object (utterance) involved is some kind of order (using the subjunctive or imperative). This is a tendency, not a strict rule.

5.3.17 EXTENSIONS IN COMBINATION

In Maasina examples of verb forms combining with up to two extensions have been found. De Wolf (1985) describes a number of verbal forms that combine four extensions in Noŋaare Fulfulde. The following sentence in the Fulfulde of Noŋaare contains a verb stem with four extensions.

> **ʔo jam-t-id-ir-an-ii   mo dewte makko fuu ʔe baayimaare**
>
> he ask-REV-COM-CIRC-DAT-COMPL him books his   all with insolence
>
> 'He begged him with insolence to have all his books.' (De Wolf 1985b:212)

There is a certain order in the sequence of extensions. Some extensions, especially the rare ones, can only occur directly following the verb root. The more productive extensions have a canonical order. The (probably complex) extension -oⁿdir- and -iŋkin- usually do not combine with other extensions. There are a few examples of the reversive extension -t- preceding these extensions. The formula indicating the order of the extensions in the verb stem, as noticed in the combinations found so far, is represented below.

```
                - ASS
                - INCH       - REC
(Verb Root)     - INT    - REV  - RES - CAUS - COM - CIRC - DAT - ALT -
                - EXHA       - SIM
                - BRU
                - PART
```

The extensions (ASS, INCH, INT, EXHA, BRU, PART) can only occur directly following the verb stem. Only the more productive extensions (REV, RES, CAUS, COM, CIRC, DAT, ALT) can occur further away from the verb root. The order in which the extensions can occur is fixed. The simulative extension and the reciprocal extension are found in combination with the reversive extension, they also occur in the fixed order REV-SIM or REV-REC. Some examples of verb roots with a combination of two extensions are given below.

fɔt-	'equal'	+RES	+CIRC	>	fɔɔ-^{n}d-ɔr-aade	'face sth., be opposite'
heɗ-	'listen'	+REV	+RES	>	het-t-i^{n}d-aade	'listen carefully'
ʔɔɔl-	'yellow'	+INCH	+CAUS	>	ʔool-ɗ-in-^{n}de	'make yellow'
wɔɗ-	'red'	+ASS	+CAUS	>	woj-j-in-^{n}de	'make red'
dar-	'stand'	+REV	+CAUS	>	dar-t-in-^{n}de	'rectify, correct'
fin-	'wake up'	+RES	+CAUS	>	fin-^{n}d-in-^{n}de	'wake someone up'
hul-	'fear'	+BRU	+CAUS	>	hul-ɓ-in-^{n}de	'frighten'

In the Maasina data most extended verb stems have no more than two extensions. Considering the example of a verb stem with four extensions in Noŋaare, there does not seem to be a strict limitation on the number of possible extensions in a verb stem.

5.4 CONJUGATIONAL CATEGORIES

In Fulfulde, the inflection of the verb is traditionally described as a system of verb forms in which verb stems are inflected with a large number of possible conjugational suffixes (see e.g. Gaden 1913, Labouret 1952, Arnott 1970a, Sylla 1982, Ka 1984, McIntosh 1984, Hilaire 1986, Endresen 1993b). The conjugational suffixes express conjugational categories, such as the exhortative, the relative completive, the middle subjunctive, the imperative etc. The majority of the conjugational categories is formed by a verbal suffix added to the verb stem. In addition, some specific conjugational categories combine with a modal adverb preceding the verb form. The verbal conjugational suffixes are considered to be fused morphemes. McIntosh (1984:6) uses the term VAP marker for the conjugational suffixes. VAP is the abbreviation for Voice-Aspect-Polarity, indicating the semantic content of these verbal suffixes. But these conjugational suffixes also convey information about mood and discourse perspective. In this thesis the abbreviation CS is used for the verbal conjugational suffixes, because the abbreviation VAPMD-marker for Voice-Aspect-Polarity-Mood-Discourse marker would be too long.

The result of treating the conjugational suffixes as monomorphemic is that Fulfulde grammarians enumerate about 30 strikingly similar conjugational morphemes. In a further analysis of the verbal suffixes in Maasina (section 5.5), it is demonstrated that these conjugational markers are not monomorphemic, but that these markers consist of several morphemes. These morphemes coincide with the semantic categories expressed in the conjugational verbal markers, as listed below.

semantic properties encoded in verbal markers

voice:	active vs. middle vs. passive
aspect:	completive vs. incompletive
polarity:	affirmative vs. negative
tense:	past vs. non-past (present)
mood:	indicative vs. imperative vs. exhortative vs. subjunctive vs. indefinite
discourse:	emphatic (focused[1]) vs. non-emphatic
	relative (focalizing[2]) vs. non-relative

The verbal markers must be polymorphemic, although phonological fusion has made the structure of the verbal markers very obscure. An analysis of their underlying structure should result in a more limited number of morphemes. However, the combinations of these morphemes, underlying the conjugational markers, are not very transparent.

Therefore, for expository reasons, the description of the Maasina verbal system will first follow the traditional analysis of verbal conjugations. The verbal conjugations are treated separately, the different allomorphs of each marker are given with a few examples indicating the use and meaning of the marker in question. This description of the verbal conjugations will largely follow the terms used by McIntosh (1984) in her description of Kaceccereere. The focus lies on the phonological shape of the conjugational suffixes and their allomorphy.

Following the listing of the many conjugational suffixes, an effort will be made to break up these conjugational suffixes into morphemes corresponding to the transparent semantic and syntactic categories, based on the McIntosh's description (1984:138). These conjugational suffixes expressing voice, aspect, polarity, mood, and discourse perspectives are probably not monomorphemic (see Mohamadou 1989, Endresen 1993b), also because the forms expressing different combinations of these semantic properties are so very similar. The names and abbreviations of the different conjugational suffixes that occur in the verb system in Maasina are given in the table below in alphabetical order.

---

[1] Focussed means that the verb containing this marker recieves focus, it is emphasized.

[2] Focalizing means that the verb containing this marker indicates that the complement preceding the verb is focused. The verb is not emphasized itself, but the verb focalizes the preceding complement. This is sometimes also called pre-verb focus.

Conjugational categories in Maasina Fulfulde:

1	COMPL	-ii	completive
2	EXH	-u	exhortative
3	INDEF	-uma	indefinite
4	INCOMPL	-an	incompletive
5	IMPsg	-u-ʔ	imperative singular
6	IMPpl	-ee-ʔ	imperative plural
7	M.COMPL	-ike, -iima	middle completive
8	M.EXH	-ɔ	middle exhortative
9	M.INDEF	-ɔɔma	middle indefinite
10	M.INCOMPL	-ɔtɔ	middle incompletive
11	M.IMPsg	-a-ʔ	middle imperative singular
12	M.R.COMPL	-ii-ʔ	middle relative completive
13	M.R.INCOMPL	-ɔtɔɔ-ʔ	middle relative incompletive
14	M.SUB	-ɔɔ-ʔ	middle subjunctive
15	M.VF	-i	middle verb focus
16	NEG	-aa	negative
17	N.COMPL	-aali, -aay	negative completive
18	N.INCOMPL	-ataa	negative incompletive
19	N.M.COMPL	-aaki	negative middle completive
20	N.M.INCOMPL	-ataakɔ	negative middle incompletive
21	N.P.COMPL	-aaka	negative passive completive
22	N.P.INCOMPL	-ataake	negative passive incompletive
23	P.COMPL	-aama	passive completive
24	P.INCOMPL	-ete	passive incompletive
25	P.R.INCOMPL	-etee-ʔ	passive relative incompletive
26	P.R.COMPL	-aa-ʔ	passive relative completive
27	P.SUB	-ee-ʔ	passive subjunctive
28	P.VF	-a	passive verb focus
29	R.COMPL	-i-ʔ	relative completive
30	R.INCOMPL	-ata-ʔ	relative incompletive
31	SUB	-a-ʔ	subjunctive
32	VF	-u	verb focus

The verbal marker of the past tense (PAST) does not form a conjugational category by itself, it appears only in combination with other conjugational suffixes. The past tense marker can co-occur with practically all indicative conjugations. The past tense marker is discussed separately in section 5.5.1.2.

There are some differences between the labels given in this thesis to the verbal conjugational suffixes and the names of the VAP markers by McIntosh. The main deviation from McIntosh is that in this study the "stative" and the "progressive" are not treated as separate conjugations (McIntosh 1984:78). The form that characterizes the stative and progressive conjugation is the word ʔana. This morpheme is an independent word, not a verbal marker. The locative ʔana signals that the event expressed by the verb form which it

precedes takes place over a span of time, not in a single moment. The locative copula expresses duration when it combines with the subjunctive or the relative completive. In this thesis the stative and the progressive are not treated as separate conjugational categories. The progressive is analyzed as a combination of the subjunctive preceded by the locative, the stative is described as a combination of the locative and the relative completive (see section 5.4.2, section 5.4.8 and section 5.6.1.2).

In this study conjugational markers which are otherwise unmarked for voice are understood to be in the active voice. The absence of the relative, which expresses the semantic notion of focalization of the element preceding the verb, indicates that no focalization occurs. McIntosh's overt term "general" for the non-relative is not used in naming the verbal conjugational suffixes. Both "general" and "active voice" are not employed because they are considered to be the unmarked values of voice and discourse.

Because this study describes the Maasina dialect, and because there is no continuative imperative in Maasina, the terms "ordinary" and "continuative" are unnecessary distinctions in the description of the imperative markers. The imperatives in Maasina are the same as the "ordinary" imperatives in Kaceccereere.

The term "emphatic" is replaced with verb focus, specifying that it is the verb that gets emphasis when it is combined with the verbal conjugational suffix with this name. The term completive is overtly indicated in the name "emphatic completive" by McIntosh. The completive notion is indeed present in this marker, here called verb focus. What is called the "vague incompletive" by McIntosh is called here the indefinite incompletive, or simply the indefinite. An example of the indefinite suffix for passive verbs (with the form *-εema in Kaceccereere) is not found in the Maasina data.

For the naming of the verbal conjugational suffixes, only the most prominent characteristics of these suffixes are used. For the same reason the subjunctive is not labelled as incompletive, although McIntosh is right when she states that the semantic notion incompletive is expressed in the verbal conjugational suffix of the subjunctive.

In sections 5.5.1 till 5.5.10 the allomorphy of the conjugational suffixes is described, with a brief indication of their function and meaning. The allomorphy is evident when the conjugational suffixes combine with other morphemes, such as the past tense marker, or pronouns.

In Maasina, there are twelve conjugational categories characterized by the presence of final glottality in sentence final position. All verbal conjugational suffixes that are imperative, relative, and subjunctive are characterized by final glottality. The final glottality is marked in the examples given, but only when the verb form occurs at the end of a sentence.

The verbal conjugations of the relative and subjunctive conjugations are characterized by inversion. These conjugations also group together because they share the characteristic of final glottality. Inversion in Fulfulde means that the subject pronoun follows the verb stem as a pronominal affix within the verbal word. This inversion takes place with certain personal pronouns only. The paradigms showing inversion are given for all the relevant conjugations characterized by inversion, because the forms of the inverted subject pronouns are not identical in combination with the different conjugations, and because the inverted subjects often lead to different allomorphs of the verbal markers. In general an inverted subject pronoun will cause shortening of the conjugational suffix. Inversion also means that

the initial consonant of the verbal stem will have a prenasalized voiced or a plosive voiceless consonant.

5.4.1 IMPERATIVE

There are three imperative conjugational suffixes. The imperative directed to one single person has a different form for the active voice verbs and the middle voice verbs. There is only one form of the plural imperative, directed to more than one person. The imperative forms are marked by final glottality.

The imperative marker for the singular of active voice verbs (IMPsg) has three forms: -u, Ø (zero), and -in. The vowel [u] can be deleted when this deletion does not result in a violation of the syllable structure conditions. These are not violated when there is only one final consonant of the verb stem, and when this consonant is not an obstruent. The vowel -u is always deleted when the verb stem ends in a CVC structure and has in a sonorant as the final consonant as in the first example of the verb **war** 'come!'.

IMPsg -u

war,   ˀe   ley juudˀε ˀam dεε-ˀ
come-IMPsg with in   arms   mine the-FG
'Come into my arms!'

When all the syllable structure conditions are met, but the structure of the verb stem is CVVC, then there is variation; the IMPsg conjugational suffix can be either there (-u) or it can be deleted (Ø, zero). In the following examples the CVVC verb stem does end in a single sonorant consonant, but the vowel [u] does not have to be deleted. This again is an indication that, although the syllable structure CVVC is possible, it is considered to be less well-formed than the CVC or CVV syllable structure. The vowel [u] remains to prevent the otherwise less well-formed syllable CVVC.

IMPsg. allomorphy Ø (zero)/-u

dɔɔm   seedˀa   **doom-u   seedˀa**
wait-IMPsg little   wait-IMPsg little
'Wait a little!'   'Wait a little!'

The IMPsg -u can never be deleted when the verb stem ends in two consonants, because a syllable structure condition says that the syllable coda can only take one consonant.

IMPsg -u

lonn-u   liccεrε ⁿdε-ˀ
wash-IMPsg rag   the-FG
'Wash the rag!'

The vowel -u is also omitted when the imperative is followed by a vowel initial morpheme, such as the object pronoun -am 'me'.

IMPsg Ø (zero)

cɛdɗɔ, dɔɔm-am   fa   mi jɛɛwɔy-a   bam^{m}baraŋkɛ mɛn

Bozo   wait-IMPsg-me so that I   go look for-SUB Bambara   our

'Bozo, wait for me to look for our Bambara.'

The morpheme -in occurs in the singular imperative form of verb stems with a -VC- form of the inchoative, reversive, and comitative extension. The same morpheme -in occurs also in the infinitive of verb stems that are combined with these extensions -iɗ-, -id- or -it-. These extended verb stems all end in an obstruent.

IMPsg -in

maɓɓ-it-in   **ʔuddit-in   dammugal, ^{n}gal ʔuddit-aaki**

cover-REV-IMPsg   open-IMPsg door   it   be open-N.M.COMPL

'Uncover.'   'Open the door, it is not open.'

The verb stems ʔudd-it- 'open' and maɓɓ-it- 'uncover' are enlarged with the extension -it- and followed by the conjugational suffix -in. The imperative adds this suppletive morpheme -in to the verb stem, to prevent the occurrence of a single obstruent in syllable final position. It is not clear why the suppletive morpheme -in is added here. A word final obstruent could also have been prevented by the form -u. The IMPsg form -u occurs in the form maɓɓ-ut-u 'uncover' in the Fulfulde dialect of Gombe. The morpheme -in- also occurs in the infinitive of the verb ʔuddit+in+dɛ [ʔudditin^{n}dɛ] 'to open'. Here also, the form -in prevents the occurrence of an obstruent syllable finally. In the infinitive the form -in also prevents the occurrence of an ill-formed sequence of three unstressed light syllables.

The morpheme -in occurring in infinitives and imperatives of verbs with stems ending in the extensions -iɗ-, -it- or -id- is probably a duplication of these extensions, where the final alveolar consonant changed into a nasal to meet the condition that the final consonant in a syllable should be sonorant. This resulted in the form -in. The suppletive form -in of the imperative singular should not be confused with the causative extension with the same form -in-. The verb stems with the homonymous causative extension -in- do not add this allomorph in the imperative and infinitive. This is because the causative extension -in- can occur word finally without violating the syllable structure conditions.

IMPsg Ø (zero)

hebb-in   lɔɔ^{n}dɛ ^{n}dɛɛ-ʔ

be full+INT-CAUS-IMPsg water pot that-FG

'Fill that water pot.'

The stem **hɛɛw-** 'be full' combined with the intensive and the causative extensions to give the verb stem **hebbin-** 'fill'. The morpheme **-in** occurring in the imperative is identical in form to the causative **-in-**, but the distribution of the former **-in** is restricted and it does not display any additional meaning. The morpheme **-in** that occurs only in the imperative and infinitive of verb stems enlarged with an extension ending in an obstruent does not have a causative meaning. It appears to be present to avoid violations of the syllable structure conditions.

The singular imperative for the middle voice (M.IMPsg) is formed by the mopheme **-a**.

M.IMPsg **-a**

war,   jɔɔcf-a   dow kɔycfɛ baaba ma cfɛɛ-ʔ
come-IMPsg, sit-M.IMPsg on   legs   father your the-FG
'Come and sit on the lap of your father.'

yin-a-ʔ
swim-M.IMPsg-FG
'Swim!'

The conjugational suffix of the middle voice imperative singular has only one form, there are no allomorphs.

The imperative marker has only one form in the plural: **-ɛɛ** (IMPpl). It combines with verb stems in both active and middle voice. The plural imperative conjugation requires the prenasalization of the initial consonant of the stem. This prenasalization normally occurs when the subject is plural, or when the subject follows the verb stem. Although no subject seems to be present, the second person plural to which this imperative is addressed might condition the prenasalization of the first consonant of the stem. It is also possible that the suffix **-ɛɛ** itself has to be interpreted as the second person plural subject, conditioning the initial prenasalization by its position following the verb stem.

IMPpl **-ɛɛ**

ⁿdɔkk-er-ɛɛ   kam sikkɔrɔ seecfa
give-CIRC-IMPpl me   sugar   little
'Give me a little of your (pl.) sugar.'

The formation of the plural imperative of middle voice verbs is the same as the formation of the plural imperative for active voice verbs.

IMPpl -ɛɛ

ⁿjin-ɛɛ-ʔ
swim-IMPpl-FG
'Swim!'

In the plural imperative of the middle voice verb **yin-aadɛ** 'to swim' there is no trace of a morpheme marking the middle voice. There is no form of the imperative for passive verbs.

5.4.2 SUBJUNCTIVE

The subjunctive has different conjugational suffixes for the active, middle and passive voice. The form of the subjunctive conjugational suffixes is characterized by final glottality. The subjunctive displays inversion. The Verb-Subject order occurs when the subject is -aa 'you' (2sg.), -ɛn 'we' (1pl. inclusive) -ɔn 'you' (2pl.). The forms of the subjunctive conjugational suffixes are given below. The function of the subjunctive in the three voices does not differ much. The subjunctive is used to express commands and exhortations, it can also be used to express purpose and permission (McIntosh 1984:141-3). The subjunctive expresses the fact that the speaker wants and expects the action expressed by the verb to take place. The subjunctive is required after certain modal particles that express obligation or necessity (cf. Arnott 1961). The negative of the subjunctive is formed by the sentence initial negative modal predicate **pati**, sometimes the words **fati** or **wɔta** are used. There is no special negative conjugational suffix for the subjunctive (McIntosh 1984:58).

The subjunctive marker attached to active verbs is formed by the suffix -a. The subjunctive, abbreviated as SUB has the allomorphs -a, u and Ø (zero). The examples below demonstrate the use of the subjunctive as a command, an exhortation, and expressing expectation.

SUB -a; command

pati   mɔ   war-a-ʔ
not   he   come-SUB
'He should not come.'

SUB -a; expectation

sɔ   naaⁿgɛ fucɗ-ii,   habiiba fin-a   naat-a   hɔggɔ   ɓir-a-ʔ
when sun   rise-COMPL Habiiba awake-SUB enter-SUB kraal   milk-SUB-FG
'When the sun has risen, Habiiba would wake up, enter the kraal and milk'
(Labatut 1986a:37)

SUB -a; exhortation

həmə fuʔ haɓ-an-a   hɔɔrɛ mun
who   all fight-DAT-SUB head his
'Everybody should fight for himself.'

Certain modal predicates require the subjunctive, the example below expresses obligation with the adverbial phrase sə **wanaa**.

SUB -a with sə **wanaa**; obligation

sə wanaa mə war-a-ʔ
if be-N he come-SUB-FG
'He has to come.'

The combination of the subjunctive conjugational suffix with the locative ʔ**ana** is described in the literature as the progressive conjugation. The locative expresses the duration, the on-going aspect of the event. In combination with the locative, the subjunctive expresses expectation. When an event is expected, it still has to take place. This makes the meaning of the subjunctive in a non-indicative mood very similar to that of the incompletive in the indicative mood.

SUB -a with locative; expected on-going action

gitɛ maa ɗɛɛ ʔana ⁿjalbit-a   hɔnɔ ⁿdiyam kaŋŋɛ kalana-ʔ
eyes your the LOC sparkle-SUB like water gold   Kalana-FG
'Your eyes are sparkling like the golden waters of Kalana.'

All the above examples are given with a 3rd person subject. When a verb form in the subjunctive occurs with the 2sg., 1pl. incl. and 2pl. personal pronouns as subject, inversion occurs. The subject is then a verbal suffix. And verbal suffixes alter the form of the conjugational suffix. The allomorph of the subjunctive conjugational suffix of the active voice is Ø (zero) when the subject follows the verb stem as a pronominal suffix. The specific forms of the subject pronouns and the allomorphs of verbal suffixes occurring when inversion occurs in the subjunctive are given in the following table.

SV and VS order in the subjunctive:

singular

1	mi hɔkk-a-ʔ	'I should give'
2	kɔkk-aa-ʔ	'you sg. should give'
3	mɔ hɔkk-a-ʔ	'he/she should give'

plural

1	min kɔkk-a-ʔ	'we excl. should give'
1+2	kɔkk-ɛn-ʔ	'we incl. should give'
2	kɔkk-ɔn-ʔ	'you pl. should give'
3	ɓɛ kɔkk-a-ʔ	'they should give'

When the forms of the subjunctive for the 1+2 and 2 person plural occur in utterance final position, the final vowels are both nasalized and laryngealized.

1+2	[kɔkkẽ]	'we incl. should give'
2	[kɔkkɔ̃]	'you pl. should give'

The form of the object pronoun for the second person singular in the subjunctive of the active voice can be both -ɛ 'you' and **maa** 'you'. The object pronoun -ɛ 'you' can only appear when no other verbal suffix occurs. The object pronoun -ɛ 'you' therefore does not occur in the inverted forms. When the object pronoun -ɛ does occur the verbal conjugational suffix of the subjunctive -a is reduced to Ø (zero).

SUB Ø zero; in order to, so that

jɔnnɔɔ,	ɗal,	mi	tinⁿdin-ɛ	seeɗa	kɔ	woni	ʔe	bittol
now	leave-IMPsg	I	explain-SUB-you	little	what	be-R.COMPL	with	leaving

'Now stop (talking), so that I explain to you about leaving.' (Tioulenta 1980a:10)

McIntosh (1984:249) doubts the usefulness of a distinction of mood between indicative and non-indicative, because there is no obvious morphological exponent that distinguishes the two, and because the subjunctive seems to straddle the two moods. When the subjunctive expresses some kind of obligation, it is clearly non-indicative, like the imperative and the exhortative. When the subjunctive is used in the narrative or when it is used in combination with a locative to express an on-going action, it seems to have an indicative meaning. The latter impression might be wrong. An indication that the subjunctive is non-indicative is the fact that the past tense marker, which only combines with indicative verb forms, is not compatible with the subjunctive. Sentences where the locative and the subjunctive together express an ongoing action or process substitute the verbal conjugational suffix of the subjunctive with that of the relative incompletive when the past tense marker -nɔ is attached.

R.INCOMPL + PAST (no SUB + PAST!) being the past of SUB

sukaaɓɛ ʔana jal-an-nɔɔ-ʔ	sukaaɓɛ ʔana jal-a-ʔ
children LOC laugh-R.INCOMPL-PAST-FG	children LOC laugh-SUB-FG
'The children were laughing.'	'The children are laughing.'

The past tense marker -nɔ provides a good criterion for the distinction between indicative and non-indicative moods: only verb forms in the indicative mood can refer to events in the past.

In the middle voice the subjunctive (M.SUB) is formed by the suffix -ɔɔ. The allomorphs of the subjunctive conjugational suffix for the middle voice are -ɔɔ and -ɔ. The following example shows a use of the subjunctive to express the idea that the subject is expected to sit down.

M.SUB -ɔɔ; exhortation

ʔɔ jɔɔɗ-ɔɔ-ʔ
he sit-M.SUB-FG
'He should sit down.'

The allomorph -ɔɔ of the subjunctive conjugational suffix in the middle voice occurs word finally. The following example shows the middle voice subjunctive with a modal predicate expressing obligation.

M.SUB -ɔɔ with **sanaa**; obligation

sanaa **mɔ** **jɔɔɗ-ɔɔ** **ɗɔɔ-ʔ**
if-be-NEG he sit-SUB here-FG
'He has to sit here.'

The allomorph of the middle voice subjunctive is -ɔ when it occurs in combination with other verbal suffixes. This is the case when the 2sg., 1pl. incl. and 2pl. personal subject pronouns are pronominal suffixes.

    SV and VS order in the middle voice subjunctive
singular
1	**mi gaaj-ɔɔ-ʔ**	'I should converse'
2	**ⁿgaaj-ɔ-ɗaa-ʔ**	'you sg. should converse'
3	**mɔ gaaj-ɔɔ-ʔ**	'he/she should converse'

plural
1	**min ⁿgaaj-ɔɔ-ʔ**	'we excl. should converse'
1+2	**ⁿgaaj-ɔ-ɗɛn-ʔ**	'we incl. should converse'
2	**ⁿgaaj-ɔ-ɗɔn-ʔ**	'you pl. should converse'
3	**ɓɛ ⁿgaaj-ɔɔ-ʔ**	'they should converse'

As explained above, the subjunctive does not combine with the past tense marker. The following example shows that an ongoing action or process, expressed in the present with the locative and the subjunctive, uses the middle relative completive for the past.

M.R.INCOMPL + PAST (no M.SUB + PAST!)

ʔɔmɔ   fill-ɔtɔ-nɔɔ-ʔ
LOC+he/she   tell-M.R.INCOMPL-PAST-FG
'He was telling a story'. ["Il racontais."]

In the passive voice form of the subjunctive (P.SUB), the marker is -ɛɛ. The allomorphs of the subjunctive conjugational suffix for the middle voice are -ɛɛ and -ɛ-. The distribution is quite similar to the other subjunctive markers. The allomorph -ɛɛ occurs in word final position. The examples below show the subjunctive in combination with the locative, forming the progressive conjugation.

P.SUB -ɛɛ with locative; ongoing action

mi nan-ii   ʔinⁿdɛ maa ʔana nɔdd-ɛɛ-ʔ
I   hear-COMPL name   your LOC   call-P.SUB-FG
'I heard your name being called.'

P.SUB -ɛɛ with kanaa; obligation

kanaa mɔ naŋⁿg-ɛɛ-ʔ
MP   he   catch-P.SUB-FG
'He must be caught.'

The allomorph -ɛ of the passive subjunctive conjugational suffix occurs when other verbal suffixes attach to the verb form, like in the inverted VS of the 2sg., 1pl. incl. and 2pl. subject pronouns.

SV and VS order in the passive voice subjunctive

singular
1   mi wiy-ɛɛ-ʔ   'I should be called'
2   ᵐbiy-ɛ-ɗaa-ʔ   'you sg. should be called'
3   mɔ wiy-ɛɛ-ʔ   'he/she should be called'
plural
1   min ᵐbiy-ɛɛ-ʔ   'we excl. should be called'
1+2   ᵐbiy-ɛ-ɗɛn-ʔ   'we incl. should be called'
2   ᵐbiy-ɛ-ɗɔn-ʔ   'you pl. should be called'
3   ɓɛ ᵐbiy-ɛɛ-ʔ   'they should be called'

An ongoing action or process substitutes the passive subjunctive with the passive relative incompletive when the event referred to took place in the past. The reference to a moment in the past is expressed by the past tense marker -nɔɔ.

R.INCOMPL + PAST (no P.SUB + PAST!)

suka ꞌana lɔɔt-ete-nɔɔ-ꞌ

child LOC wash-P.R.INCOMPL-PAST-FG

'The child was being washed.' ["On lavais l'enfant."]

being the past of:

P.SUB -ee with locative; ongoing action

suka ꞌɔɔ ꞌana lɔɔt-ee-ꞌ

child the LOC wash-P.SUB

'The child is being washed.'

In conclusion it can be stated that the underlying forms of the subjunctive are *a for active voice verbs, *ɔɔ for middle voice verbs and *ee for passive voice verbs. The vowel [a] of the active forms is deleted before vowel initial verbal clitics, such as the inverted subject pronouns and the object clitic -e 'you (sg)'. The vowel of the middle and passive forms is shortened when they occur before an inverted subject pronominal suffix that forms a heavy syllable.

5.4.3 VERB FOCUS

The verb focus is called the emphatic past by Arnott (1970a:267) and the emphatic completive by McIntosh (1984:134). The verb focus is used to emphasize the verb form. It can express contrastive and affirmative focus. Often the term "really" [vraiment] is added in the translations of forms with verb focus. The verb focus emphasizes the fact that the action or process expressed in the verb really took place. It is therefore not strange that the verb focus can only be found in the completive aspect.

The allomorphs of the verb focus of active voice verbs (VF) are -u and Ø (zero).

VF -u

ꞌɔ fiy-aay   suka ꞌɔ, ꞌɔ wall-u mɔ

he beat-N.COMPL child the he help-VF it

'He didn't beat the child, he HELPED it!'

sɔ wɔn miil-dɔ haala mun kaal-mi,   ᵐboof-u

if is think-CL word his speak-R.COMPL-I err-VF

'If there is someone who thinks it is his word that I'm telling, he is MISTAKEN!'
(Tioulenta 1980a:6)

The allomorph -u of the Verb Focus can be deleted when syllable structure conditions are not violated. The following sentences are identical in meaning. The [m] is allowed to occur in syllable final position, therefore the VF allomorph -u can (but does not have to) be deleted.

VF allomorphy -u, Ø (zero)

ʔɔ ɲaam tan	=	ʔɔ ɲaam-u tan		
he eat-VF only		he eat-VF only		
'He has only EATEN!'				

ʔɔ war tan	=	ʔɔ war-u tan		
he come-VF only		he come-VF only		
'He has only COME!'				

The verbal marker -u does not only occur when the verb stem final consonant is an obstruent (as in the examples below), it can also occur when the stem final consonant is a sonorant (as in the examples above). Coda weakening will occur when the vowel [u] is deleted after an obstruent final verb stem.

VF allomorphy -u, Ø (zero)

ʔɔ hɛm tan	=	ʔɔ heɓ-u tan		
he get-VF only		he get-VF only		
'He has only GOT (it).'				

ʔɔ wan tan	=	ʔɔ wad'-u tan		
he do-VF only		he do-VF only		
'He has only DONE (it).'				

The obstruents [ɓ] and [ɗ] are not allowed in syllable final position, they become nasal due to coda weakening rules.

The verb focus marker for the middle voice (M.VF) has the form -i, as is shown in the following example.

M.VF -i

ʔa d'aan-i na, naa ʔa d'aan-t-iŋkin-tɔɔ-d'ɔ
you sg sleep-M.VF qp or you sleep-REV-SIM-M.R.INCOMPL-CL
'Are you really ASLEEP, or are you pretending to be asleep?'

Examples of sentences with contrastive stress on the verb were often translated into Fulfulde with participles. The above sentence should be compared to the next example which contains a similar message.

ʔa   ɗaan-ii-ɗɔ   na, naa ʔa ɗaan-t-iŋkin-tɔɔ-ɗɔ
you sg sleep-M.R.COMPL-CL qp or you sleep-REV-SIM-M.R.INCOMPL-CL
'Are you asleep, or are you pretending to be asleep?'

There is a slight difference in meaning between the two sentences which is expressed by the word "really" in the translation of the previous example.

The passive-voice verb-focus marker (P.VF) has the form -a, as shown in the following example.

P.VF -a

mi hɔkk-a   ɗum, mi wan-aa lubb-aa-ɗɔ   ɗum
I   give-P.VF it   I   be-NEG   lend-P.R.COMPL-CL it
'It was GIVEN to me, it was not lent to me.'

So the forms of the verb focus are -u or Ø (zero) for the active voice, -i for the middle voice, and -a for the passive voice.

5.4.4 EXHORTATIVE

The exhortative is called the desiderative by Arnott (1970a:51). McIntosh (1984:141) introduced the term exhortative which is also used in this study. The exhortative combines with only active and middle voice verbs. It expresses a kind of exhortation, which is however more like a wish (see section 5.5.6) than the meaning of exhortation which can be expressed by the subjunctive (see section 5.4.2). The form of the exhortative for active verb forms (EXH) is -u. The first example is a fixed expression, said as a prayer for a child on its name-giving day.

EXH -u

ʔalla wuur-n-u   mɔ,   bark-in-a   mɔ
God   live-CAUS-EXH him/her bless-CAUS-SUB him/her
'May God give him/her a long life, and bless him/her'.

ʔɛn   koot-u
we incl. go home-EXH
'Let's go back, let's go home.'

The allomorph of the exhortative of the active voice is zero when the verb stem final consonant is allowed syllable finally. The form of the exhortative is also zero if an active verb stem combines with the object pronoun -ɛ 'you sg.'. The particle yɔ 'that, may' often precedes the exhortative conjugation.

EXH Ø (zero)

yɔ ʔalla bark-in mɔ	yɔ ʔalla rɛɛn-ɛ
that God bless-CAUS him/her	that God protect-you
'May God bless him/her.'	'May God protect you'

The active form of the exhortative (EXH) is homonymous with the marking for the active verb focus (VF). The active form of the exhortative only differs from the active imperative singular (IMPsg) in that the imperative is marked by final glotallity. There is only a clear difference in form between the middle and passive verb forms of these conjugational suffixes.

The form of the exhortative for the middle voice is -ɔ. The first sentence is a fixed expression that is pronounced when somebody has died.

M.EXH -ɔ

yɔ ʔalla hinn-ɔ mɔ	yɔ ʔa rɛɛn-ɔ
may God take care-M.EXH	him/her may you guard oneself-M.EXH
'May God take care of him/her.'	'May nothing bad happen to you'

There is no form of the exhortative in the passive voice. The passive voice and the exhortative are semantically incompatible in Fulfulde because the patient argument of a verb can not be urged to undergo the action or process of the passive verb. Only the agent can be urged to do something. So the exhortative can only combine with active voice and middle voice verbs where the subject is also the agent. The forms of the exhortative are -u and Ø (zero) for the active voice and -ɔ for the middle voice.

5.4.5 INCOMPLETIVE

The incompletive conjugations indicate that the action or process expressed by the verb is not completed. Usually it expresses habitual events and events that take place in the future. The incompletive marker for the active voice (INCOMPL) is the same as the general incompletive marker described by McIntosh (1984:126). Its form is -an when no other verbal suffixes are present. It is frequently realized as a nasalized vowel, like all word final vowel-nasal sequences.

INCOMPL -an [-ã]; habitual and future

ɲanⁿdɛ fuʔ mɔ yar-an kɔsam
day all she drink-INCOMPL milk
'Everyday she drinks milk.'

yiilt-a, ʔa yiy-an kɔ ʔanⁿd-u-ɗaa
walk around-M.IMPsg you see-INCOMPL what know-R.COMPL-you
'Walk around, you'll see what you know.'

The allomorphs of the incompletive marker (INCOMPL) -et-, -t-, -am- closely resemble the allomorphs of the relative incompletive marker (see section 5.4.6). The allomorph -et- occurs before the object pronoun -ɛ 'you (sg.)'.

INCOMPL -et-

mi fiy-et-ɛ
I   beat-INCOMPL-you
'I will beat you.'

This allomorph can be shortened to -t- when it follows a verb stem enlarged with an extension that ends in a sonorant consonant.

INCOMPL -t-

mi jaŋⁿgin-t-ɛ   **ⁿgol faa**   **ᵐbaaw-aa   fadɛ   maa   ʔimmaa-dɛ**
I   teach-INCOMPL-you   it   so that   can-SUB   you   before   you   leave-INF
'I will explain it to you, so that you will be knowledgeable before you leave.'

If the stem is expanded with a verbal extension, but the final consonant is an obstruent, then the vowel initial marker of the INCOMPL is used.

INCOMPL -et-

mi tippit-et-ɛ   **balɔn**
I   throw-REV-INCOMPL-you   ball
'I will throw you the ball once more.'

Before the object pronoun mɔ 'him/her', the incompletive marker has the form -am-.

INCOMPL -am-

mi fiy-am   mɔ
I   beat-INCOMPL   him/her
'I will beat him/her.'

The morpheme of the incompletive has the form -an- when it occurs before the past tense marker -nɔ. The incompletive combines with the short form -nɔ of the past tense marker.

INCOMPL -an with past tense; uncompleted action in the past

ʔɔ seer-an-nɔ   mɔ   **ʔɔ   wii   ʔa   war-an-nɔ**
he divorce-INCOMPL-PAST her   he/she say+COMPL   you   come-INCOMPL-PAST
'He divorced her.'   'He has said you would come'

The possibility of the combination of the incompletive marker with the past tense marker confirms the meaning expressed as incompletive, not as present or future. The past tense marker only changes the point of reference to the past, so at the moment in the past referred to, the coming of the you-person in the second sentence, and the divorce in the first sentence, had not been completed.

The underlying form of the incompletive marker is *-at-, all other forms can be derived by applying phonological rules. The derivation of the allomorphs of the incompletive marker (INCOMPL) is summarized below.

*at > an	/ __ #	syllable final *[t] becomes sonorant [n]
*at > an	/ __ n	total assimilation of syllable final *[t]
*at > am	/ __ m	total assimilation of syllable final *[t]
*at > ɛt	/ __ ɛ	total assimilation of unstressed short *[a]
*at > t	/ in __	loss of vowel *[a] in a sequence of three unstressed light syllables, preceded by a verbal extension

In the middle voice, the allomorphs of the incompletive marker (M.INCOMPL) are -ɔtɔ and -tɔ. The allomorph -tɔ only occurs after a verb stem which is enlarged by a verbal extension with a VC form. The form -ɔtɔ is used elsewhere.

M.INCOMPL -tɔ

sɔ ʔɔ sippit-ii	kɔsam makkɔ, ʔɔ wirfitit-tɔ	cuudíʔ
If she sell-REV-COMPL milk	her she return-REV-M.INCOMPL	houses-FG

'If she has sold her milk, she will return home.'

M.INCOMPL -ɔtɔ

ʔɔ jɔɔdˈ-ɔtɔ	mɔ fill-ɔtɔ
he/she sit-M.INCOMPL	he/she tell-M.INCOMPL
'He will sit down.'	'He will tell (a story).'

The middle voice incompletive marker has the form -ɔtɔ when it combines with the short form nɔ of the past tense marker.

M.INCOMPL *ɔtɔ with PAST nɔ

mɔ ɓɔɔr-n-ɔtɔ-nɔ	na ?
he/she dress-CAUS-M.INCOMPL-PAST	qp

'Did he dress himself?'

mɔ fill-ɔn-tɔ-nɔ	ʔɔɔn pillol
he/she tell-DAT-M.INCOMPL-PAST	him/her story

'He would tell him a story.'

In the second example, the first vowel of the underlying form of the middle voice completive marker *ɔtɔ is deleted after a verb stem with a -VC- extension because the extension and the conjugational suffix *ɔtɔ cannot form a sequence of three light syllables without one of the light syllables being stressed. Such a sequence is ill-formed in Fulfulde. The short vowel of the light syllable in the middle is deleted to form a sequence of a heavy syllable followed by a light syllable (see section 4.2.2). Thus the sequences *ɔn-ɔtɔ < *an-ɔtɔ and *it-ɔtɔ become -ɔntɔ and -ittɔ, resulting in the predictable allomorph -tɔ.

The completive marker for the passive voice (P.INCOMPL) has the allomorphs -ɛtɛ and -tɛ.

P.INCOMPL -ɛtɛ

jantol nan-ɛtɛ	**sukaaɓe ɓee lɔɔtɛtɛ**	**na**
history hear-P.INCOMPL	children the wash-P.INCOMPL	qp
'The history will be heard.'	'Will the children be washed?'	

The sequence of three light syllables nanɛtɛ 'will be heard' is not shortened to *nan-tɛ here. The first of the three short syllables is stressed. The first vowel of the passive incompletive marker -ɛtɛ is deleted in the following example:

P.INCOMPL -tɛ

ⁿgɔɔwaarɛ fijir-tɛ
ball play with-P.INCOMPL
'The ball is played with.'

Again it seems that the verb stem has to be enlarged with a verbal extension -VC- to cause the deletion of the first vowel of the passive incompletive marker (P.INCOMPL). The conclusion is therefore that the underlying form of the passive incompletive marker is *ɛtɛ, with a shortening rule occurring in a sequence of three unstressed light vowels. I have no example of a combination of the passive incompletive with the past tense marker.

5.4.6 RELATIVE INCOMPLETIVE
The relative incompletive marker (R.INCOMPL) has a large number of allomorphs. The allomorphs of the R.INCOMPL are -ata, -ta, -ɛt-, -ɔt-, -ay-, -an-, -am- . The relative incompletive marker is characterized by final glottality. The meaning of the relative incompletive marker (R.INCOMPL) only differs in its discourse function from the incompletive marker (INCOMPL). The relative incompletive form is used to put the first constituent in focus. This can be a noun phrase, a locative or a question word. Question words always have focus and are followed obligatorily by a relative verb conjugation. The incompletive indicates that the action of the verb is not completed. The full form -ata, also the underlying form of the relative incompletive, is used when there are no other verbal suffixes following the verb form. This means that the subject precedes the verb, and no past tense marker or object pronoun is attached to the verb.

R.INCOMPL -ata; habitual

huɗɔ $^?$ɛ lamɗam $^?$e ^{n}diyam ɓe tɛf-ata hitaa^{n}dɛ fu-$^?$
grass and salt   and water   they search-R.INCOMPL year   all-FG
'It's grass, salt and water that they search for every year.'

The form **-ta** is also used when no subject pronoun, object pronoun or past tense marker follows the verb form. The difference in distribution between the marker **-ata** and **-ta** is that the latter occurs only and obligatorily following verb stems enlarged with a **-VC-** extension.

R.INCOMPL -ta; habitual

koɗum soot-t-in-ta   fulɓe wɔɗeeɓe daabaaji mun$^?$en ?
what   buy-REV-CAUS-R.INCOMPL Fulbe red   animals   their
'What makes the nomadic Fulbe sell their animals?'

The verb stem **sɔɔd-** 'buy' in the verb form **soottinta** 'habitually causes to sell' is enlarged with the reversive extension **-t-**and the causative extension to form the verb stem **soottin-** 'to cause to sell'. The verb stem **sɔɔtt-** is often pronounced with a short vowel to avoid the less well-formed CVVC syllable structure. The initial vowel in the verbal marker **-ata** is not lost when it follows the verb root directly.

R.INCOMPL -ata

ma^{n}dɛ mɔ war-ata
when   he   come-R.INCOMPL
'When will he come?'

The verb form **warata** 'will come' is not shortened to ***warta** because the first syllable is stressed. The relative incompletive marker combines with the long form **-nɔɔ** of the past tense marker. In combination with the past tense marker **-nɔɔ**, the final consonant of the relative marker **-at-** assimilates to the first consonant of the past tense marker, resulting in the allomorph **-an-**.

R.INCOMPL -an- with past tense; simple past

dɛwtɛrɛ mɔ win^{n}d-an-nɔɔ-$^?$
book   he/she write-R.INCOMPL-PAST-FG
'It's a book that he wrote.'

In combination with the object pronouns the relative marker takes the form **-ata** except when it combines with the object pronoun **-ɛ** 'you (sg.)'. This object pronoun behaves as a clitic, shortening the relative marker to **-at-** and assimilating its vowel to **-ɛt-**.

R.INCOMPL -ɛt- with object pronoun -ɛ 'you sg'

maⁿdɛ dɛbbɔ hɔkk-ɛt-ɛ   kɔ ɲaam-ɛtɛɛ ?
when   woman   give-R.INCOMPL-you   what   eat-P.R.INCOMPL
'When will the woman give you (sg.) something to eat?'

The other object pronouns are not clitic, they do not shorten the relative marker to -at-. For this reason all object pronouns except the 2nd person singular -ɛ. are written as separate words, detached from the verb form. Below, an example with the object pronoun ʔɔn 'you pl.' is given.

R.INCOMPL -ata with object pronoun ʔɔn 'you pl.; future

maⁿdɛ dɛbbɔ hɔkk-ata   ʔɔn   kɔ ɲaam-ɛtɛɛ
when   woman   give-R.INCOMPL   you pl.   what   eat-P.R.INCOMPL
'When will the woman give you (pl.) something to eat?'

The relative conjugations are characterized by the inversion of certain subject pronouns. When the inverted subject pronouns follow the relative marker, this results in different allomorphs. The vowel of the shortened relative marker -at- assimilates to the inverted subject pronouns -ɛn 'we (inclusive)' and -ɔn 'you (pl.)', thus the allomorphs -ɛt- and -ɔt- arise. Before the inverted subject pronoun -mi the final consonant of the relative marker assimilates to the initial consonant of the subject pronoun resulting in the allomorph -am-.

SV and VS order in the relative incompletive

singular		
1	**kɔkk-am-mi**	'I shall give'
2	**kɔkk-at-aa**	'you sg. will give'
3	**mɔ hɔkk-ata**	'he/she will give'
plural		
1	**min kɔkk-ata**	'we excl. shall give'
1+2	**kɔkk-ɛt-ɛn**	'we incl. shall give'
2	**kɔkk-ɔt-ɔn**	'you pl. will give'
3	**ɓɛ kɔkk-ata**	'they will give'

The forms **kɔkkɛtɛn** 'we shall give' and **kɔkkɔtɔn** 'you shall give' are mostly pronounced with a nasalized vowel because a VN sequence in word final position is phonetically realized as a nasalized vowel in Maasina, unless special stress falls on the word or a very careful and slow speech style is used. The allomorphy of the relative incompletive conjugational suffix (R.INCOMPL) is summarized below.

*ata	>	ta	/	EXT __	vowel deletion after -VC- extension
*ata	>	at	/	__ -aa	vowel deletion before subject affix 'you sg.'
*ata	>	an	/	__ -nɔɔ	vowel deletion and assimilation of *t before PAST
*ata	>	am	/	__ -mi	vowel deletion and assimilation of *t before subject affix 'I'
*ata	>	ɛt	/	__ -ɛ(n)	vowel deletion and assimilation *a before object affix -ɛ 'you sg.' and before clitic subject pronoun -ɛn 'we incl.'
*ata	>	t	/	EXT__V	vowel deletion after -VC- extension and vowel deletion before vowel initial pronominal affix
*ata	>	ata	/	elsewhere	

The underlying form of the relative completive conjugational suffix is *ata when combining with active verbs.

The verbal marker for the middle voice relative incompletive (M.R.INCOMPL) has the allomorphs -ɔtɔɔ, -ɔtɔ-, -tɔɔ, -tɔ, -otoo- and -too-. The first vowel of the conjugational suffix *ɔtɔɔ is deleted when the verb stem ends in a verbal extension with the form -VC-.

M.R.INCOMPL -tɔɔ; future

jooni ɓɛ   cɔm-ɔy-tɔɔ-ʔ
now   they   shop-ALT-M.R.INCOMPL-FG
'It's now that they will go shopping!'

The allomorphs that only differ from the other allomorphs in ATR value of the vowel (-otoo- and -too-) occur when they are followed by a verbal suffix that contains a vowel that is [+ATR] in the verbal word. The only [+ATR] verbal suffix that can follow within the verbal word is the subject pronoun of the first person singular -mi. This allomorph occurs because of the inversion that occurs in the verb form of the middle voice relative incompletive. In the relative incompletive the subject pronouns of the 1st and 2nd person singular and of the 1st (incl.) and 2nd person plural follow the verb stem. The allomorphs occurring in the paradigm with personal pronouns are given below.

SV and VS order in the relative incompletive

singular		
1	ⁿgaaj-otoo-mi-ʔ	'I shall converse'
2	ⁿgaaj-ɔtɔ-ɗaa-ʔ	'you sg. will converse'
3	mɔ gaaj-ɔtɔɔ-ʔ	'he/she will converse'
plural		
1	min ⁿgaaj-ɔtɔɔ-ʔ	'we excl. shall converse'
1+2	ⁿgaaj-ɔtɔ-ɗɛn-ʔ	'we incl. shall converse'
2	ⁿgaaj-ɔtɔ-ɗɔn-ʔ	'you pl. will converse'
3	ɓɛ ⁿgaaj-ɔtɔɔ-ʔ	'they will converse'

In the inverted forms, the long vowel in the verbal marker *ɔtɔɔ shortens when it is followed by a verbal affix that constitutes a heavy syllable. The form -ɔtɔ- occurs before

the CVC or CVV subject pronouns -ɗaa (2sg.), -ɗɛn (1+2pl.) and -ɗɔn (2pl.). The subject pronouns -ɗɛn and -ɗɔn are mostly pronounced with a nasalized vowel as -ɗɛ̃ and -ɗɔ̃.

The middle relative incompletive marker -ɔtɔ- combines with the long form -nɔɔ of the past tense marker. When the verbal marker combines with the past tense, the vowel length occurs on the past tense marker.

M.R.INCOMPL -ɔtɔ- with PAST

wakkati mɔ yɔtt-ɔtɔ-nɔɔ   maayɔ ⁿgɔɔ ʔɔɔ, mɔ soynorikɛ   toon jamaaʔ

time   he   arrive-R.INCOMPL-PAST river   the   that   he perceive-M.COMPL there   crowd

'When he arrived at the river, he saw a crowd in the distance.'

The allomorph of the middle voice incompletive is -ɔtɔ- in the example above. Only the length of the past tense marker distinguishes this allomorph from the form of the middle voice completive -ɔtɔ- which is not relative. The shortest allomorph -tɔ- occurs when all of these conditions are met, the verbal marker -tɔ- is preceded by a verbal extension and followed by a morpheme that shortens the final long vowel -ɔɔ-.

M.R.INCOMPL -tɔ-

yalla wɔn   kɔ ɓɛy-ɗ-ɔr-tɔ-ɗɛn-ʔ

so that   (there) be-R.COMPL   that   increase-INCH-CIRC-M.R.INCOMPL-we incl.-FG

'So that we will have something more.'

In the example above the underlying form *ɔtɔɔ is shortened to -tɔ-. The form loses its first vowel because it follows a verb stem ending in the verbal extension -ɔr-. It shortens its long vowel [ɔɔ] because it precedes the inverted subject pronoun -ɗɛn which constitutes a heavy syllable. The form of the M.R.INCOMPL is -ɔtɔɔ elsewhere.

M.R.INCOMPL -ɔtɔɔ; habitual or future

saaya   mawka   kaa,   maⁿdɛ   mɔ   ɓɔrn-ɔtɔɔ   ka

gown   large   that   when   he/she   wear-M.R.INCOMPL   it

'That large gown, when will/does he wear it?'

The underlying form of the middle voice relative completive conjugational suffix is *ɔtɔɔ. The allomorphy of the middle relative incompletive conjugational suffix is summarized below.

*ɔtɔɔ > -tɔɔ	/ EXT __	vowel deletion after -VC- extension
*ɔtɔɔ > -ɔtɔ-	/ __ M	vowel shortening before clitics that constitute a heavy syllable, so before -nɔɔ 'PAST' -ɗaa SPro 'you sg.', -ɗɔn SPro 'you pl.' and -ɗen SPro 'we incl.'
*ɔtɔɔ > -tɔ-	/EXT __ M	vowel deletion after -VC- extension and vowel shortening before clitics that constitute a heavy syllable, so before -nɔɔ 'PAST' -ɗaa SPro 'you sg', and -ɗɔn SPro 'you pl.', and -ɗen SPro 'we incl.'
*ɔtɔɔ > -otoo-	/ __ mi	ATR assimilation before clitic -mi SPro 'I'
*ɔtɔɔ > -too-	/ EXT __ mi	vowel deletions after -VC- extension and ATR assimilation before clitic mi SPro 'I'
*ɔtɔɔ > -ɔtɔɔ	/ elsewhere	

The verbal marker for the passive voice relative incompletive (P.R.INCOMPL) has the allomorphs -etɛɛ, -etee-, -etɛ-, -tɛɛ, -tee- and -tɛ. Like all relative forms, the passive incompletive marker is characterized by final glottality. The contexts conditioning these forms are identical to those causing the forms for the middle voice relative incompletive. The first vowel of the conjugational suffix *etɛɛ is deleted after a verb stem ending in a verbal extension with a -VC- shape.

P.R.INCOMPL -tɛɛ; future, habitual

ʔaddu mɔ nodd-ir-tɛɛ-ʔ

Abdu   he   call-CIRC-P.R.INCOMPL-FG

'Abdu he will be called.'

ley hitaaⁿde, nii gɔllε fecc-ir-tɛɛ   ley leydi maasina

in   year   thus work divide-CIRC-P.R.INCOMPL in   land   Maasina

'This is how the work is divided over the year in Maasina.'

Allomorphs with [+ATR] vowels occur before the inverted 1st person subject pronoun -mi, the only verbal suffix which contains a [+ATR] vowel. The example is given together with the whole paradigm of the passive voice relative incompletive with he subject pronouns. All relative conjugations are characterized by inversion of certain pronouns.

SV and VS order in the relative incompletive

singular		
1	ᵐbiy-etee-mi-ʔ	'I will be called'
2	ᵐbiy-etɛ-ɗaa-ʔ	'you will be called'
3	mɔ wiy-etɛɛ-ʔ	'he/she will be called'
plural		
1	min ᵐbiy-etɛɛ-ʔ	'we excl. will be called'
1+2	ᵐbiy-etɛ-ɗen-ʔ	'we incl. will be called'
2	ᵐbiy-etɛ-ɗɔn-ʔ	'you pl. will be called'
3	6e ᵐbiy-etɛɛ-ʔ	'they will be called'

The shortening of the long vowel occurs before the inverted subject pronouns that constitute a heavy syllable -ɗaa (2sg.), -ɗɔn (2pl.) and -ɗɛn (1+2). The vowel-nasal sequence at the end of the word is often pronounced as a nasalized vowel.

The long form of the past tense marker -nɔɔ combines with the passive relative incompletive marker -ɛtɛ, that is shortened when it precedes a morpheme that constitutes a heavy syllable.

P.R.INCOMPL with PAST -ɛtɛ-nɔɔ

suka ˀɔɔ ˀana lɔɔt-ɛtɛ-nɔɔ-ˀ
child that LOC wash-P.R.INCOMPL-PAST-FG
'That child was being washed.'

The occurrence of the locative with a relative incompletive is not frequent. The locative here indicates that the action or process expressed by the verb took place over a span of time, i.e. the washing of the child lasted for some time. The following example shows that the passive relative incompletive marker and the past tense marker are both short when they are followed by the inverted subject pronoun -ɗaa 'you sg.' that constitutes a heavy syllable.

P.R.INCOMPL with PAST and inverted SPro -ɗaa 'you sg.'

hanⁿdɛ kɔkk-ɛtɛ-nɔ-ɗaa   pooli ɗi-ˀ
today give-P.R.INCOMPL-PAST-you birds the-FG
'It's today that the birds would have been given to you.'

The form of the passive voice relative incompletive is -tɛ- when several conditions (a -VC-extension and a heavy syllable affix) shortening the conjugational suffix occur at the same time.

hɔnɔ ⁿjammir-tɛ-ɗɔn
how call family name-P.R.INCOMPL-you pl.
'What is your family name?

The conjugational suffix of the relative passive incompletive is -ɛtɛɛ elsewhere, this is also its underlying form.

P.R.INCOMPL -ɛtɛɛ; habitual, future

seeɗa tew ɲaam-ɛtɛɛ-ˀ
little meat eat-P.R.INCOMPL-FG
'Meat is only sparingly eaten'.

hɔtɔ   ɓe   taw-etee   wakkati   ⁿduŋⁿgu ?

where they find-P.R.INCOMPL time   rainy season

'Where are they to be found in the rainy season?'

5.4.7 COMPLETIVE

The completive marker (COMPL) has the form -ii. This morpheme occurs in the last heavy syllable of the verb form. It is therefore always stressed.

COMPL -ii

ɓe   ⁿjeew-t-ı̀i   sanne

they be lonely-REV-COMPL very

'They have enjoyed themselves (talking) very much.'

The completive marker is not shortened when other verbal suffixes are attached to the verbal form. It is only the past tense marker that can be attached to a verb form with the completive conjugational suffix -ii.

COMPL -ii with PAST -nɔ

ʔɔ   hacf-ii-nɔ   mɔ   ŋateede-ʔ

he   prevent-COMPL-PAST him/her to be bitten-FG

'He had prevented him from being bitten.'

It is the short form -nɔ of the past tense marker that combines with the completive marker -ii.

The completive marker for the middle voice (M.COMPL) has several suppletive forms: -ike, -eke and -iima. These forms can be found in the idiolect of the same speaker. The form -iima is more dominant in Maasina. The form -ike is more dominant in Haayre, where occasionally the variant -eke is also used.

M.COMPL -iima, -ike, -eke

speaker from Jenne (Jenneeri):

naaⁿge   lel-iima

sun   lie-M.COMPL

'The sun has gone down.'

s-a   ɓett-ike   kamuraga,   ʔa   yɔtt-ɔtɔ   seenɔsa

if-you pass-M.COMPL Kamuraga,   you arrive-M.INCOMPL Seenosa

'If you have passed Kamuraga you will arrive at Seenosa.'

speaker from Duwansa (Haayre):

ʔɔ jaab-ike   baab-iikɔ

he answer-M-COMPL father-his

'He has answered his father.'

ʔɔ sal-eke   yaa-de-ʔ

he answer-M.COMPL go-INF-FG

'He has refused to go.'

The above examples do not indicate the areal distribution of these variants, they only indicate the fact that the same speaker can use more than one variant. In the centre of Maasina the forms -ike and -iima were both encountered. Perhaps there is a difference in meaning between the forms which I have not yet discovered.

In combination with the long form of the past tense marker -nɔɔ, the middle voice completive marker breaks up into two parts.

M.COMPL -i..ma, -i..ke with PAST -nɔɔ

speaker from Sah (Gimballa):

mi ɗaan-i-nɔɔ-ma

I   sleep-M.COMPL-PAST-M.COMPL

'I had slept.'

speaker from Soofara (Kunaari):

ʔa til-i-nɔɔ-ke   winⁿdude-ʔ

you finish-M.COMPL-PAST-M.COMPL write-INF-FG

'You had finished writing.'

speaker from Duwansa (Haayre):

mi til-eke-nɔ   ʔe huttude lella-ʔ

I   finish-M.COMPL-PAST with skin-INF antelope-FG

'I had finished skinning the antelope.'

A speaker from Sabara, near Jonnyoori in the centre of Maasina, used the two forms **tilinɔɔke** 'had finished' and **ɗaaninɔɔma** 'had slept'. Perhaps the variation is also due to the semantics of the verb stem with which this verbal marker combines. The form **tilekenɔ** 'had finished', pronounced by a speaker coming from Duwansa, shows that the vowel length of the past tense marker is determined by its position. The past tense marker is short when it follows the middle completive marker, it is long when it behaves as an infix.

When the past tense marker combines with the middle completive marker, the first part of the morpheme -iima, its vowel -ii-, is shortened before the heavy syllable containing the past tense marker -nɔɔ. The hypothesis is that the morphemes ke and ma are later additions to the conjugation of the middle completive, they are added to disambiguate the middle voice forms of the completive conjugation from those of the active verbs which are -ii- in neutral sentences and -i- when focus precedes the verb.

The completive conjugational suffix for passive voice verbs (P.COMPL) is -aama.

P.COMPL -aama

$^?$ɔ rim-aama   sɔɔfara
he   bear-P.COMPL Soofara
'He is born in Soofara.'

mi yɛɛw-aama ^{n}gen^{n}di $^?$am
I   be alone-P.COMPL   village   my
'I am homesick for my village.'

$^?$ɔ ɓil-aama   sannɛ
he   make angry-P.COMPL   very
'He is very angry.'

The passive completive combines with the long form of the past tense marker -nɔɔ. The first part of the passive completive marker -aa- is shortened before the morpheme -nɔɔ which constitutes a heavy syllable. The second part of the passive completive marker -ma follows the past tense marker -nɔɔ.

P.COMPL -a..ma with PAST -nɔɔ-

fotiirɛ lawj-a-nɔɔ-ma
pot   wash-P.COMPL-PAST-P.COMPL
'The pot had been washed.

The behaviour of the past tense marker -nɔɔ as an infix is an indication that the conjugational suffix -aama is historically polymorphemic.

Thus, the underlying forms of the completive markers are *ii for the active voice verbs, *iima or *ikɛ for the middle voice verbs, and *aama for the passive voice verbs.

5.4.8 RELATIVE COMPLETIVE

The allomorphs of the relative completive conjugational suffix for the active voice (R.COMPL) are -i, -u- and Ø (zero). Relative verb forms are marked by final glottality. The relative completive markers indicate that the event or process expressed by the verb is completed. It also puts focus on the information preceding this verb form. There may be an explicit focused constituent at the beginning of the sentence, either on the subject or on the argument preceding the subject. The focus may also be placed on other information preceding the verb form as is the case when it is used in a narrative sequence (as in the following sequence).

R.COMPL -i; narrative

ɓe ⁿjeh-i fa ɓe ⁿjott-ii maayɔ maŋⁿgɔ
they go-R.COMPL until they arrive-M.R.COMPL river big
ⁿgɔ geene pil-ii, ɓe ⁿdeg-i, ɓe ⁿjar-i ⁿdiyam
that grass surround-M.R.COMPL they descend-R.COMPL they drink-R.COMPL water
'They went until they arrived at a big river surrounded by grass, they went down
and they drank water.'

In combination with the locative marker, the relative completive forms what is called the stative. This stative can only be formed with inchoative verbs. Inchoative verbs express the change from one state to another, they mark the beginning of a new state. In the stative it is the relative completive which indicates that this change of state is completed, it is the locative marker which indicates that the result of the completion of this change of state or of the completion of the beginning of this state occurs at the time of speech.

R.COMPL -i with LOC; stative

ʔɔmɔ fuuy-i-ʔ
he+LOC be lazy-R.COMPL-FG
'He is lazy.'

The allomorph -u- and Ø (zero) occur when the relative completive marker is followed by other verbal suffixes. The relative completive is used in the following example, because sentence initial question words are focused constituents.

R.COMPL -u- with inversion

kɔ kawr-u-ɗaa
what meet-R.COMPL-you
'What did you meet?'

The relative conjugations are characterized by inversion for the subject pronouns -mi 'I', -ɗaa 'you (sg.)', -ɗen 'we (incl.)', and -ɗɔn 'you (pl.')'. This results in the following verbal complexes, exemplified with the verb stem hɔkk- 'give'. Deletion of the vowel -u- is not possible after a verb stem ending in two consonants, since this would lead to ill-formed syllable structures.

SV and VS order in the relative completive

singular		
1	**kokk-u-mi-ʔ**	'I have given'
2	**kokk-u-ɗaa-ʔ**	'you have given'
3	**mɔ hokk-i-ʔ**	'he/she has given'
plural		
1	**min kokk-i-ʔ**	'we (excl.) have given'
1+2	**kokk-u-ɗɛn-ʔ**	'we (incl.) have given'
2	**kokk-u-ɗɔn-ʔ**	'you have given'
3	**ɓɛ kokk-i-ʔ**	'they have given'

The allomorph of the relative completive marker can only be Ø (zero) when the succession of the verb stem and further verbal suffixes does not create ill-formed syllable structures.

R.COMPL Ø (zero) with inversion

kɔ   kaal-ɗaa   fuʔ,   ʔɔ pene-ʔ

what speak-R.COMPL-you all,   it   lies-FG

'All that you have said is a lie.'

The vowel -u- is omitted when the verb stem is enlarged with a verbal extension.

R.COMPL Ø (zero) after extension

kɔ   ʔanⁿd-ir-moo-mi   lebbi   tati

it   know-CIRC-R.COMPL-him-I months three

'It's now three months since I have known him.'

The alternation between -u- and Ø (zero) is optional when the verb stem is not expanded with a verbal extension.

R.COMPL -u- or Ø (zero)

kɔ   ⁿjiɗ-u-mi   =   kɔ   ⁿjim-mi

what want-R.COMPL-I (SPro)   what want-R.COMPL-I (SPro)

'What I want...'

The relative completive -u- combines with the long form -nɔɔ of the past tense marker when the deletion of this vowel would create ill-formed syllables. If these violations would not arise the allomorph of the relative completive is Ø (zero).

R.COMPL -u- with PAST -nɔɔ

buba mɔ winⁿd-u-nɔɔ **ʔe mum leetere**

Buba₁ he₂ write-R.COMPL-PAST to him₁ letter

'It's to Buba that he had written a letter.'

The past tense marker -noo- has assimilated to the [+ATR] vowel [i] of the subject pronominal affix -mi.

R.COMPL -u- with PAST -noo-

ʔattey ⁿgadd-u-noo-mi-ʔ

tea bring-R.COMPL-PAST-I (SPro)

'It's tea that I had brought.

The long obstruent [dd] cannot occur syllable finally, therefore the vowel -u- forms the allomorph of the R.COMPL.

The allomorphs of the relative completive marker are summarized below.

*i > -i / elsewhere generally
*i > -u- / __M before another affix
-u-> Ø / EXT__M before another affix,
provided that no ill-formed syllable structures occur
1. obligatory after -VC- extension
2. optionally after simple verb stem

The relative completive marker for middle voice (M.R.COMPL) has the allomorphs -ii, and -i-. The first examples illustrate the allomorph -ii.

M.R.COMPL -ii

hɔtɔ mɔ joodʼ-ii ? **gɔrkɔ na ɓoor-n-ii saaya-ʔ**

where he sit-M.R.COMPL the man LOC dress-CAUS-M.R.COMPL gown

'Where is he seated?' 'The man is dressed in a gown.'

The allomorph -i- occurs when the M.R.COMPL is followed by verbal suffixes which constitute a heavy syllable such as some of the subject pronominal affixes .

SV and VS order in the relative completive

singular			
1	ⁿgaaj-ii-mi		'I have chatted, conversed'
2	ⁿgaaj-i-ɗaa		'you have chatted'
3	mɔ gaaj-ii		'he/she has chatted'
plural			
1	min ⁿgaaj-ii		'we (excl.) have chatted'
1+2	ⁿgaaj-i-ɗɛn	[ⁿgaaj-i-ɗɛ̃]	'we (incl.) have chatted'
2	ⁿgaaj-i-ɗɔn	[ⁿgaaj-i-ɗɔ̃]	'you have chatted'
3	ɓe ⁿgaaj-ii		'they have chatted'

The middle relative completive marker -ii- is not shortened before the subject pronominal affix -mi 'I' because it constitutes a light syllable (see section 4.2.2).

The long form -nɔɔ of the past tense marker combines with the middle relative completive marker -i- because the past tense marker -nɔɔ constitutes a heavy syllable.

M.R.COMPL -i with PAST -nɔɔ

ʔɔmɔ   jooɗ-i-nɔɔ   hakkuⁿdɛ mɛn
he+LOC sit-M.R.COMPL-PAST   between   us
'He sat among us.'

The allomorphs of the relative completive markers for passive voice verbs are -aa, -a-, and -ɛ-. The first example shows the P.R.COMPL suffix -aa with the locative describing an ongoing state. The P.R.COMPL occurs in the second example because the question word is in focus.

P.R.COMPL -aa-

ʔɔmɔ   ʔanⁿd-aa-ʔ   maⁿdɛ suka ʔɔɔ lɔɔt-aa
he+LOC know-P.R.COMPL-FG   when child that wash-P.R.COMPL
'He is known.'   'When has that child been washed?'

Like all relative conjugations, the passive relative incompletive markers are characterized by the inversion of certain subject pronouns.

SV and VS order in the relative completive

singular

1	ᵐbiy-aa-mi		'I have been called'
2	ᵐbiy-ɛ-ɗaa		'you have been called'
3	mɔ wiy-aa		'he/she has been called'

plural

1	min ᵐbiy-aa		'we (excl.) have been called'
1+2	ᵐbiy-a-ɗɛn	[ᵐbiy-a-ɗɛ̃]	'we (incl.) have been called'
2	ᵐbiy-ɛ-ɗɔn	[ᵐbiy-ɛ-ɗɔ̃]	'you have been called'
3	min ᵐbiy-aa		'they have been called'

The allomorph -ɛ occurs when the second person -ɗaa (sg.) or -ɗɔn (pl.) follows the verb form as an inverted subject. The vowel change from [a] to [ɛ] in this context is difficult to explain. The vowel shortening of the conjugational marker occurs before verbal affixes that constitute a heavy syllable, i.e. before the subject pronouns -ɗaa, -ɗɛn and -ɗɔn but not before the subject pronoun -mi 'I' which forms a light syllable. The P.R.COMPL verbal marker *aa is shortened before the long form of the past tense marker -nɔɔ that constitutes a heavy syllable.

P.R.COMPL -a with PAST -nɔɔ

kayrɛ   **lawj-a-nɔɔ-ʔ**

it (NDE class)   wash-P.R.COMPL-PAST-FG

'It is the one (cloth) that had been washed.'

ⁿdɛ nafanⁿdɛ jaŋⁿg-an-a-nɔɔ   **ɓataaki ʔɔɔ ⁿdɛɛ, dar-ii**

when Nafande   read-DAT-P.R.COMPL-PAST   letter   that   when   stop-M.R.COMPL

ʔɔmɔ miil-a kɔ jaab-ɔtɔɔ   **miɲ-um ʔɔɔ-ʔ**

he+LOC think-SUB what   answer-M.R.INCOMPL   younger-his   that-FG

'When Nafande had been read this letter (to), when it stopped he thought about what to answer this younger sibling of his.' (Tioulenta 1980b:9)

From the story about Nafannde (Tioulenta 1986b:9), it is clear that Nafannde cannot read because he was looking for a jaŋⁿgɔnɔɔwɔ 'somebody that reads for people who can't read or write'. So in this sentence the subject Nafannde is the benefactive for whom the letter is read and Nafannde is the subject of the passive verb jaŋⁿgeedɛ 'to be read (to)'.

The allomorphy of the passive relative completive marker is summarized below.

*aa > -a- / ___M   when the verb form is followed by a verbal affix that constitutes a heavy syllable

*aa > -ɛ- / ___M   when the verb form is followed by a 2nd person subject affix -ɗaa or -ɗɔn.

*aa > -aa   elsewhere

Thus the underlying forms of the relative completive markers are *i for the active voice verbs, *ii for the middle voice verbs, and *aa for the passive voice verbs.

5.4.9 INDEFINITE INCOMPLETIVE

The indefinite incompletive (from here on indefinite) occurs very rarely in Fulfulde. This is also the case in Maasina. McIntosh (1984:122) calls this conjugational suffix in Kaceccereere the vague incompletive. The indefinite (INDEF) expresses an uncertainty about the actual accomplishment of the action or process of the verb. This is why the term vague incompletive has been changed to the indefinite. In the data, only two examples were found. The first example of the indefinite was given as a translation of the example of McIntosh (1984:131). In Maasina the adverbial expression ˀana miilee 'lit: it is thought' indicating possibility has to precede this verb form.

INDEF -uma

Kaceccereere			Maasina				
ⁿgel	yoor-uma	ɗɔɔ	ˀana	miil-ee	ⁿgel	yoor-uma	ɗɔɔ
it	dry-INDEF	here	it	think-P.SUB	it	dry-INDEF	here

'It may dry here'   'Possibly (it is thought that) it will dry here.'

A second example, with the form of the middle indefinite, was found in the story of Nafannde (Tioulenta 1980a:14).

M.INDEF -ɔɔma

heddɔ	kelenteeje	ˀana	kerk-it-a	dow	makkɔ,
then	birds	LOC	chatter-REV-SUB	on	him

ŋɔŋ-aa	sakɔ	ɗaan-ɔɔma	
be sleepy-NEG	even less	sleep-M.INDEF	(Tioulenta 1980a:14)

'Then (short legs, noisy, grey, spotted, small) birds were chattering above him, they weren't sleepy, even less likely that they would sleep (and shut up).'

The uncertainty of an event can be expressed by the modal adverb maa 'probably' as in the following sentence.

adverb maa 'probably'

maa	mi	war	ka...
probably	I	come	however

'I should probably come, but...'

The above sentence indicates that the speaker cannot come, but also that he cannot say that he won't come (this could be said, for example to people whom one can't refuse anything because of a yaage 'respect, restraint etc.' in an avoidance relationship). The similarity in form and meaning between the adverb maa 'probably' and the indefinite marker -ma

suggests that the two forms are related. Such a relation between this adverb **maa** and the verbal marker -**ma** is an indication that historically some verbal markers can be derived from adverbs in Fulfulde.

The indefinite is also used in a few fixed expressions such as the modal predicate **ɓɔɔyma** 'probably during be a long time'. The verb stem **ɓɔɔy**- 'to last, be long' combines here with the indefinite because you can't be really sure what will happen in a long time.

> **ɓɔɔy-ma** **ɗum waɗ-aali**
>
> take time-INDEF it do-N.COMPL
>
> 'It will be long before it will be realized.'

The adverbs of time **jɛmma, jamma** 'night' and **ɲalɔɔma** 'daytime' are probably also derived from indefinite verb forms. The examples **ɓɔɔyma** 'probably during a long time' and **yooruma** 'probably will dry' give no clear insight into the distribution of the allomorphs of the indefinite -**ma** and -**uma**. The active voice marker -**u**- can be deleted after a CVVC morpheme ending in a sonorant, but this deletion is optional, perhaps related to frequency of the word in question.

The indefinite is such a rare conjugation that it is difficult to explain the fact that no forms of the indefinite with the past tense marker are found: it may be due to its infrequent use in general or a possible semantic incompatibility. The formation of the indefinite shows many similarities with the other non-indicative conjugations. This is probably the reason why its combination with the past tense marker is not attested.

5.4.10 NEGATIVE CONJUGATIONAL SUFFIXES

There are seven different negation markers. These negation forms differ for the three voices (active, middle, and passive) and they differ for the two aspects (completive and incompletive).

(general) negative (N)	-aa
negative completive (N.COMPL)	-aali, -aay
negative incompletive (N.INCOMPL)	-ataa
negative middle completive (N.M.COMPL)	-aaki
negative middle incompletive (N.M.INCOMPL)	-ataakɔ
negative passive completive (N.P.COMPL)	-aaka
negative passive incompletive (N.P.INCOMPL)	-ataakɛ

The active voice verbs can thus combine with a completive and with an incompletive negation marker. But besides these two, some active voice verbs can combine with a third negation marker -**aa** that is not marked for incompletive or completive. The meaning of the negative marker -**aa** is the negation of a general statement or state. It combines especially with verbs that occur in the stative. This generic negation marker (N) -**aa** always occurs in the last heavy syllable of the verb form and therefore it is always stressed (cf. Mohamadou 1989).

NEG -aa

mi ʔanⁿd-àa	mɔ heew-àa sem^mbe

mi ʔanⁿd-àa

I   know-NEG

'I don't know.'

mɔ heew-àa   sem^mbe

he   be many-NEG   strength

'He does not have much strength.'

The form -**ataa** is the negation marker for incompletive verb forms of active voice verbs (N.INCOMPL).

N.INCOMPL -ataa

ɓe   kɔɗ-ataa   ley wurɔ

they   stay-N.INCOMPL   in   the village

'They won't stay in the village.'

The negation marker for completive verb forms of active voice verbs (N.COMPL) can have the form -**aali** or -**aay**. There is much variation, the form can depend on the speaker, the speech style, and possibly on the geographical origin of the speaker. The form -**aali** seems to be dominant in the centre of Maasina.

N.COMPL -aali, -aay

speaker from Toggere Kumba (Maasina centre)

mɔ war-aali

he   come-N.COMPL

'He hasn't come.'

speaker from Sah (Gimballa)

mɔ yiy-aay   kaaɗɔ

he   see-N.COMPL   Dogon

'He hasn't seen the Dogon.'

speaker from Soofara (Kunaari)

ʔɔ fiy-aay   suka ʔɔɔ

he   beat-N.COMPL   child   the

'He didn't beat the child.'

speaker from Duwansa (Haayre)

mi yih-aay   fay gɔɔtɔ

I   see-N.COMPL   even   one person

'I haven't seen anybody.'

The negation marker for middle voice verbs in the incompletive conjugation (N.M.INCOMPL) can have the form -**ataakɔ** or -**taakɔ**. The form -**ataakɔ** follows the verb form directly, as in the example below.

N.M.INCOMPL -ataakɔ

ɗam ⁿdiyam yar-ataakɔ

this water drink-N.M.INCOMPL

'This water can't be drunk.'

The initial vowel of this verbal marker is deleted when it follows a verb stem which is enlarged with a verbal extension, as in the following example.

N.M.INCOMPL -taakɔ

huuⁿde fuʔ dill-in-taakɔ   **kɔ wan-aa ʔanⁿdal makkɔ**

thing all move-CAUS-N.M.INCOMPL that be-NEG knowledge his

'Nothing can make a move without his knowledge.'

The negation marker for middle voice verbs in the completive conjugation (N.M.COMPL) has the form -**aaki**.

N.M.COMPL -aaki

ʔafɔ   **taɲɲ-aaki**   **waɲɲ-aaki**

Afo (firstborn) be ugly-INT-N.M.COMPL hate-INT-N.M.COMPL

'Afo is not ugly, and cannot be hated (so he's very adorable).' (Seydou 1991:246)

The two allomorphs of the negation marker for passive voice verbs in the completive conjugation (N.P.INCOMPL) are -**ataake** and -**taake**.

N.P.INCOMPL -ataake

mɔ wiʔ-ataake buba-ʔ   **ʔabada nan-t-ataake**

he say-N.P.INCOMPL Buba   never hear-REV-N.P.INCOMPL

'He isn't called Buba.'   'Never will it be heard again.'

                                              (Seydou 1991:270)

The form -**taake** is not attested but it is expected to follow verb stems with a -VC-extension. The negation marker for passive voice verbs in the completive conjugation (N.P.COMPL) is -**aaka**.

N.P.COMPL -aaka

ɓe kill-aaka   **kɔ woni**   **ley wurɔ**

they be interested in-N.P.COMPL what be-R.COMPL in the village

'They are not interested in what is in the village.'

The form of the past tense marker in combination with a negation marker can be either long or short. The past tense marker is short when it follows a negative conjugational suffix, e.g. N.COMPL + PAST: -aalinɔ. The past tense marker is long when it behaves as an infix, e.g. N.COMPL + PAST: -anooli (see section 5.5.1.2).

NEG with PAST

mɔ yiɗ-aa-nɔ   piy-ɛ-ɗaa

he   want-NEG-PAST   beat-P.R.COMPL-you sg.
'He didn't want you to be beaten.'

N.INCOMPL with PAST

ʔabada min   ʔanⁿd-ataa-nɔ

ever   we (excl) know-N.INCOMPL-PAST
'We would never have known.'

The variation of the negative completive marker is also present in the combination with the past tense marker. Both forms -aay and -aali can be followed by the short form past tense marker -nɔ. The long form of the past tense marker can also occur as an infix in the verbal marker -aali. The vowel of the past tense marker will assimilate to the [+ATR] vowel [i] resulting in the form -anooli. The variation could be geographically distributed, but several speakers use all forms.

N.COMPL with PAST

speaker from Sah (Gimballa)
ʔɔ   hɛɓ-aay-nɔ

he/she obtain-N.COMPL-PAST
'She hadn't got it'.

speaker from Sabare (Maasina centre)
ʔɔɔ   war-aali-nɔ

he/she-DEM come-N.COMPL-PAST
'That one hadn't come.'

speaker from Toggere Kumba (Maasina centre)
mi winⁿd-a-noo-li   Ɓataaki

I   write-N.COMPL-PAST-N.COMPL letter
'I hadn't written a letter.'

The negative middle completive marker is split up into two morphemes when it combines with the past tense marker.

N.M.INCOMPL *-ata..kɔ with PAST -nɔɔ

ɗam ⁿdiyam yar-atɔ-nɔɔ-kɔ
that   water   drink-N.M.INCOMPL-PAST-N.M.INCOMPL
'That water was not drinkable.'

The underlying shortened vowel [a] preceding the past tense marker -nɔɔ- has undergone assimilation to become [ɔ] because it occurs in a non-stressed light syllable. This assimilation does not take place in the example where the negation of the middle completive combines with the past tense marker.

N.M.COMPL *-a..ki with PAST -nɔɔ

mi jaab-a-noo-ki   mɔ-ʔ
I   answer-N.M.COMPL-PAST-N.M.COMPL   him
'I had not answered him.'

In the combination of the negative passive incompletive marker all the unstressed short vowels undergo assimilation again. The domain in which this vowel assimilation rule appears varies.

N.P.INCOMPL *ata..kɛ with PAST -nɔɔ

mɔ wiʔ-ɔtɔ-nɔɔ-kɛ   buba-ʔ
he   say-N.P.INCOMPL-PAST-N.P.INCOMPL   Buba-FG
'He will not be called Buba.'

The first two short vowels [a] of the underlying form of the negative passive incompletive marker combined with the past tense marker *-atanɔɔkɛ > -ɔtɔnɔɔkɛ have been assimilated to the vowel [ɔɔ] of the past tense marker, because they occur in a non-stressed light syllable.

N.P.COMPL *a..ka with PAST -nɔɔ

mɔ   haɓɓ-a-nɔɔ-ka
he/she   tie-N.P.COMPL-PAST-N.P.COMPL
'He had not been tied.'

The rule accounting for the assimilation of a short vowel in an unstressed syllable is optional, it does not occur in the above example, but it does occur in the following example with the same verbal markers.

N.P.COMPL *a..ka with PAST -nɔɔ

ɓe   kill-it-ɔ-nɔɔ-ka   **kɔ   woni   ley wurɔ**
they interest-REV-N.P.COMPL-PAST-N.P.COMPL what be-R.COMPL in   village
'They were again not interested in what is in the village.'

The vowel length of the negation marker -aa is reduced when the past tense marker -nɔɔ- is an infix. The only long vowel that can occur after the verb stem is found in the past tense marker in the penultimate syllable, preceding the second part of the negative passive completive marker.

5.5 FURTHER ANALYSIS OF THE CONJUGATIONAL SUFFIXES IN MAASINA

The hypothesis is that the conjugational suffixes are fused forms combining several morphemes in their underlying structure. This assumption is based on the fact that the same semantic properties recur in several conjugational categories and in different combinations. The semantic categories expressed by the verbal conjugational suffixes are listed below.

TENSE:	present:	point of reference is the moment of speaking
	past:	reference point is before the moment of speaking
VOICE:	active:	subject enacts V
	middle:	V affects the subject
	passive:	subject undergoes V
ASPECT:	completive:	event described in the clause is completed
	incompletive:	event described has not been completed
DISCOURSE:	general (non-relative):	utterance is not dependent on something else
	focalizing (relative):	indicating focus preceding V
	focus (verb focus):	contrastive emphasis on V
POLARITY:	affirmative:	event described is affirmed
	negative:	event described is denied
MOOD:	indicative:	event described has happened or will happen
	non-indicative:	someone wants the event described to happen
	imperative	command: wanted
	exhortative	wish: wanted and desired
	subjunctive	wanted and expected
	indefinite	wanted and unexpected

The forms that result from a combination of these semantic parameters are discussed in the previous sections 5.4.1-5.4.10. When the allomorphy of these portmanteau morphemes and the marking of tense (by the presence or absence of the morpheme -nɔ) is left aside, the following conjugational suffixes are left for further analysis.

	Active	Middle	Passive
Imperative singular	*u	*a	
Imperative plural	*εε	*εε	
Exhortative	*u	*ɔ	
Verb Focus	*u	*i	*a
Subjunctive	*a-ʔ	*ɔɔ-ʔ	*εε-ʔ
Incompletive	*an	*ɔtɔ	*εtε
Relative Incompletive	*ata-ʔ	*ɔtɔɔ-ʔ	*εtεε-ʔ
Indefinite	*uma	*ɔɔma	(—)
Negative Incompletive	*ataa	*ataakɔ	*ataakε
Completive	*ii	*ikε, *iima	*aama
Relative Completive	*i-ʔ	*ii-ʔ	*aa-ʔ
Negative Completive	*aali, *aay	*aaki	*aaka
Negative	*aa		

When the above schema is compared with the conjugational suffixes occurring in Kaceccereere (McIntosh 1984:156) several differences appear. The continuative imperative is not present in Maasina. If the continuation of an action is demanded, the imperative of the verb **heddaade** 'rest, remain' is used in Maasina. The command to continue doing something is expressed in the following way:

hedd-a   **yin-aade-ʔ**   **kedd-εε**   **jɔɔd-aade-ʔ**

remain-M.IMPsg swim-INF-FG   remain-IMPpl   sit-INF-FG

'Keep swimming.'   'Remain seated.'

The absence of the progressive and stative inflectional paradigms described by McIntosh is explained by the fact that they are not treated here as separate conjugations. Another difference is the fact that the negative conjugational suffix *aa (NEG) is not described as a separate conjugational suffix by McIntosh.

Following the principle "one form, one meaning", in the following sections an effort will be made to discover the morphological exponents which the different conjugational suffixes are composed of.

5.5.1 TENSE

The possible semantic notions of tense (see Reichenbach 1980, Comrie 1985) which are expressed in Fulfulde are the following:

Semantic distinctions of tense:

present: point of reference is moment of speaking
past: reference point is before moment of speaking

The present tense is the unmarked tense of the verb forms. The past tense is marked by the morpheme **nɔ**.

5.5.1.1 PRESENT

The present tense indicates that the point of reference of an utterance is the moment of speaking. The present tense is the unmarked tense in Fulfulde, it has no specific morphological exponent. The tense of the verb form must not be confused with the point in time when the action or process expressed in the verb (the event) takes place. The time of the event depends on the moment in time described by other temporal indicators present in the utterance, such as adverbs of time, or the context. In a sentence like **jaŋⁿgɔ mi waran** 'tomorrow I will come' something is said about a moment in the future: tomorrow, but the point of reference is still the present. Tomorrow is the future only in relation to the reference point which is the moment of speaking, i.e. the present.

5.5.1.2 PAST TENSE MARKER nɔ

The past tense marker changes the point of reference from the moment of speaking to a moment in the past. The past tense marker only combines with indicative verb forms, it does not combine with imperative, exhortative, subjunctive and indefinite verb forms. These conjugations can only refer to a wish (exhortative), a need (imperative), or an expectation (subjunctive, indefinite) that exists at the moment of speaking.

It is remarkable that the past tense marker is not found with the subjunctive conjugations. The subjunctive could be said to describe an indicative mood in combination with the locative when an action in progress is described. The subjunctive is described as an indicative mood because it signals that the event expressed by the verb is wanted in all other contexts. The subjunctive cannot be combined with the past tense marker, neither can other conjugations in a non-indicative mood. An expectation or desire of an event to have happened in the past is expressed by the R.INCOMPL in combination with the past tense marker.

The past tense marker has a special place in the morphology of the verbal conjugational suffixes. It is the only verbal marker with a clear form which has not fused completely with other verbal markers. The past tense marker has been isolated as a separate morpheme previously by several authors although under different names, e.g. preterite marker (Arnott 1970a:216, Sylla 1982:89), anteriority marker (McIntosh 1984:76).

The combination of the past tense marker with other markers often leads to different allomorphs of the verbal conjugational suffixes. The vowel length of the past tense marker is determined by the verbal conjugational suffix with which it combines. Here a summary on the usage and allomorphy of the past tense marker is given. In the following table the underlying forms of the conjugational verbal suffixes are listed, with and without the past tense marker.

		underlying form	with past tense marker		
1	IMPsg	*u	--		
	M.IMPsg	*a	--		
	IMPpl	*ɛɛ	--		
2	EXH	*u	--		
	M.EXH	*ɔ	--		
3	VF	*u	--		
	M.VF	*i	--		
	P.VF	*a	--		
4	SUB	*a-ʔ	--	(R.INCOMPL:	-an-nɔɔ-ʔ)
	M.SUB	*ɔɔ-ʔ	--	(M.R.INCOMPL:	-ɔtɔ-nɔɔ-ʔ)
	P.SUB	*ɛɛ-ʔ	--	(P.R.INCOMPL:	-ɛtɛ-nɔɔ-ʔ)
5	INCOMPL	*an	-an-nɔ		
	M.INCOMPL	*ɔtɔ	-ɔtɔ-nɔ		
	P.INCOMPL	*ɛtɛ	[--]		
6	R.INCOMPL	*ata-ʔ	-an-nɔɔ-ʔ		
	M.R.INCOMPL	*ɔtɔɔ-ʔ	-ɔtɔ-nɔɔ-ʔ		
	P.R.INCOMPL	*ɛtɛɛ-ʔ	-ɛtɛ-nɔɔ-ʔ		
7	N.INCOMPL	*ataa	-ataa-nɔ		
	N.M.INCOMPL	*ataakɔ	-atɔ-nɔɔ-kɔ (*atanɔɔkɔ)		
	N.P.INCOMPL	*ataakɛ	-ɔtɔ-nɔɔ-kɛ (*atanɔɔkɛ)		
8	INDEF	*uma	--		
	M.INDEF	*ɔɔma	--		
9	COMPL	*ii	-ii-nɔ		
	M.COMPL	*ikɛ, *iima	-i-nɔɔ-ma, -i-nɔɔ-kɛ, -ɛkɛ-nɔ		
	P.COMPL	*aama	-a-nɔɔ-ma		
10	N.COMPL	*aali, *aay	-aali-nɔ, -aay-nɔ, -a-noo-li		
	N.M.COMPL	*aaki	-a-noo-ki		
	N.P.COMPL	*aaka	-ɔ-nɔɔ-ka, -a-nɔɔ-ka		
11	R.COMPL	*i-ʔ	-u-nɔɔ-ʔ		
	M.R.COMPL	*ii-ʔ	-i-nɔɔ-ʔ		
	P.R.COMPL	*aa-ʔ	-a-nɔɔ-ʔ		
12	NEG	*aa	-aa-nɔ		

The underlying form of the past tense marker *nɔ has a short vowel. The long form -nɔɔ of the past tense marker is the result of its merger with an adjacent vowel in the underlying structure of the conjugational suffix.

The past tense marker has a long form when it follows the relative conjugations. At the same time the relative conjugations lose one vocalic time slot when they combine with the past tense marker. The most probable explanation is that the long vowel of the past tense marker -nɔɔ results from its merger with the lost vowel of the conjugational suffix. If this is so, the underlying structure of these forms also shows the past tense marker as an infix.

Long vowel -nɔɔ resulting from a merger in relative forms:

	without PAST	with PAST	
R.INCOMPL	*ata	*-at-nɔ-a	> -an-nɔɔ
M.R.INCOMPL	*ɔtɔɔ	*-ɔtɔ-nɔ-ɔ	> -ɔtɔ-nɔɔ
P.R.INCOMPL	*etɛɛ	*-etɛ-nɔ-ɛ	> -etɛ-nɔɔ
R.COMPL	*i	*-nɔ-i	> -u-nɔɔ
M.R.COMPL	*ii	*-i-nɔ-i	> -i-nɔɔ
P.R.COMPL	*aa	*-a-nɔ-a	> -a-nɔɔ

The vowel [u] which appears before the past tense marker in the relative compleltive is the active voice marker, its distribution shows a lot of similarity with the distribution of epenthetic vowels. The past tense marker has a long form when it behaves as an infix. A long vowel preceding the infix is usually shortened and a short vowel preceding the infix is deleted. It is possible that the past tense marker preceded this vowel and merged with it to form the long vowel [ɔɔ].

	without PAST	with PAST		
M.COMPL	*ikɛ	*(i)-nɔ-ikɛ	> -i-nɔɔ-kɛ	
M.COMPL	*iima	*i-nɔ-ima	> -i-nɔɔ-ma	
P.COMPL	*aama	*a-nɔ-ama	> -a-nɔɔ-ma	
N.COMPL	*aali	*a-nɔ-ali	> -a-noo-li	
N.M.COMPL	*aaki	*a-nɔ-aki	> -a-noo-ki	
N.P.COMPL	*aaka	*a-nɔ-aka	> -a-nɔɔ-ka	> -ɔnɔɔka
N.M.INCOMPL	*ataakɔ	*ata-nɔ-akɔ	> *ata-nɔɔ-kɔ	> -atɔnɔɔkɔ
N.P.INCOMPL	*ataakɛ	*ata-nɔ-akɛ	> *ata-nɔɔ-kɛ	> -ɔtɔnɔɔkɛ

Only the length in the form of the middle compleltive with the past tense marker -inɔɔkɛ cannot be explained in this way. The vowel length of -nɔɔ- in this conjugational suffix is perhaps caused by paradigmatic levelling. The past tense marker precedes the inverted subject pronoun when inversion occurs, i.e. in the subjunctive and relative conjugations.

PAST with pronominal subject affixes

ɗeɛ kulle kɔkk-an-noo-mi mɔ
these things give-R.INCOMPL-PAST him/her
'It's these things which I gave to him.'

han^{n}de kɔkk-etɛ-nɔ-ɗaa pooli
today give-P.R.INCOMPL-PAST-you birds
'It's today which you would have been given birds.'

ɗɔɔ naŋ^{n}g-u-noo-mi ɗɛ
here catch-R.COMPL-I them
'It's here that I had caught them'

wakkati hɔmɔ ⁿjog-i-nɔ-ɗaa

time   which   have-M.R.COMPL-PAST-you

'What time did you say it was?'

ɗɛɛ kulle kɔkk-a-noo-mi

these things give-P.R.COMPL-PAST

'It's these things that I had been given.'

kɛɛɲɛ naŋⁿg-ɛ-nɔ-ɗaa

yesterday   catch-P.R.COMPL-PAST-you

'It's yesterday that you had been caught.'

The vowel of the conjugational suffix is shortened when long, or deleted when short in inverted verb forms. The time slot of this lost vowel is attached to the past tense marker, resulting in a long form -nɔɔ-.

R.INCOMPL: *at-a   kɔkk-an-noo-mi   < *kɔkk-at-nɔ-a-mi

                 give-R.INCOMPL-PAST   give-R.INCOMPL-PAST-R.INCOMPL-I

R.COMPL: *i   naŋⁿg-u-noo-mi   < *naŋⁿg-nɔ-i-mi

                 catch-R.COMPL-I   catch-PAST-R.COMPL-I

P.R.COMPL: *a-a   kɔkk-a-noo-mi   < *kɔkk-a-nɔ-a-mi

                 give-P.R.COMPL-PAST   give-P.R.COMPL-PAST-P.R.COMPL-I

In the last example the active verb marker -u- intervenes between the stem and the past tense marker to prevent a sequence of three consonants.

The inverted verb forms that are followed by the subject -ɗaa 'you (sg.)' are thought to follow the same derivation as the verb forms with the inverted subject -mi 'I'. An additional rule of vowel shortening of the long vowel of *nɔ-ɔ in the penultimate syllable occurs when it precedes the last heavy syllable which is formed by the subject pronoun -ɗaa. The following verb forms show shortening of the form -nɔɔ- before -ɗaa.

P.R.INCOMPL: *ɛtɛɛ

kɔkk-ɛtɛ-nɔ-ɗaa   < *kɔkk-ɛtɛ-nɔ-ɛ-ɗaa

give-P.R.INCOMPL-PAST-you   give-P.R.INCOMPL-PAST-P.R.INCOMPL-you

M.R.COMPL: *ii

ⁿjog-i-nɔ-ɗaa   < *ⁿjog-i-nɔ-i-ɗaa

have-M.R.COMPL-PAST-you   have-M.R.COMPL-PAST-you

P.R.COMPL: *aa

naŋⁿg-ɛ-nɔ-ɗaa   < *naŋⁿg-a-nɔ-a-ɗaa

catch-P.R.COMPL-PAST-you   catch-P.R.COMPL-PAST-you

The change of the vowel [a] marking the relative passive completive to [ɛ] also occurs without the past tense marker in inverted forms.

The derivation of the long forms of the past tense marker -nɔɔ also shows that this marker has fused to a certain extent with the conjugational suffix. The frequent occurrence of vowel assimilation and vowel merger in the conjugational suffix, the many semantic parameters that are expressed with the conjugational suffixes (like mood, polarity, aspect, and discourse functions), and the place of the past tense marker (an infix might well be the result of a placement between two morphemes that indicate related meanings), support the hypothesis that the conjugational suffixes are fused forms of several morphemes. In the following section an initial investigation is described, answering the question which underlying morphemes express the semantic parameters that occur in the different conjugational suffixes.

5.5.2 VOICE

All the conjugational suffixes have different forms when they combine with active voice verbs, with middle voice verbs or with passive voice verbs (see section 5.2). The voice of a verb expresses something about the argument structure of that verb (see Arnott 1956, Kemmer 1993).

Semantic distinctions of voice:

active: subject is agent of V (action), patient of V (inchoative)
middle: subject is affected by V, subject can be both agent and patient
passive: subject is patient of V (action)

The hypotheses for the morphemes indicating voice is based on a comparison of all the conjugational suffixes combining with one voice. The following forms of the voice markers are postulated.

Voice markers:

	incompletive	completive
active	-	*u
middle	*ɔ	*i
passive	*ɛ	*a

Is it difficult to postulate underlying unitary morphemes for each voice. It is obvious that the vowels in the conjugational suffixes differ when they occur with another voice. The vowels characteristic for the different voices have to be differentiated for the completive and for the incompletive verb forms. Possibly there are suppletive morphemes expressing voice in the incompletive and completive conjugational suffixes. The markers for aspect and voice have merged in such a way that an internal reconstruction of the two elements within the conjugational suffixes is not possible.

5.5.2.1 ACTIVE

The hypothesis is that the morpheme *u is the marker for the active voice in the completive verb forms. The active voice is the unmarked voice in the incompletive verb forms. The conjugational suffixes of the active verb forms are generally shorter than those of the middle or passive verb forms. The active voice marker *u can occur in the surface forms of the following active voice conjugational suffixes.

Evidence for an active voice morpheme *u in COMPL and non-indicative CS:

Imperative singular	*u
Indefinite	*u-ma
Exhortative	*u
Verb Focus	*u
Relative completive + Past	*u-nɔɔ
Relative completive + inverted subject pronouns	*u-mi
id.	*u-ɗaa
id.	*u-ɗɛn
id.	*u-ɗɔn
Infinitive of active voice verbs	*u-de-ʔ

The active voice marker *u is often deleted whenever the syllable structure allows it. The active voice marker -u occurs preceding consonant initial morphemes and preceding the word boundary. The suggestion is that the active voice marker is fused with the completive marker *i in the negative completive conjugational suffixes. The voice marker is unmarked in the incompletive conjugational suffixes.

Active voice marker deleted or unmarked:

Imperative plural	*ɛɛ
Subjunctive	*a-ʔ
Incompletive	*an
Relative Incompletive	*ata-ʔ
Negative Incompletive	*ataa
Completive	*ii
Relative Completive	*i-ʔ
Negative Completive	*aali, *aay
Negative	*aa

The vowel [u] appearing in completive conjugational suffixes of active voice verbs is not epenthetic. The vowel quality [u] is not predictable, and the vowel can also occur without necessarily preventing an ill-formed consonant sequence or syllable structure.

5.5.2.2 MIDDLE

The hypothesis for the vowel marking the middle voice is based on the occurrence of the vowel *ɔ only and uniquely in the verbal conjugational suffixes of the middle voice verbs. The vowel *ɔ appears on the surface in the following incompletive conjugational suffixes.

Middle voice marker *ɔ in INCOMPL:

Exhortative	*ɔ
Subjunctive	*ɔɔ-ʔ
Incompletive	*ɔtɔ
Relative Incompletive	*ɔtɔɔ-ʔ
Indefinite	*ɔɔma
Negative Incompletive	*ataakɔ

In the completive conjugational suffixes of the middle voice, the vowel *i has to be postulated as the voice marker for completive verb forms.

Middle voice conjugational suffixes in COMPL:

Verb Focus	*i
Completive	*ikɛ, *iima
Relative Completive	*ii-ʔ·
Negative Completive	*aaki

The forms of the imperative are problematic in the present derivational system for the conjugational suffixes.

Middle voice conjugational suffixes in IMP and INF:

Imperative singular	*a
Imperative plural	*ɛɛ
Infinitive middle voice verbs	*aa-dɛ-ʔ

Also the morpheme -aa- marking the middle voice in infinitive forms seems to be an exception, for which there is no explanation yet.

5.5.2.3 PASSIVE

The marker for the passive voice marker is *ɛ in most conjugational suffixes. It occurs mainly in the incompletive conjugations, whereas in the completive the vowel [a] is more dominant. In the relative completive with inverted subject pronouns, the vowel [ɛ] is also present, just as in the infinitive. The following forms show the conjugational suffixes where the passive voice marker *ɛ is present in the surface forms.

Passive voice marker *ɛ in INCOMPL, COMPL, SUB and INF:

Subjunctive	*ɛɛ-ʔ
Incompletive	*ete
Relative incompletive	*etɛɛ-ʔ
Negative Incompletive	*ataake
Relative Completive with inverted subject pronoun	*ɛ-ɗaa-ʔ
Relative Completive with inverted subject pronoun	*ɛ-ɗɔn-ʔ
Infinitive of passive verbs	*ɛɛ-ɗe-ʔ

The passive voice marker is postulated with the form *a in most completive conjugational suffixes.

Passive conjugational suffixes in COMPL:

Verb Focus	*a
Completive	*aama
Relative Completive	*aa-ʔ
Negative Completive	*aaka

The vowel *a as the passive marker in the completive conjugations is hard to explain, equally difficult to explain is the fact that the completive marker *i never appears on the surface of passive completive forms. It is very unlikely that the passive completive marker *a could be derived from the passive voice marker *ɛ and the completive marker *i. The passive morpheme *a is considered to be a suppletive form occurring in the completive conjugational suffixes. The suppletive passive morpheme *ɛ occurs in the other conjugations.

5.5.3 ASPECT

Aspect describes the relation of the event described by the verb to the point of reference (see Comrie 1976, Reichenbach 1980, Robert 1991). There are two aspects in Fulfulde.

Semantic distinctions of aspect:

completive:	the event described in the clause is completed
incompletive:	the event described in the clause has not been completed

The completive aspect describes the fact that the action or process expressed by the verb (the event) is completed at the point of reference. In unmarked present tense verb forms this means that the event is completed at the moment of speaking. In verb forms which combine with the past tense marker this means that the event had been completed at the point of reference in the past.

The incompletive aspect indicates that the event described by the verb form is not completed at the moment of reference. In the unmarked verb forms this means that the event is not completed at the time of speaking. If the incompletive verb forms combine with

the past tense marker, this means that the event was not completed at the point of reference in the past.

5.5.3.1 INCOMPLETIVE

The incompletive is marked by the morpheme *at in the underlying structure of the incompletive conjugational suffixes. The first vowel of the morpheme often occurs in an unstressed light syllable. This is the reason why it is often deleted, for example, when it follows verbal extensions. The same unstressed short vowel will therefore also assimilate to a vowel in a preceding syllable. The incompletive marker *at is present in the underlying forms of the following conjugational suffixes.

Incompletive marker *at:

Active voice markers:

Incompletive	*an	< *at
Relative Incompletive	*ata-ʔ	< *at-a-ʔ
Negative Incompletive	*ataa	< *at-aa

Middle voice markers:

Incompletive	*ɔtɔ	< *at-ɔ
Relative Incompletive	*ɔtɔɔ-ʔ	< *at-ɔɔ-ʔ
Negative Incompletive	*ataakɔ	< *at-aakɔ

Passive voice markers:

Incompletive	*ɛtɛ	< *at-ɛ
Relative Incompletive	*ɛtɛɛ-ʔ	< *at-ɛɛ-ʔ
Negative Incompletive	*ataakɛ	< *at-aakɛ

The same morpheme *at can also be found in the underlying structure of relative incompletive forms with inversion, or in combination with the past tense marker.

5.5.3.2 COMPLETIVE

The morpheme expressing the completive aspect is *i. It is only and uniquely found in completive conjugational suffixes of active voice verbs and middle voice verbs.

Completive marker *i:

Active voice verbs		Middle voice verbs	
Completive	*ii	Verb Focus	*i
Relative Completive	*i-ʔ	Completive	*ikɛ, *iima
Negative Completive	*aali, *aay	Relative Completive	*ii-ʔ
		Negative Completive	*aaki

The completive morpheme *i is not found in the surface structure of the verb focus of active voice, and it is not found in the passive verb forms, where the combination of the passive and the completive is represented by the form *a.

Passive Completive *a:

Passive Verb Focus	*a
Passive Completive	*aama
Passive Relative Completive	*aa-ʔ
Passive Negative Completive	*aaka

The occurrence of the vowel [a] as the marker for the completive forms of passive verb forms can not be predicted from the combination of the passive voice marker *ɛ and the completive marker *i. For the moment a suppletive morpheme *a has to be postulated, indicating the combination of passive and incompletive.

Other completive conjugational suffixes:

Verb Focus	*u

The Verb Focus of active voice verbs is not formed with the completive marker, only the active voice marker *u appears to be present in this conjugational suffix.

5.5.4 DISCOURSE

In Fulfulde, the conjugational suffixes give information about the discourse. There are three different semantic categories which are linked to discourse that can be expressed in the indicative verbal conjugational suffixes (see Saeed & Sylla 1977, Fagerberg 1983, McIntosh 1984, Labatut 1986b, De Wolf 1986c, Valette 1988, Abu-Manga 1991).

Semantic distinctions of discourse:

general (non-relative):	utterance of V does not depend on something else
focalizing (relative):	indicating focus preceding V
focus (verb focus):	contrastive emphasis on V

The forms called the general or non-relative verbal conjugations by McIntosh (1984:128) are used when no special reference is made to any constituent in the discourse. This will generally signal that the utterance stands by itself. Such verb forms are typically used in direct speech utterances, and the "general" verb forms are also used to indicate a division of the text in a story. A new point of reference in a story is often indicated with the use of a "general" verb form. The events that follow the new point of reference are often put in the relative completive or the subjunctive, these are forms which are used in a narrative sequence.

The relative forms indicate that a constituent preceding the verb form is in focus. The focus may be attracted to a nominal or adverbial phrase in the same sentence. When the

relative forms are used as a narrative in a long text or speech, the focus is attracted to the whole text preceding the verb form with a relative conjugational suffix.

Contrastive focus is put on the verb itself when it combines with a conjugational suffix of the verb focus.

5.5.4.1 GENERAL

The general completive puts emphasis on the event which is described in the sentence, indicating "neutral" new information or a new point of view. The hypothesis is that the general forms are the unmarked forms of the indicative conjugational suffixes. There is no recurring morphological component in these suffixes. The general forms are not marked by a specific morpheme.

General conjugational suffixes:

	Active	Middle	Passive
Incompletive	*an	*ɔtɔ	*ɛtɛ
Completive	*ii	*iima, *ikɛ	*aama

The forms of the incompletive conjugational suffixes can be derived from the combination of the voice markers and the aspect markers. The middle and passive completive markers have forms that deviate by their addition of the elements -ma and -kɛ. from the relative completive conjugational suffixes. Possibly these morphemes have been added to disambiguate the forms from the relative completive conjugational suffixes.

5.5.4.2 FOCALIZING (RELATIVE)

The relative verb forms are generally characterized by final glottality and in most conjugational suffixes also by additional vowel length. The relative incompletive form has one additional vowel [a]. The hypothesis is that the morpheme indicating the relative incompletive consists of one vocalic time slot. Historically the vowel quality of the relative marker has been lost because it always assimilated to the other vowels in the conjugational suffix.

Focalizing morpheme: additional vowel and final glottality:

Active relative incompletive	*ata-ʔ
Active relative incompletive + PAST	*annɔɔ-ʔ
Active relative completive + PAST	*unɔɔ-ʔ
Middle relative incompletive	*ɔtɔɔ-ʔ
Middle relative incompletive + PAST	*ɔtɔnɔɔ-ʔ
Middle relative completive + PAST	*inɔɔ-ʔ
Passive relative incompletive	*ɛtɛɛ-ʔ
Passive relative incompletive + PAST	*ɛtɛnɔɔ-ʔ
Passive relative completive + PAST	*anɔɔ-ʔ

The lengthening of the vowel marking the relative forms occurs at the end of the conjugational suffix. The vowel of the past tense marker nɔ is lengthened when the verb form is focalizing.

The relative forms of the completive do not share a morphological similarity. The R.COMPL appears to be characterized by vowel shortening. M.R.COMPL and P.R.COMPL differ from the general forms in the lack of the morphemes -ke and -ma.

Relative of COMPL without nɔ: final glottality

	relative	general
Active Relative Completive	*i-ʔ	*ii
Middle Relative Completive	*ii-ʔ	*ike, *iima
Passive Relative Completive	*aa-ʔ	*aama

The derivation of the relative completive forms is not simply a matter of adding the underlying morphemes. The completive forms are very frequently used. The relative completive suffixes are shorter than the general forms of the same aspect and voice. Hypotheses on the underlying structures of the conjugational suffixes are written out in section 5.5.7.

5.5.4.3 FOCUSED (VERB FOCUS)

Verb focus puts emphasis on the verb itself. The conjugational suffixes expressing verb focus show a great similarity with the markers for the relative completive.

	verb focus	relative completive
active	*u	*i
middle	*i	*ii
passive	*a	*aa

The relative completive conjugational suffixes have one time-slot more than the verb focus. Perhaps there is no distinct underlying morpheme expressing verb focus, but it is the fact that only a voice marker is present, which characterizes the verb focus conjugational suffix. For the moment the morphological marking of the verb focus will be described as Ø (zero).

5.5.5 POLARITY

The number of affirmative verb forms is larger than the number of negative verb forms. The semantic distinctions in the polarity domain are the following:

Semantic distinctions of polarity:

affirmative: the event described is affirmed
negative: the event described is denied

The negative forms cannot express any information about discourse and mood. The form of the morpheme indicating negation is *aa (see Mohamadou 1989). The negation morpheme *aa can occur by itself in active voice verbs, describing a negation of a general state. In the

conjugational suffixes the negation morpheme *aa can only be preceded by the incompletive marker -at-. It can also occur with and without other time or aspect markers.

Negative morpheme *aa:

Active negative	*aa
Active negative incompletive	*ataa
Active negative completive	*aali, *aay
Middle negative incompletive	*ataakɔ
Middle negative completive	*aaki
Passive negative incompletive	*ataake
Passive negative completive	*aaka

The negative marker *aa is shortened in the presence of the long form of the past tense marker. This long form of the past tense marker is perhaps the result of assimilation between one of the (time slots of the) vowels of the negation marker and the vowel of the past tense marker nɔ.

5.5.6 MOOD

It seems useful to make a distinction between the indicative mood and the other possible moods that can be expressed by the conjugational suffixes in Fulfulde. The indicative mood describes events that are thought of as actually taking place, either in the past, present or future. The non-indicative moods express the idea that the speaker wants a certain event to happen. Non-indicative moods express desires, wants or wishes. The want can be modified in several ways. The desire can be plainly obvious such as when the imperative mood is used to indicate that the speaker wants the listener to do something. The exhortative mood is used when the speaker wants events to happen that are beyond his control, they are often used for demands to God or to life in general ("may it be so that"). The indefinite is used when an event is desired but when it is thought unlikely that it will actually happen.

The subjunctive mood also expresses a will or intention, especially when it can be translated as "in order to". The subjunctive expresses the fact that the action expressed in the verb is wanted, when it is used as a strong exhortation "X should do V". When used to describe uncompleted actions in a narrative sequence, the subjunctive also expresses the idea that the listener (or reader) is expected to do something. The subjunctive used in recipes describes an order of events that one is expected to do, as in the way described if one wants to make a mushy soup of vegetables and flour (McIntosh 1984:267-269). The subjunctive may look like the indicative conjugational categories describing events that have no relation to the will of the speaker. But, like all other non-indicative moods, the subjunctive describes events that are, in one way or another, wanted by the speaker. Examples of the uses of the subjunctive are given in section 5.4.2. The different moods that can be expressed in the conjugational suffixes of Fulfulde are repeated in the following table.

Semantic distinctions of mood:

indicative:		event has happened or will happen
non-indicative:	imperative (command)	event is wanted
	exhortative (wish)	event is desired
	subjunctive (expected)	event is wanted and expected
	indefinite (uncertain)	event is desired but not expected

The indicative moods are marked by the absence of aspect, either completive or incompletive, as described above. The non-indicative moods are marked by either Ø (zero), a vowel *a, or a suffix *ma marking each mood, combining only with voice markers.

	Active	Middle	Passive
Imperative	sg.: *u-ʔ pl.: *ɛɛ-ʔ	sg: *a-ʔ pl.: *ɛɛ-ʔ	
Subjunctive	*a-ʔ	*ɔɔ-ʔ	*ɛɛ-ʔ
Exhortative	*u	*ɔ	
Indefinite	*uma	*ɔɔma	

The imperative and the exhortative forms are very similar; the vowel *a in the imperative for the middle voice is difficult to explain. Perhaps it is the same vowel *a that is found in the subjunctive? The only difference between the middle voice exhortative and the imperative is found in the forms of the middle voice which are -ɔ and -a respectively.

The emphasis on a desire is often added by the adverb yɔ 'that, may it be so that'. The indefinite markers are morphologically marked by a morpheme *ma, derived from the adverb maa 'probably'. This morpheme -ma combines with the forms found in the active imperative and in the exhortative. The subjunctive is marked by the vowel *a and final glottality added to the voice markers, the active voice marker being unmarked in the subjunctive.

An effort to derive the conjugational suffixes from the proposed underlying verbal morphemes is described in the following section.

5.5.7 DEEP STRUCTURE OF THE CONJUGATIONAL SUFFIXES
Having formed hypotheses about the underlying forms for the morphemes expressing the different semantic exponents of the conjugational suffixes, theoretically, it should now be possible to derive the different conjugational suffixes from the sum of the morphemes present in each of the conjugations. The morphemes that are thought to occur in the deep structure of the conjugational suffixes are listed below[*].

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[*] The basis for this deep structure analysis has been worked out in an excellent paper written by Rossel (1986) for a Fulfulde Structure Course taught at the Department of African Linguistic at the Leiden University

Morphemes in the underlying structure of conjugational suffixes:

semantic category	form	
present tense	unmarked	
past tense	*nɔ	
active voice	INCOMPL: unmarked	COMPL: *u
middle voice	INCOMPL: *ɔ	COMPL: *i
passive voice	INCOMPL: *ɛ	COMPL: *a
incompletive aspect	*at	
completive aspect	*i	
general discourse	unmarked	
focused discourse	short vowel (assimilated to voice marker)	
focalizing discourse	vowel length	
affirmative	unmarked	
negative	*aa	
imperative mood	*u active, *a middle	
exhortative mood	*u active, *ɔ middle	
subjunctive mood	*a-ʔ	
indefinite mood	*(V)ma	
non-indicative mood	no possibility to combine with past tense	
	no possibility to combine with aspect marker	
indicative mood	possibility to combine with past tense and aspect markers	

The following table shows the proposed deep structure of indicative conjugational suffixes.

		1.	2.	3.	4.	5.	6.	7.	8.
INCOMPL	*an	at	-	-	-	-	-	-	-
INCOMPL + PAST	*annɔ	at	-	-	nɔ	-	-	-	-
R.INCOMPL	*ata-ʔ	at	-	-	-	-	V	-	ʔ
R.INCOMPL + PAST	*annɔɔ-ʔ	at	-	-	nɔ	-	V	-	ʔ
N.INCOMPL	*ataa	at	aa	-	-	-	-	-	-
N.INCOMPL + PAST	*ataanɔ	at	aa	-	nɔ	-	-	-	-
M.INCOMPL	*ɔtɔ	at	-	ɔ	-	-	-	-	-
M.INCOMPL + PAST	*ɔtɔnɔ	at	-	ɔ	nɔ	-	-	-	-
M.R.INCOMPL	*ɔtɔɔ-ʔ	at	-	ɔ	-	-	V	-	ʔ
M.R.INCOMPL + PAST	*ɔtɔnɔɔ-ʔ	at	-	ɔ	nɔ	-	V	-	ʔ
M.N.INCOMPL	*ataakɔ	at	aa	ɔ	-	-	kɔ	-	-
M.N.INCOMPL + PAST	*atanɔɔkɔ	at	aa	ɔ	nɔ	-	kɔ	-	-
P.INCOMPL	*etɛ	at	-	ɛ	-	-	-	-	-
P.R.INCOMPL	*etɛɛ-ʔ	at	-	ɛ	-	-	V	-	ʔ
P.R.INCOMPL + PAST	*etɛnɔɔ-ʔ	at	-	ɛ	nɔ	-	V	-	ʔ
P.N.INCOMPL	*ataakɛ	at	aa	ɛ	-	-	kɛ	-	-
P.N.INCOMPL + PAST	*atanɔɔkɛ	at	aa	ɛ	nɔ	-	kɛ	-	-
VF	*u	-	-	u	-	-	-	-	-
M.VF	*i	-	-	ɔ	-	-	-	-	-
P.VF	*a	-	-	ɛ	-	-	-	-	-
COMPL	*ii	-	-	u	-	i	-	-	-
COMPL + PAST	*iinɔ	-	-	u	-	i	-	nɔ	-
R.COMPL	*i-ʔ	-	-	u	-	i	-	-	ʔ
R.COMPL + PAST	*unɔɔ-ʔ	-	-	u	nɔ	i	-	-	ʔ
N.COMPL$_1$	*aali	-	aa	u	-	i	li	-	-
N.COMPL$_2$	*aay	-	aa	u	-	i	-	-	-
N.COMPL + PAST$_1$	*aaynɔ	-	aa	u	-	i	-	nɔ	-
N.COMPL + PAST$_2$	*aalinɔ	-	aa	u	-	i	li	nɔ	-
N.COMPL + PAST$_3$	*anooli	-	aa	u	nɔ	i	li	-	-
NEG	*aa	-	aa	u	-	-	-	-	-
NEG + PAST	*aanɔ	-	aa	u	nɔ	-	-	-	-
M.COMPL$_1$	*iima	-	-	i	-	i	ma	-	-
M.COMPL$_2$	*ikɛ	-	-	i	-	i	kɛ	-	-
M.COMPL + PAST$_1$	*inɔɔma	-	-	i	nɔ	i	ma	-	-
M.COMPL + PAST$_2$	*inɔɔkɛ	-	-	i	nɔ	i	kɛ	-	-
M.COMPL + PAST$_3$	*ɛkɛnɔ	-	-	i	-	i	kɛ	nɔ	-
M.R.COMPL	*ii-ʔ	-	-	i	-	i	V	-	ʔ
M.R.COMPL + PAST	*inɔɔ-ʔ	-	-	i	nɔ	i	V	-	ʔ
M.N.COMPL	*aaki	-	aa	i	-	i	ki	-	-
M.N.COMPL + PAST	*anooki	-	aa	i	nɔ	i	ki	-	-
P.COMPL	*aama	-	-	a	-	a	ma	-	-
P.COMPL + PAST	*anɔɔma	-	-	a	nɔ	a	ma	-	-
P.R.COMPL	*aa-ʔ	-	-	a	-	a .	V	-	ʔ
P.R.COMPL + PAST	*anɔɔ-ʔ	-	-	a	nɔ	a	V	-	ʔ
P.N.COMPL	*aaka	-	aa+	a	-	a	ka	-	-
P.N.COMPL + PAST	*anɔɔka	-	aa+	a	nɔ	a	ka	-	-

1: INCOMPL aspect, 2: NEG, 3: voice/aspect, 4: PAST, 5: COMPL aspect,
6: CS specific morphemes, 7: exceptional place of PAST at end CS, 8: FG.

The underlying morphemes which combine to form the different conjugational suffixes are thought to occur in a fixed order.

Order of markers in the conjugational suffixes:

incompletive	negation	voice	past	completive	other markers	final glottality
at	aa	u	nɔ	i	kɛ	ʔ
		i			kɔ	
		a			li	
		ɔ			ma	
		ɛ			ki	
					ka	
					V	

The conjugational suffixes of indicative verb forms are composed of (if present) the incompletive marker *at, followed by the negation marker *aa, followed by one of the voice markers, followed by the past tense marker, followed by a completive marker, followed by the discourse markers or by other possible additional morphemes to disambiguate the conjugational suffix. Sometimes, the past tense marker can also be found at the end of conjugational suffixes as is shown by the alternative forms -anooli and -aalinɔ of the past negative completive (N.COMPL + PAST).

The coalescence of the underlying morphemes in the following completive conjugational suffixes should have resulted in a short vowel.

R.COMPL	*i-ʔ	<	not *u-i-V-ʔ	but *i
M.COMPL₂	*ikɛ	<	not *i-i-kɛ	but *i-kɛ
M.COMPL + PAST₃	*ɛkɛnɔ	<	not *i-ikɛnɔ	but *i-kɛ-nɔ

Perhaps it is wrong to postulate both a morpheme marking voice and a morpheme marking the completive aspect in their underlying structure, especially since there are different suppletive morphemes marking voice in the incompletive and the completive conjugations. For the same reason it must be concluded that the relative is marked by a vocalic time-slot in the incompletive, but not in the completive. The conclusion is that the relative completive conjugational suffix only consists of the suppletive voice morpheme for the completive.

Possibly the markers kɔ, kɛ, ki, li, and ma have been added to disambiguate the many similar verbal conjugational suffixes. The marker -ma occurs in the middle and passive completive and in the indefinite, it is possibly related to the adverb maa 'possibly'. The marker -li is specific for the negative completive -aali. The markers with [k] only occur in the negative conjugational suffixes, the vowel is linked to voice and aspect: kɔ in the middle incompletive, -kɛ in the middle completive, -ki in the middle completive, and -ka in the passive completive. The etymological origin of these markers is not clear.

The non-indicative conjugations do not combine with aspect markers, the past tense marker, the negation marker, or discourse markers. The derivation of their forms involve

voice and mood markers only. The following table shows the proposed deep structure of the non-indicative conjugational suffixes.

		voice	CS specific	final glottality
IMP sg	*u	u	-	ʔ
M.IMP sg	*a	ɔ	a	ʔ
IMP pl	*εε	u	εε	ʔ
M.IMP pl	*εε	ɔ	εε	ʔ
EXH	*u	u	-	-
M.EXH	*ɔ	ɔ	-	-
INDEF	*uma	u	ma	-
M.INDEF	*ɔɔma	ɔ	ma	-
SUB	*a-ʔ	-	a	ʔ
M.SUB	*ɔɔ-ʔ	ɔ	a	ʔ
P.SUB	*εε-ʔ	ε	a	ʔ

There are two forms where the combination of these underlying morphemes would lead to the wrong vowel length in the surface form of the conjugational suffix.

M.IMP sg	*a	< not	*-ɔ-a-ʔ	but	*aʔ
M.INDEF	*ɔɔma	< not	*-ɔ-ma	but	*-ɔ-V-ma

The vowel [a] in the imperative singular could be a suppletive morpheme that is already marked for voice, so perhaps the voice morpheme *ɔ should not be reconstructed in the underlying structure of the middle voice singular imperative conjugational suffix. It is not clear why the first vowel in the middle voice indefinite conjugational suffix -ɔɔma is long.

The active form of the subjunctive is only correctly derived when its voice is unmarked, not containing the active voice marker for completive forms *u. It is not clear why this voice marker is present in the other forms of the non-indicative moods. Sometimes vowel length, mostly a result of merger of more than one vowel, is hard to explain. But these are not the only questions that should be answered to arrive at the correct forms of the conjugational suffixes.

The structures presented above are only an approximation of a possible underlying form, based on the semantic and morphological complexity of the conjugational suffixes. The proposed underlying deep structures do not result in the correct derivation of all the conjugational suffixes. However, it has been demonstrated that some semantic exponents of the verbal conjugation can clearly be linked to certain morphological forms. To arrive at a watertight derivation, historical information should also be taken into consideration. The comparative method, applied to Fulfulde and other Atlantic languages could also perhaps explain some of the verbal markers which are left unexplained here. Such research falls, however, beyond the scope of the present study.

5.6 SOME VERB-RELATED MINOR WORD CLASSES

The verb-related minor word classes which are described here are copulas, modal predicates, adverbs, ideophones, and a number of particles. These word classes have in common the fact that they can not be referred to by a nominal concord. Copulas can function like a verb, being part of the predicate. Modal predicates are fixed conjugated verb forms that function as adverbs. Adverbs modify the verb. Ideophones are a specific type of adverbs. The term particle is used here in its most general sense, small uninflected words that can express pragmatic and discourse-related functions. The particles which are distinguished here are the conjunctions, the question particles, and topic markers. There is overlap between these word classes, a word can sometimes be classified in different word classes. For example, the relation between conjunctions and topic markers is explicitly present in the word **kaa**, as a conjunction it is translated as 'but', as a topic marker it is translated as 'however'.

5.6.1 COPULAS

There are two words in the Fulfulde of Maasina that occur in non verbal sentences connecting two noun phrases that can be called copulas. The copula of identity **yɔ** connects two noun phrases that describe the same thing or person. The locative copula **ʔana** connects two noun phrases of which the last noun phrase describes a location. But both copulas can also occur in verbal sentences, acting as auxiliaries to modify the verb. In the following two sections the use of the copulas in both non-verbal and verbal sentences will be exemplified.

5.6.1.1 THE COPULA OF IDENTITY yɔ

The copula **yɔ** indicates a relation of identity. A typical use of the copula **yɔ** is to equate two noun phrases with each other. It has an identificational as well as an attributive use.

> **taasawal   lidʼdʼi   yɔ   buudʼi   capandʼe   jɔy**
> plate   fishes   COP coins   tens   five
> 'A plate of fishes is 250 CFA.' (Tioulenta 1980a:19)

The copula of identity can only appear between two noun phrases. When the subject is a pronoun, i.e. a personal pronoun or a class concord, the copula **yɔ** cannot occur. The pronominal subject and the nominal predicate are juxtaposed to each other in a non-verbal sentence which expresses identity between the pronominal subject and the nominal predicate.

> **mɔ ɓii ʔusumaanu**   'She is the child of Usman.'
> **mɔ durɔɔwɔ**   'He is a herdsman.'
> **dʼum pullɔ**   'It is a Pullo.'
> **ʔa jɔm-ʔanⁿdal**   'You are knowledgeable.'

The copula **yɔ** can also connect noun phrases that have been extended with relative clauses.

mɔ ⁿjii-cɗaa   fuu yɔ jaaw-n-ii-cɗɔ

who see-R.COMPL-you all   COP be fast-CAUS-M.R.COMPL-CL

'Every one that you see is hasty.'

The copula of identity is also used in pseudo cleft sentences.

kɔ yicɗ-i   faamudɛ   yɔ yalla mɔ hokk-ii   cɗum

what want-R.COMPL understand-INF COP whether he$_1$ give-COMPL him$_2$

laawol   faa fucɗ-a   lanⁿdiⁿdaaⁿdɛ-ʔ

time/occasion for begin-SUB consult

'What he wanted to understand was whether he was given an occasion for getting advice.' (Tioulenta 1980a:11)

A cleft construction with the copula yɔ is typical in sentences with an exhortative verb form.

yɔ ʔalla wuur-n-u   mɔ

COP God live-CAUS-EXH him/her

'That God make her/him live'.

The word yɔ in an exhortative sentence can be omitted, but the word yɔ is not omitted in this fixed expression pronounced when children are born or given their name. The word yɔ appears to emphasize the strength of the wish expressed in the sentence.

5.6.1.2 LOCATIVE COPULA ʔana

The locative copula ʔana expresses the location of an entity somewhere. In non-verbal sentences it has to be followed by a locative constituent, i.e. by a locative noun or by a locative prepositional phrase.

ⁿdiyam ʔana ley mayrɛ   sɛwrɛ ʔana burgu

water LOC in it   herd LOC inner Niger-Delta

'Water is in it.'   'The herd is in the inner Niger-Delta.'

The locative copula can also combine with the adverb nii 'thus, just so' to form presentational predicates, as the compound word ʔannii 'here is'. The locative copula ʔana can also be found in the word ʔannaa 'there is'.

ʔana with nii 'right here'   ʔana with naa 'around here'

dɛwtɛrɛ ⁿdɛ ʔan-nii   nagge ʔan-naa

book the LOC-just   cow LOC-just-NEG

'Here is the book.'   'There is a cow'

The words ʔannii and ʔannaa can be compared in function with the French words "voici" and "voilà". They are used to present an item, which requires that the object presented is

within the visual field of the speaker. The etymological origin of the second part *naa in the word ˀannaa is not obvious. Possibly the form -naa here is a contraction of the word nii 'just' and the negative conjugation -aa-. In other words, ˀannaa 'there is' is perhaps derived from the negation of ˀannii 'right here, exactly here'. The proposal for the etymology of ˀannaa gives the paraphrase "not right here, not exactly here", which is a possible paraphrase for something that must be within the visual field of the speaker since it is presented but which is not exactly in the same place as the speaker since it is "there" and not "here".

The locative copula ˀana expressing location can only appear after a nominal subject, it precedes a locative phrase. The locative copula ˀana cannot occur when the subject is pronominal. Special locative forms of both the personal pronouns and the subject concords are used in locative non-verbal sentences.

ˀɔmɔ bamakɔ	'He is in Bamako.'
ˀeɓe burgu	'They are in the Inner Niger-Delta.'
ˀeⁿdu to	'It is there.'

The pronominal subject in a non-verbal sentence expressing location is formed by the subject pronoun which is preceded by a marker *ˀe.

The locative copula ˀana and its derived forms can be used to modify subjunctive and relative completive verb forms. The combination of the locative marker and the subjunctive has been treated in the literature as a separate progressive conjugation. When this locative precedes a verb stem conjugated with subjunctive, the verb phrase expresses the ongoing occurrence of the action or process expressed by the verb at the moment of speech.

Forms of ˀana modifying subjunctive verb forms:

nay ˀan-nii tacc-it-a   maayɔ
cows LOC-just cut-REV-SUB river
'(Look) the cows are crossing the river.'

laabi ɗiɗi ley hitaaⁿde nay ˀana tacc-it-a   maayɔ
times two in year   cows LOC cut-REV-SUB river
'Two times a year the cows cross the river.'

The first sentence can only be truthfully uttered if the cows which are crossing the river are actually in the proximity of the speaker. The meaning of ˀannii as a verbal modifier is very much the same as its meaning in a non-verbal sentence. The locative marker ˀana in the second sentence mainly indicates that the action takes place over a longer period of time, a notion more often expressed by locative markers in different languages of the world. The incompletive meaning of the subjunctive marker -a indicates here that the action referred to (the crossing of the river by cows) is expected and habitual (a habit is an expected recurring event).

Likewise the locative marker modifying a relative completive verb form has not been described as such, but as one discontinuous morpheme which is called the stative.

ʔana modifying relative completive verb forms:

mootti ʔana heewi yimɓe

Mopti LOC have many-R.COMPL people

'Mopti has many people' -or- 'Mopti is filled with people.'

koreeji maa ʔana ⁿdeen-ii ?

family members your LOC be fine-M.R.COMPL

'Is your family doing fine?'

The fact that the verbal constructions with the locative in the above phrases has been called the stative conjugation follows from the particular semantic structure of the verb roots rather than from the combination of the meaning of the locative marker and the relative completive verbal marker. Verbs like **heewde** 'fill, be(come) many' and **reenaade** 'be(come) fine' are inchoative verbs: they indicate a point of change from one state into another state. A more literal translation of the verb **heewde** could be paraphrased as 'become full' indicating a change of state from being little or being empty to the state of being many or being filled. A more literal translation of the verb **reenaade** could be paraphrased as 'become fine' indicating a change of state from not fine, unprotected, ill etc. to the state of being fine, i.e. protected, healthy etc. To describe the fact that the change of state has occurred, the verb combines with the completive marker. To describe the fact that the state resulting from the completion of the change of state is continuing, the verb is modified with the locative marker. The locative marker again only indicates that the action, state or process expressed in the verb form (the event) takes place over a longer period of time. It is true that the locative marker is often used in combination with these inchoative verbs, but the locative marker can also be found to express duration in combination with verb forms that are not based on inchoative verb roots.

ʔana modifying **filaade** 'tell' (non-inchoative verb):

taw-ii taaniraaɓe mum ʔana pil-ii ɗum, taal-an-a taalol

find-COMPL grandchildren his₁ LOC tell-M.R.COMPL him₁ tell-DAT-SUB story

'It's so that his grandchildren have continuously told him that he should tell a story.' (Tioulenta 1980a:13)

The locative marker in the example above emphasizes the fact that the grandchildren have constantly occupied the grandfather by asking him to tell stories constantly, all the time, and repeatedly, which is also expressed elsewhere in the text.

ʔana modifying wɔnnɔɔ. 'was':

mɔ ʔitt-i	teŋⁿgaade	makkɔ	ʔana wɔn-nɔɔ	dow	hɔɔre	makkɔ
he take off-R.COMPL	hat	his	LOC be-R.COMPL-PAST	on	head	his

'He took off his hat that was (all the time) on his head.' (Tioulenta 1980a:10)

The locative ʔana in the above sentence describes the fact that, before putting his hat off, it had been on his head for a long period of time. The locative ʔana indicates duration of the event expressed in the verb which it modifies.

The locative meaning of the copula ʔana recurs especially in the form ʔannii both in its use in non-verbal sentences as in its use as a verbal modifier. The word ʔana is polysemic, it can indicate both location and duration.

In earlier studies of Fulfulde, the similarity of the locative and the durative has been noticed, but the locative copula ʔana in non-verbal sentences was not identified with the ʔana found in verbal sentences preceding the verb in the progressive and stative conjugation. Ard (1979) is the first to describe these conjugations as periphrastic verbal constructions developed from locative expressions.

There are several indications which suggest that the word ʔana indicating both location and duration should be treated as one polysemic word. In the first place, the forms of this marker are completely identical in all contexts. Secondly, the locative and the durative meaning are related. In non-verbal sentences the copula ʔana indicates the presence of the subject at a location at the time of speech. In verbal sentences the ongoing process or state takes place at the time of speech or at the time of reference when the verb form contains the past tense maker nɔ. Although the spatial and locative meaning of ʔana is more emphasized in non-verbal sentences, and the temporal or durative meaning is more focused in verbal sentences, both uses of ʔana as a copula and as a verbal modifier indicate a unity of time and place.

5.6.2 MODAL PREDICATES

Modal predicates are conjugated verb forms that occur in adverbial phrases, and have a function similar to the functions of adverbs: modifying the verb. The meaning of these modal predicates is also similar to the meanings which are typical for adverbs. Modal predicates can say something about time, place or manner (mood). In Fulfulde, the modal predicates occur sentence initially. They are often formed from verb stems describing temporal or spatial processes.

ɓɔɔy-	'last, take long'	ɓooyi	'a long time ago'
		ɓooyii	'long time ago, it has taken some time'
		ɓɔɔyaa	'not for long'
		ɓɔɔymaa	'for a long time' [will probably last]
		ɓɔɔyataa	'it won't take long, right away, in a moment'

taw-	'find'	tawetɛ	'may be'
		tawii	'it is so that' [lit. it has been found that]
		tawi, tawii	'it is so that'
		tawa	'it is so that' [lit. it is habitually found that]
ʔad-	'go first, lead'	ʔadan	'before, beforehand'
hɛdd-	'remain'	hɛddɔ	'then, and it happened that'
laat-	'become'	laatɔɔ	'when'

Adverbial clauses occur either sentence initially or sentence finally, and so do these modal predicates which function as an adverbial clause. The use of these modal predicates is exemplified in the following sentences.

| mi yahan ɓɔɔyataa | 'I will leave in a moment.' |
| tawetɛ mɔ waran | 'May be he will come.' |

The words for night **jɛmma** and afternoon **ɲalɔɔma** are etymologically conjugated verb forms that can occur in adverbial phrases. They have become nouns because they can be referred to with the concord of the 'O class. Etymologically the two words are formed from a verb stem that combines with the indefinite conjugational suffix -ma.

| jɛŋⁿg- | + | -ma | -> | jɛmma | 'night' | 'O class |
| ɲal- | + | -ɔɔma | -> | ɲalɔɔma | 'afternoon' | 'O class |

The word **jɛmma** is based on the root of the verb **jɛŋⁿgudɛ** 'be late in the evening' from which the noun **jɛŋⁿgɔ** **ⁿgɔ** 'the evening' is derived. The combination of this verb root with the active voice marker of the indefinite conjugational suffix -ma describes the period that is likely to follow the evening: the night. The word **ɲalɔɔma** 'afternoon' is based on the same stem as the verb **ɲalwudɛ** 'to be in zenith (of the sun), to be midday'. The combination of this verb root with the middle voice marker of the indefinite -ɔɔma describes the period that is likely to follow midday: the afternoon. The etymology of these words has become opaque, mainly because the indefinite conjugational suffix is not used frequently. Thus the word class of these adverbs has been reinterpreted: they are classified as nouns. As a result they can be referred to with the concord of the 'O class, a class where all nouns without a proper noun class suffix are found (like e.g. loan-words).

5.6.3 ADVERBS
Adverbs can form an adverbial phrase modifying the verb. Adverbials are words that express how, where, when or why the action or process described in the main verb of the sentence takes place. Thus by their meaning, adverbs can be divided into adverbs of manner (how), adverbs of time (when), and adverbs of place (where), and adverbs of reason (why). In the syntactic structure of a sentence the information of verb modification is expressed by adverbial phrases. Adverbial phrases can consist of an adverb, an adverb phrase, a noun phrase, or a prepositional phrase (Crystal 1991:11).

Adverbial phrases:

adverb:	**keeɲɛ mɔ wari**	'Yesterday he came.'
adverb phrase:	**jooni jooni mɔ wari**	'Just now he came.'
noun phrase:	**yɔntɛrɛ ɓettii^{n}dɛ mɔ wari**	'Last week he came.'
prepositional phrase:	**hakku^{n}dɛ naa^{n}gɛ mɔ wari**	'At noon he came.'

This study limits itself to the description of word formation. Therefore only adverbial words, whose occurrence is syntactically restricted to adverbial phrases, are discussed here. There are also some conjugated verb forms that can occur in adverbial phrases. These modal predicates have been discussed in the previous section. The class of words commonly called adverbs are words expressing time, place or manner. Ideophones are a special group of adverbs, they are discussed in section 5.6.4 .

The class of adverbs contains a limited number of words. As stated above, adverbs can be divided on the basis of their meaning into adverbs of place, time and manner. They will be discussed here in that order.

Adverbs of place

The word formation of the adverbs of place is very similar to the word formation of demonstratives, both in form and meaning. Actually there are only four true adverbs of place that take the same derivatives as the demonstratives.

ga	'here, right here'
gaa	'here, right here (deictic)'
ɗɔ	'here, around here'
ɗɔɔ	'here, around here (deictic)'
ɗɔɔn	'here, around here (referential)'
to	'there, at that place'
too	'there, at that place (deictic)'
toon	'over there, at that place in question (referential)'
heen	'in it, in there'

The adverb **ga** 'right here' (within eyesight) does not combine with the referential marker, possibly because the referential marker proto-typically refers to things that you can't see, but which you have talked about. The adverb **heen** only combines with the referential marker, possibly because when something is within something else, it can't be seen: a proto-typical situation for the use of the referential marker.

war <u>ga</u>	'Come here.'
taaniraaɓɛ maa tawan ^{n}du <u>ɗɔɔ</u>	'Your grandchildren will find it here.'
maayɔ walaa <u>toon</u>	'There is no river over there.'
mɔ waɗi <u>heen</u> haakɔ	'She has put leaves in it.'

The CVVC forms **ɗɔɔn, toon, heen** often are shortened to a CVC form **ɗɔn, ton** and **hen**, especially when they are not in a stressed position. This is a further indication that the

CVVC syllable is a marginal structure in Maasina. A few adverbs of place are derived from compounds which contracted into single words, such as the words for east and west.

hirnaa^{n}ge, hirna	'west'	< hiir-	'be evening'	+	naa^{n}ge 'sun'
funnaa^{n}ge, funna	'east'	< fuɗ-	'rise'	+	naa^{n}ge 'sun'

These words are derived from the verb stems hiir- 'become evening' and fuɗ- 'rise' and the noun naa^{n}ge 'sun'. The word hirnaa^{n}ge describes where the sun is in the evening: in the west. The long vowel [ii] of the morpheme hiir- is shortened in the derivation from *hiirnaa^{n}ge because it occurs in an unstressed CVVC syllable and to avoid this less preferred CVVC syllable structure. The word funnaa^{n}ge describes where the sun rises: in the east. The final [ɗ] of the stem fuɗ- 'rise' is assimilated to the initial [n] of the word naa^{n}ge 'sun' in the form *fuɗnaa^{n}ge because an obstruent like [ɗ] cannot occur in syllable final position.

Normally, constructions compounding a verb stem with a noun remain in the class of nouns like the compound mɔ tiiɗa-hɔɔrɛ 'he is a stubborn person' (lit. hard of head). Probably because of their spatial meaning, the words hirnaa^{n}ge 'west' and funnaa^{n}ge 'east' and their abbreviated forms hirna and funna for east and west changed into adverbs, they can no longer be referred to with a class concord. Different words for north and south remain nouns and can be referred to with a concord. There are different words that are translated as north and south. They are all nouns, their primary meaning denotes what is in the north or south rather than the direction itself.

saahal ^{n}gal	'north' (lit. desert) [Maasina]
ɓaleeri ^{n}di	'south' (lit. black land) [Maasina]
soɓɓule ɗe	'north' (lit. corners) [Duwansa]
hɔɔrɛ huɗɔɔrɛ ^{n}de	'south' (lit. head of grass) [Duwansa]

Words for east and west are the same in all dialects, whereas north and south mostly describe landscape features that happen to be in the north or the south of a certain dialect area.

Adverbs of time

Many adverbs of time can also occur with the referential marker -n, and there is some variation in the vowels which seems to correspond to regional differences. These words are not nouns even though some of the translation equivalents may suggest otherwise; these words cannot be referred to with a nominal concord.

jaŋ^{n}gɔ		'tomorrow'
han^{n}de		'today'
keeɲe	keeɲen	'yesterday' [Maasina]
keeɲa	keeɲan	'yesterday' [Haayre]
hikka		'this year'
mawuuri		'next year'
mawuurti		'in two years'

tem^mbu		'just, only a moment ago'
jooni	joonin	'immediately'
naane	naanɛn	'just, only a moment ago'
ʔabadaa		'ever'
haŋki	haŋkin	'yesterday evening'
kasa		'again' [Haayre]
kasi	kasin, kasen	'again' [Maasina]
rɔwani, rawani	rawanin,	'last year'
rɔwtani	rɔwtanin, rawtanin, rɔwtanɛn	'two years ago'

In Maasina the word keɛɲe 'yesterday' ends in the vowel [ɛ], in Haayre the word ends in a vowel [a], keɛɲa 'yesterday'. In Haayre a final vowel [a] is found in the word kasa again, whereas in Maasina this word ends in [ɛ] or [i], a variation that is also found in the word rɔwtanin, rɔwtanɛn 'two years ago'. The first vowel in rowani 'last year' can change to [a], because unstressed short vowels often assimilate to the vowel in the next syllable. The impression is that these vowel changes do not indicate a difference in meaning, however the absence or presence of the referential marker does.

The referential marker changes the time of reference, e.g. rawani-n 'last year + REF' refers to the year before the moment of reference, i.e. 'last year' or 'the year before'. The time of reference is then indicated by the verb in the sentence and by the context. No forms with the referential marker -n are found for some adverbs of time. The word jaŋⁿgɔ is not found ending in -n in the data, instead the word can be used followed by a possessive pronoun jaŋⁿgɔ mum to express 'the next day' (after the indicated time described in the context).

Possibly the adverbs jaŋⁿgɔ 'tomorrow' and hanⁿde 'today' are historically derived from nouns in the NGO class and in the NDE class respectively. Syntactically, these words cannot combine with nominal modifiers. These words can only combine with the completive forms of the verb faɓɓ- 'pass time' and *heecc- 'be elder' to form adverbial clauses denoting the day after tomorrow and the day before yesterday respectively. The verb *heecc- 'be elder', possibly extended with the reversive extension -it- is often realized as either heec- or hecc- to avoid the less preferred CVVC syllable.

faɓɓi jaŋⁿgɔ	'day after tomorrow'
faɓɓiti jaŋⁿgɔ	'in three days'
faɓɓititi jaŋⁿgɔ	'in four days'
hecci keɛɲe	'day before yesterday'
hecciti keɛɲe	'three days ago'
heccititi keɛɲe	'four days ago'

The words rɔwani 'last year', rɔwtani 'two years ago', mawuuri 'next year' and mawuurti 'in two years from now' are considered to be adverbs of time because of their temporal meanings and because of the possibility of adding the referential marker -n to

them. The etymology of the word **mawuuri** could be related to the adverb of manner **maa** 'probably' and the verb stem **wuur-** 'live', paraphrasing the next year as the time one is "probably still alive". The verbal origin of these adverbs is also indicated by the presence of the verbal extension -t- 'back, again' in these adverbs.

Adverbs of manner
Of all the adverbs, the adverbs of manner, also called modal adverbs, are the most closely related to the verb forms. First the modal adverbs will be listed, then their influence on the verb will be discussed.

kanaa	'obligatorily'	**maa**	'probably'
sɔnaa	'obligatorily, except'	**meere**	'nothing, for nothing'
sinaa	'obligatorily, except'	**sanne**	'much, very, too much'
wɔta	'don't'	**seeɗa**	'a bit, little'
fati	'don't'	**tan**	'only, just'
pati	'don't'	**yeru**	'like'
law	'quickly'	**kala**	'each'
fuu	'all, every, completely'	**nii**	'thus, this is how'
nɔ	'as, like'	**nɔɔn**	'thus, so'
hɔnɔ	'as, like'	**nɔn**	'this is how'

The modal adverbs co-occur with one particular conjugational category. The modal adverb **maa** 'probably' combines with the verb in verb focus, as in the following example.

maa mi war ka...	'I (probably) will come but...'
maa taw	'probably'

The first sentence above describes a situation where the subject referred to cannot say no, he or she is expected to come, but rather would prefer not to. Modal adverbs expressing obligation are **kanaa, sɔnaa, sinaa**. The subjunctive co-occurs with adverbs which express an obligation.

kanaa mi wara	'I must come.'
sanaa mɔ jɔɔɗɔɔ	'He should sit down.'

There are a number of modal adverbs like **hɔnɔ, nɔ, nii**, indicating vaguely how something is done, translated as 'thus'. The verbs in sentences where these adverbs occur, combine with the circumstantial extension -ir-. The adverb **nii** 'thus' in the following example requires the circumstantial extension.

nii	gɔlle	fecc-ir-tee		ley	maasina
thus	work	divide-CIRC-P.R.INCOMPL		in	Maasina

'This is how the work is divided in Maasina.'

The adverbs **fati, pati, wɔta** are geographically distributed variants of the same word. These adverbs form the negation of the subjunctive.

fati ᵐbɔy-aa

don't cry-SUB-you (SPro)

'You should not cry.'

Not all adverbs of manner require a specific verbal conjugation as shown in the following examples.

war law	'Come quickly.'
seeɗa teew ɲaametɛɛ	'Meat is only scarcely eaten.'
mi yiɗu maa sanne	'I love you very much.'
ɓe ʔeggan tan tewtude huɗɔ	'They only migrate to find grass.'

There are probably more adverbs of manner than those cited here, but these are the most frequent ones.

5.6.4 IDEOPHONES

Ideophones are a special type of adverbs. In Fulfulde they will always receive the main stress of the sentence, i.e. they are always in focus. Their phonological shape differs from that of other words in Fulfulde in that any consonant can occur syllable finally in ideophones whereas elsewhere in the language a syllable final consonant has to be sonorant. The ideophones are semantically restricted to co-occur with a certain verb or adjective. The following sentences show some ideophones and the words which they modify.

pɛp	'very little'	**heewaa pɛp**
		'Only a very small quantity, not very much.'
nur	'very straight (nose)'	**dɛbbɔ koofol makkɔ ʔana darii nur**
		'The woman, her nose is very straight.'
jɛr	'perfect (Fulfulde)'	**ʔɔmɔ haala fulfulde jɛr**
		'He speaks Fulfulde clearly, with ease.'
		sɔ ʔa ɓɔɔyan ʔa waawa fulfulde jɛr
		'If you continue, you might speak perfect Fulfulde.'
coy	'very red'	**ʔana wojji coy**
		'It is very red.'
buy	'very yellow'	**ʔana ʔooldi buy**
		'It is very yellow.'
kirim,	'very black'	**gitɛ ɓaleeji kirim**
krim,		'very black eyes'
kurum		
paca	'very white'	**ʔana rawni paca**
		'It is very white.'

puka	'very grey'	ʔana furɗi puka
		'It is very grey.'
dus	'very bad (smell)'	ʔana luubi dus
		'It smells very bad.'
fuŋa	'very nice (smell)'	ʔana ʔuura fuŋa
		'It smells very nice.'

There are a number of ideophones which are onomatopoeic. They can deviate even more from the phonological system. The vowel [ə] is not used to distinguish meaning in Fulfulde, it occurs in the ideophone used to depict the sound of rumbling thunder.

karrr	'sound of lightning striking'
kaw	'sound of lightning striking'
gədədədə	'sound of thunder rumbling'
gududu du	'sound of thunder rumbling'

All ideophones have a very expressive value. They are used to brighten up stories. Ideophones can be used to increase the suspense in a story and startle the listeners. The use of an ideophone mostly causes a smile on the face of the listeners.

5.6.5 QUESTION PARTICLES

There are a few question particles in Fulfulde, they are placed either in initial or final position of a sentence. They are used to signal yes-no questions.

naa, na	midɔ waawi fijude ʔɛ maa na ?
	I+LOC can-R.COMPL play-INF with you qp
	Can I play with you?

kori	kori ⁿgeeⁿdi ⁿdii ʔana reenii ?
	qp village the LOC be well-M.R.COMPL
	Is everything all right in the village?

Both question particles seem to be derived historically from modal predicates. The question particle **naa** is derived from a conjugated verb form of the verb stem **wɔn-** 'to be' conjugated with the negative marker -**aa**: *wanaa, paraphrased as "isn't it?". It is added as a question tag to the yes-no question. It is not obligatory, the main indication for the yes-no question is its intonation pattern.

The question particle **kori** is also added at the beginning of yes-no questions, it also carries a meaning of "hopefully". The final vowel [i] could be the relative completive conjugation. The addition of this question particle indicates that one hopes and expects the answer to be yes. Its etymology is unclear.

5.6.6 CONJUNCTIONS

Conjunctions are defined as words that connect sentences (Crystal 1991:73). The following words are classified as conjunctions in Fulfulde.

dee	'further, thereupon, subsequently'
faa	'untill, in order to'
sabi, sabu, saabi, saabe, saabaabu	'because'
sɔ, se, si, sa	'when, if'
yalla	'whether, if'
ʔila, gila	'since'
kaa	'but'
kammari	'because'
nɔ	'like'
ⁿgam	'therefore, to the benefit of'

In Fulfulde the conjunctions have to be bound to a clause with which they form an adverbial clause expressing how, when, where or why the action in the connected clause happened. The conjunctions occur in adverbial clauses functioning as sentence connectors in the following examples.

dee 'further, thereupon, subsequently'

baaba makkɔ daɲ-i   jawdi sanne dee,
father   her   reap-R.COMPL wealth much   subsequently,
hokk-i   mɔ huuⁿdɛ fuʔ kɔ mɔ lanⁿd-ii
give-R.COMPL her thing   all that she ask-M.R.COMPL
'Her father was very wealthy subsequently, he gave her everything she asked for.'

dɔɔm-am   ɗɔɔ faa   mi jɛɛw-ɔy-a
wait-IMPsg-me here so that I   see-ALT-SUB
kaaɗɔ mɛɛrɛɛjɔ ʔɔɔ dee,   min ⁿgar-t-id-a
Bozo   worthless   this subsequently we   come-REV-COM-SUB
'Wait here for me so that I go and look for this terrible Bozo and subsequently, we'll come back together.'

The conjunction **dee** is usually put at the end of the adverbial clause. In the first example the adverbial clause indicates the circumstance that makes it possible for her father to give her anything she asks for because he is very rich. In the second example the referent of speaker will come back together with the Bozo as a consequence of the fact that he is going to look for him. The speaker thus expresses the fact that he is sure that his looking for the Bozo will lead to him finding the Bozo. The adverbial clause expresses the circumstance leading to the coming back together.

faa 'until, in order to, so that'

ɓe ⁿjeh-ii   faa ɓe ⁿjott-ii   maayɔ maⁿⁿgɔ
they go-COMPL until they arrive-M.R.COMPL river   large
'They went until they reached a large river.'

fati ɓe kers-u, sɔ ɓe ⁿjood-d-iima faa ɓe kaal-d-a
don't they shame-VF if they sit-COM-M.COMPL so that they speak-COM-SUB
'They shouldn't be ashamed, if they sat together in order to talk with each other.'
(Tioulenta 1980a:18)

The adverbial clause with **faa** delimits the time of the verb ⁿjeh-ii 'went' in the above example. In combination with the subjunctive the adverbial clause with the conjunction **faa** expresses the reason for the action of the main verb.

sabi, sabu, saabi, saabe, saabaabu 'because'

to maasina, demal maarɔ, sabi ⁿdiyam ɓur-i heew-de
there Maasina, cultivation rive, because water surpass-R.COMPL be much-INF
'In Maasina, there is the cultivation of rice, because there is a lot of water.'

sabi jiiwɔɔⁿde ⁿde ʔɔ yalt-ataa
because rainstorm the he go out-N.INCOMPL
'Because of the rainstorm, he will not go out.'

ʔɔ walaa ga sabu ʔɔmɔ dɔɔm-a nay
he be-NEG here because he+LOC wait-SUB cows
'He isn't here because he is watching the cows.'

Adverbial clauses with the conjunction **sabi** or any of the other forms for the word 'because' describe the reason for the action of the main verb. The conjunction **sabi** can not only be followed by a verbal predicate but it can also be followed by a noun, as in the adverbial phrase **sabi jiiwɔɔⁿde** 'because of the rain storm'.

so, se, si, sa 'when, if'

se toɓ-i, laawol ⁿgol hecc-iɗ-an
when rain-R.COMPL road it be wet-INCH-INCOMPL
'When it rains, the road is wet.'

ʔɔ war-an-nɔ sɔ mɔ waaw-nɔ
he come-INCOMPL-PAST if he can-R.COMPL-PAST
'He would come if he could.'

sɔ ⁿduŋⁿgu ɓelt-ike dabbuⁿde naat-a
when rainy season pass-M.COMPL cold season enter-SUB
'When the rainy season has past, the cold season enters.'

sa ʔa wujj-ii ʔa fiy-e
if you steal-COMPL you beat-P.VF
'If you have stolen, you really should be beaten.'

The forms sɛ, si, sɔ are possibly geographically distributed. The form **sa** is a form that occurs only before the subject pronoun ʔ**a** 'you'. It can also replace **sɔ** and ʔ**a**, in that case the two words have merged.

yalla 'whether, if'

midɔ sikk-it-i   yalla   mɔ garɔɔwɔ
I+LOC wonder-REV-R.COMPL whether he   come+AGENTIVE+CL
'I doubt whether he will be coming.'

hoorn-u yalla   ʔadʼa   waaw-i
try-IMPsg whether you+LOC can-R.COMPL
'Try if you can.'

ʔɔ lamⁿdii   yalla   samᵐba   warii
he ask-M.R.COMPL whether Samba   come-COMPL
'He asked whether Samba has come.'

The conjunction **yalla** introduces a clause whose realization or truth is not known. It expresses some doubt about the actual occurrence of the action expressed in the main clause.

ʔ**ila, gila** 'since'

ʔedʼum dʼɔɔ gila ʔabada
it+LOC here since ever
'It's there since eternity.'

ⁿduŋⁿgu, ʔila ⁿdiyam naat-aay,   remɔɔɓɛ ʔaaw-an   gɛsɛ mũʔɛn
rainy season since water   enter-N.COMPL farmers   sow-INCOMPL fields their
'In the rainy season, before the water enters , the farmers sow their fields.'

ʔɔ jiw-an   gila hakkuⁿdɛ naaⁿgɛ waraay
he leave-INCOMPL since middle   sun   come-N.COMPL
'He'll leave before noon.'

There is a particular use of the conjunction ʔ**ila** with negative verb forms. The adverbial phrase ʔ**ila** ⁿ**diyam naataay** 'before the water enters' literally means "since the water has not yet entered". Likewise the adverbial clause **gila hakkuⁿdɛ naaⁿgɛ waraay** describes the last moments when the midday sun has not (yet) arrived, so before midday.

kammari 'because, because of, due to'

ʔɔ seed-i   ʔe goriikɔ kammari ʔɔn fii   mɔ

she separate-R.COMPL with her husband due to   that one beat-COMPL her

'She has left her husband because he has beaten her.'

There is only a small difference between the conjunctions **sabi** 'because' and **kammari** 'because'. The word **sabi** is much more frequently used. The word **kammari** 'because, due to' introduces clauses which describe more serious, uncorrectable reasons.

nɔ 'like'

nɔ yimɓe heewɓe, ʔɔ jiw-i   wurɔ maɓɓe

like people many   he leave-R.COMPL village their

'Like many people, he has left his village.'

The word **nɔ** can function both as an adverb of manner with the meaning 'thus, as, like', and as a conjunction introducing a clause describing a manner. This shows that in Fulfulde the difference between an adverb and a conjunction is not very large.

kaa 'but'

ʔɔ sell-aa   kaa ʔɔmɔ gɔll-a

he be healthy-NEG but he+LOC work-SUB

'He is not healthy but he works.'

The conjunction **kaa** 'but' introduces an adverbial clause which describes a contradiction between the event expressed by the verb in the relative clause and the event described in the main clause. The same word **kaa** 'however' can also be found as a topic marker, which shows that in Fulfulde the distinction between topic markers and conjunctions is small. The topic markers are discussed in the next section.

5.6.7 TOPIC MARKERS

Topic markers occur at the end of a topic phrase on which the rest of the sentence comments. The following topic markers occur in the Fulfulde of Maasina.

kam	'concerning'
nee	'concerning'
duu	'also, too'
kaa	'however, at least, on the other hand'
fuu	'all'
nii	'thus, only thus'
tan	'only'