

ASPECTS OF FULFULDE SYNTAX AND

MORPHOLOGY

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Abstract

On the basis of evidence from the Kaceccereere dialect of Southern Zaria in Northern Nigeria, this study aims to reveal some of the principles that underly Fulfulde (or Fula) verbal morphology, and thus to improve on the *ad hoc* nature of earlier descriptions. It shows that many morphological issues may be resolved by reference to the syntax and phonology of the language, and that there is also a need for morpho-syntactic and morpho-phonological levels of description. In thus accounting for the morphology, certain new categories and principles are established for Fulfulde. Most important amongst these are the syntactic categories of topic and focus; and the morpho-phonological principle termed the 'suffixal precedence hierarchy', which determines the surface-form of certain verbal suffixes when they co-occur. An attempt is also made first to identify morpho-syntactic properties such as active, middle and passive, positive and negative, which are terms in categories such as voice and polarity; and then to explain the principles that underly the morphological realisation of such properties in the various tenses, or 'conjugations' of Fulfulde.

Table of Contents

	page
List of Tables	7
Acknowledgements	8
<u>Introduction</u>	9
0.1. Language	11
0.2. Informants	13
0.3. Aims of this Study	14
0.4. Conventions and Abbreviations	15
0.4.1. Presentation of Examples	15
0.4.2. Translation of Examples	16
0.4.3. Unacceptability	17
0.4.4. Underlining	17
0.4.5. Abbreviations	17
Footnotes	19
<u>Chapter 1: Linguistic Background Information: Phonology, Conson- and Alternation and the Nominal Class System</u>	
1.0. Introduction	20
1.1. Phonology	21
1.1.1. Vowels	21
1.1.2. Consonants	23
1.1.3. Syllable Structure	24
1.1.3.1. 'Regular' Syllable Structure	24
1.1.3.2. 'Irregular' Syllable Structure	28
1.1.3.3. Syllable Structure: Conclusions	30
1.1.4. Prosodic Features	30
1.1.4.1. Final Glottality	30
1.1.4.2. Word Stress	31
1.1.4.3. Intonation	33
1.1.4.4. Hypertonic Words	36
1.1.4.5. Prosodic Features: Conclusions	37
1.1.5. Transcription	37
1.1.5.1. Vowels in Word-final Position	37
1.1.5.2. 'Weak' Consonants	38
1.1.5.3. Transcription: General	40
1.2. Consonant Alternation	42
1.2.1. Consonant Alternation in Verbal Complexes	43
1.2.2. Consonant Alternation in Nominals	46
1.2.3. Consonant Alternation in Class-Suffixes	47
1.2.3.1. Suffix-Grades	48
1.2.3.2. Which grade with a given Stem?	51
1.2.3.3. Suffix-Grades: Conclusions	52
1.2.4. Consonant Alternation in Root-final Position	53
1.2.5. Consonant Alternation: Conclusions	55
1.3. The Nominal Class System	56
1.3.1. The Classes	57
1.3.1.1. Singular and Plural Classes	58
1.3.1.2. The 'Meaning' of Nominals	61
1.3.2. Nominals: Nouns, Adjectives, Participles	62
1.3.3. Nominal Class System: Conclusions	64
1.4. Conclusions	65
Footnotes	66

	page
Chapter 2: <u>The Fulfulde Sentence, Verbal Complex and Noun Phrase</u>	
2.0. Introduction	68
2.1. The Fulfulde Sentence	69
2.1.1. Verbal Sentences	71
2.1.1.1. Deletion	71
2.1.1.2. Verbal Properties	72
2.1.1.3. Negation	73
2.1.2. Non-Verbal Sentences	75
2.1.2.1. Non-Verbal Sentences: Attribution	75
2.1.2.2. Non-Verbal Sentences: Identification	78
2.1.2.3. Non-Verbal Sentences: Location and Existence	82
2.1.2.4. Non-Verbal Sentences: 'Rag-bag'	85
2.1.2.5. Non-Verbal Sentences: Conclusions	86
2.1.3. The Fulfulde Sentence: Conclusions	86
2.2. The Verbal Complex	86
2.2.1. The Verbal Root	87
2.2.2. Other Appendages in Verbal Complexes	91
2.2.2.1. Subject and Object Pronouns	91
2.2.2.2. Extensions	93
2.2.2.3. The Anteriority-Marker	96
2.2.2.4. 'E and don'	97
2.2.3. Intonation	101
2.2.4. The Verbal Complex as a Morphological Word	105
2.3. The Noun Phrase	107
2.3.1. Topic	107
2.3.2. Focus	110
2.3.3. Answer to a Question	111
2.3.4. Other Types of NP	113
2.3.5. The NP: Conclusions	115
2.4. The Fulfulde Sentence, Verbal Complex and NP: Conclusions	115
Footnotes	116
Chapter 3: <u>Paradigms of Verbal Inflections: Syntax and Semantics</u>	
3.0. Introduction	119
3.1. Derivational Processes	119
3.1.1. Extensions	120
3.1.2. Nominals	121
3.2. Inflectional Processes	122
3.2.1. 14 Inflectional Paradigms: 14 'Conjugations'	122
3.3. Verbal Properties and Verbal Categories	123
3.4. 'Conjugational' Properties	124
3.4.1. Indicative and Non-Indicative Mood	124
3.4.2. Completive and Incompletive Aspect	129
3.4.3. Positive and Negative Polarity	132
3.4.4. Relative and Non-relative (or General)	133
3.4.5. Emphatic and Non-Emphatic	133
3.4.6. Stative and Progressive	133
3.4.7. Imperative and Exhortative	134
3.4.8. Subjunctive	134
3.4.9. Vague	135
3.5. Properties that do not distinguish one conjugation from another	135
3.5.1. Active, Middle and Passive Voices	135
3.5.1.1. Middle Voice: Reflexive and Ergative	136
3.5.1.2. Voice and Extensions	140

	page
3.5.2.	Anteriority 143
3.5.3.	Properties of Person, Number and Case 144
3.5.3.1.	1st, 2nd and 3rd Person 144
3.5.3.2.	Singular and Plural Number 147
3.5.3.3.	Subject and Object Case 148
3.6.	Indicative Mood: Conjugations in Neutral Sentences . . 149
3.6.1.	Completive Aspect 150
3.6.1.1.	Stative and General Completive 150
3.6.1.2.	Negative Completive 153
3.6.2.	Incompletive Aspect 154
3.6.2.1.	Progressive and General Incompletive 154
3.6.2.2.	Negative Incompletive 157
3.6.2.3.	Vague Incompletive 158
3.7.	Indicative Mood: Conjugations in Non-neutral Sentences 159
3.7.1.	Completive Aspect 159
3.7.1.1.	Relative Completive 159
3.7.1.2.	Emphatic Completive 162
3.7.2.	Incompletive Aspect 163
3.7.2.1.	Relative Incompletive 163
3.7.3.	Indicative Mood: Conclusions 165
3.8.	Non-Indicative Mood 167
3.8.1.	Imperatives 167
3.8.2.	Exhortative 169
3.8.3.	Subjunctive 169
3.9.	Verbal Conjugations: Conclusions 171
Footnotes	172

Chapter 4: Paradigms of Verbal Inflections: Morphology

4.0.	Introduction	174
4.1.	The Morphological Composition of Verbal Complexes . . .	176
4.1.1.	SV Order	178
4.1.2.	VS Order	181
4.1.3.	Morphological Composition of Complexes: Conclusions	184
4.2.	VAP-Suffixes in Complex-final Position	185
4.2.1.	Anaptyctic <u>u</u>	188
4.2.2.	Vowel Harmony	190
4.3.	VAP-Suffixes in non-final Position	192
4.3.1.	VAP-Suffixes for the Negative Completive Active . . .	194
4.3.2.	The Clitic/Suffix Distinction	194
4.3.2.1.	Pronouns	195
4.3.2.2.	The Anteriority-Marker	198
4.3.2.3.	The Usefulness of the Clitic/Suffix Distinction . .	199
4.3.3.	The Suffixal Precedence Hierarchy	201
4.3.4.	Alternation between short-vowelled VAP-Suffix & Zero.	206
4.3.5.	VAP-Suffixes of Incompletive Aspect	209
4.3.6.	VAP-Suffixes in non-final Position: Conclusions . .	212
4.4.	Verbal Complexes: Some Finer Points	212
4.4.1.	SV and VS Complexes	213
4.4.1.1.	VS>SV because of the number of Appendages in a Complex	213
4.4.1.2.	VS>SV with a 1sg subject	216
4.4.2.	'E and <u>don</u>	217
4.4.2.1.	'E	217
4.4.2.2.	<u>Don</u>	220
4.4.2.3.	'E and <u>don</u> : Conclusions	222
4.5.	The Morphological Classification of Conjugations . . .	222
Footnotes		224

<u>Chapter 5: Types of Exponence</u>		page
5.0.	Introduction	225
5.1.	Syntactic Exponence	226
5.2.	Cumulative Exponence	227
5.2.1.	VAP-Suffixes	227
5.2.2.	Pronouns	229
5.3.	Sensitive Exponence	230
5.3.1.	Pronouns	230
5.3.2.	Anteriority	234
5.4.	Extended Exponence	235
5.4.1.	Stative and Progressive	235
5.4.2.	Pronouns	236
5.4.3.	Morph-Order	237
5.4.4.	Consonant Alternation	238
5.5.	Homonymy	239
5.5.1.	Syncretism	239
5.5.2.	'Accidental Homonymy' - (i)	242
5.5.3	'Accidental Homonymy' - (ii)	244
5.6.	Conclusions	247
<u>Chapter 6: Topic and Focus</u>		
6.0.	Introduction	248
6.1.	Topic	248
6.1.1.	Topic and Anaphoric Reference	251
6.1.1.1.	Subject and Topic coreferential	251
6.1.1.2.	Object and Topic coreferential	252
6.1.1.3.	Genitive and Topic coreferential	253
6.1.1.4.	Anaphoric Reference: Summary	255
6.1.2.	The Position of a Topic NP in a Sentence	258
6.1.2.1.	After-thought Topic	258
6.1.2.2.	Inversion of Topic and Question-word, Relative Pronoun or Adverb	258
6.1.2.3.	Complement Clauses	259
6.1.2.4.	Two Topics	260
6.1.3.	Topic-Markers	260
6.1.3.1.	<u>Kam</u>	261
6.1.3.2.	<u>Boo</u>	261
6.1.3.3.	<u>Maa</u>	262
6.1.3.4.	<u>Kammaa</u>	262
6.1.3.5.	Topic-Markers: Conclusions	263
6.2.	Focus	263
6.2.1.	NP Focus	264
6.2.1.1.	Focus: Relative Conjugations	265
6.2.1.2.	Focus: no Anaphoric Pronouns	269
6.2.1.3.	Focus: Pronouns	269
6.2.1.4.	Focus with Topic	270
6.2.1.5.	Question-words	270
6.2.1.6.	Focussed Adverbs	271
6.2.1.7.	NP Focus: Conclusions	272
6.2.2.	Verb Focus	274
6.2.2.1.	Completive Aspect	275
6.2.2.2.	Incompletive Aspect	277
6.2.3.	Focus: Conclusions	278
Footnotes		280
<u>Conclusion</u>		281

<u>Appendix A: Summary of the Morphology of the 14 Verbal Conjugations</u>	
Introduction	285
SVO Complexes	287
VSO Complexes	293
VOS Complexes	296
Footnotes	297
<u>Appendix B: Two Texts</u>	
Introduction	298
Text 1	299
Text 2	300
Footnotes	302
<u>Bibliography</u>	303

Erratum

In the numbering of the examples, numbers 69, 137, 138 and 139 have been omitted.

List of Tables

		Page (s)
I	Vowels	21
II	Diphthongs	22
III	Consonants	23 - 24
IV	Examples of Commonest Syllable-Types	25
V	Combinations of Syllable-Types	26
VI	Stress in Nominals	32
VII	Alternating Consonants in Verbal Roots and Nominal Stems	42
VIII	Alternants of <u>w</u> and <u>y</u>	43
IX	Alternating Consonants in Nominal-Class Suffixes	48
X	Representative Class-Suffixes	49
XI	Representative Nominal-Class Suffixes with representative Stems	50
XII	A. Consonants commonly found in root-final position B. Consonants rarely found in root-final position	53 - 54
XIII	Phonology of commonest Verbal Roots	54
XIV	Nominal Classes	57
XV	One-to-one correlation between Singular and Plural Classes	59
XVI	Correlation between Singular and Plural Classes	60
XVII	Range of Classes occurring with <u>nen-</u> 'person'	62
XVIII	Sample of Classes occurring with <u>maw-</u> 'big'	62
XIX	Pronouns of the <u>Nge</u> class	65
XX	Plural Pronouns	145
XXI	VAP-Suffixes in Complex-final Position	186
XXII	VAP-Suffixes	193
XXIII	Clitic and Suffix Pronouns	197
XXIV	The Suffixal Precedence Hierarchy - 1	203
XXV	The Suffixal Precedence Hierarchy - 2	204
XXVI	Variable Suffixes participating in the Suffixal Precedence Hierarchy	204
XXVII	Classification of Conjugations	222
XXVIII	Distribution of Pronouns by Conjugation	231 - 233
XXIX	Form of a 3rd person case-function if it is coreferential with the topic	256

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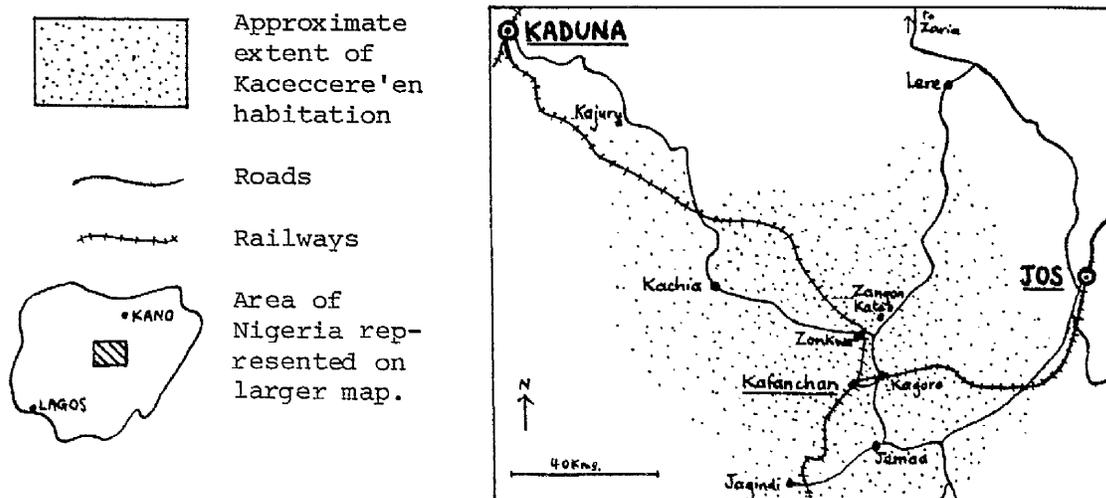
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Introduction

The Fulani people, who call themselves Fulbe, inhabit an area stretching from Senegambia in the West to Nigeria, Cameroon, and beyond, in the East. Traditionally, they are a pastoral people, who herd their cattle in the West African savannah. Even in those areas where they have established hegemony, such as Northern Cameroon, and Fouta Toro (in Guinea), the Fulani have retained their links with their pastoral tradition. Most Fulani in fact live as a minority ethnic group amongst sedentary agriculturalists. Some are 'pure' pastoralists, and practise transhumance; whereas others have adopted a sedentary, or semi-sedentary, life-style, and mix farming with pastoralism. The Kaceccere'en, whose language is the subject of this study, belong to the latter category of Fulani.

The Kaceccere'en live in the area indicated on the map below. This area is generally known as 'Southern Zaria'.



Most of this area has been under the suzerainty of the Emir of Zaria since the *jihad* of Usman dan Fodio in the early nineteenth century - hence its commonly-used name today. Part of it, however, was in the emirate of Jema'are. Today Southern Zaria constitutes the extreme south-eastern part of Kaduna State. The majority of its inhabitants are christianized farmers of various tribes. These include the Kaje; and the Katab, Kachichere and Kagoro, who speak mutually-intelligible dialects of the same language (cf. Hansford et al. 1976). Kachichere is the name of an area, as well as of a dialect and people; and the name Kaceccere'en is probably derived from it.¹

Unlike most of their neighbours, the Kaceccere'en are Moslems; they herd cattle; and they live in encampments (some temporary, some virtually permanent), rather than in villages. Due to the latter facts, they call themselves Fulbe na'i ('cattle Fulani'), or Fulbe ladde ('bush Fulani'), thus distinguishing themselves both from their non-Fulani neighbours, and from such Fulani as live in towns, or who no longer herd cattle.

The Kaceccere'en are Fulani of heterogeneous origins, who define themselves by the area where they now live. They claim various areas of origin, such as Kano, Borno and Bauchi, and within the Kaceccere'en umbrella they identify various lineages. For example, there are the Gayaaaji (who came from Gaya, near Kano), the Bornanko'en (from Borno), and the Wuntanko'en (from the Bauchi area). The precise history of the influx of cattle Fulani into the Southern Zaria area, and the gradual formation of the Kaceccere'en clan, is not documented. However, the oral traditions of the Kaceccere'en indicate that they began to arrive during the *jihad*, ie. during the first half of the nineteenth century, and that there has been a continuing, gradual, influx since then.²

In this study, I shall refer to the Kaceccere'en as a 'clan' of the Fulani people. I do not use the term 'clan' in a technical sense; it is simply a convenient way of referring to a group of people who regard themselves as a unit within the larger designation of 'Fulani' or Fulbe.

O.1. Language

The Fulani in Mali, and in areas east of Mali, call their language Fulfulde; and this is the term I shall use here. Elsewhere in Africa, the language is called Pulaar or Pular; and in the literature, it has been called Peul, Fula and Ful. The Kaceccere'en call their particular brand of Fulfulde Kaceccereere (with stress on the ree thus [katʃɛtʃɛ"re:rɛ], where " precedes the stressed syllable); and I shall sometimes use this term too. Since the Kaceccere'en, and other Fulani, regard Kaceccereere as a distinct type of Fulfulde, it is convenient to label it a 'dialect'.

Fulfulde is a member of the West Atlantic branch of the Niger-Congo language family (cf. Greenberg 1970); it is intonational, and has SVO order in 'neutral' sentences (cf. Greenberg 1966). It is an inflecting language, with a highly developed nominal-class system, which has received much attention from scholars. On the whole, case-marking is effected by word- or morph-order, although certain personal pronouns are morphologically marked for case.

In Northern Nigeria, the lingua franca, Hausa, is gaining ground at the expense of other languages, such as Fulfulde. This fact is very evident in Southern Zaria. Here Hausa is the lingua franca of the market-place, for only a few Fulani speak a smattering of Katab or Kaje and no non-Fulani speak Fulfulde. Moreover, Hausa and English are used in the local schools. The result is that amongst the Kaceccere'en, Fulfulde is the language of the home but not of the wider world.

The impact of Hausa on the Kaceccere'en is most evident amongst school children. They themselves admit, and their parents complain, that their Fulfulde is 'not deep'. It is quite conceivable that the children of today's Kaceccere'en school-children will speak Hausa rather than Fulfulde. However amongst the uneducated Kaceccere'en, most of whom are of the older generation, the impact of Hausa has been much less. Although there is considerable Hausa vocabulary in their Fulfulde, the Fulfulde syntax and morphology is intact.

The Hausa numerals after ten are preferred to the Fulfulde ones - no doubt because the latter, with a combination of base five and base ten, are so complicated (cf. Arnott 1970: ch.27). Examples of other Hausa words that are used interchangeably with their Fulfulde counterparts are aiki 'work', makaranta 'school', and asbiti 'hospital'. The Hausa word may be imperfectly borrowed: for example, kiila is the Kaceccereere form of Hausa watakila 'perhaps'. A Hausa borrowed word is often inflected according to the rules of Fulfulde morphology: for example, gedaaji 'ground nuts' is borrowed from Hausa gyada, but has a Fulfulde plural suffix, -ji; and mi-good-ake 'thank you' is formed from Hausa goode 'to thank', with the Fulfulde subject pronoun mi 'I', and the Fulfulde middle voice suffix -ake. (A borrowed verbal root always takes suffixes of the middle rather than the active, voice. See §3.5.1. below.)

Despite the inroads that Hausa vocabulary is making into Kaceccereere, Kaceccereere is in many senses a conservative dialect of Fulfulde, if one considers its morphological and syntactic structure. Three characteristics of Fulfulde are inclined to be eroded, or simplified, in what one might call more 'progressive' dialects of the language, such as that of Adamawa (in North Eastern Nigeria and Northern Cameroon), where Fulfulde is a lingua franca, and much used by non-native speakers. These three characteristics are: the system of consonant alternation; the occurrence of verb-subject order; and the middle voice. For evidence of the loss of these characteristics in Adamawa, see, for example, Skinner and Pelletier (1978: 175), where no consonant alternation is shown in verbs; Noye (1974: §84), where the rarity of verb-subject order is mentioned; and Noye (1974: §63), where the disappearance of the Middle Voice is commented on. In Kaceccereere, however, all three of these characteristics are very much in evidence, as we shall see in the chapters that follow.

Kaceccereere also has certain characteristics that distinguish it from other dialects that have been described in the literature. Phonological, morphological, and syntactic features will be pointed out during the course of the following chapters. However, I shall

mention here certain items of vocabulary that are not recorded elsewhere (though they may be noted in the de St. Croix dictionary manuscript³). It is not yet clear whether any of these items are borrowed from the other languages that the Kaceccere'en come into contact with. They include sinndeyi 'knife', geebol 'stream', wonngo 'perhaps' and inke 'it seems that'.

0.2. Informants

This study is based on the Fulfulde of several informants of the Kaceccere'en clan. Most are still resident in the Kafanchan-Kagoro-Zonkwa area, and those that are not regularly visit their family there.

My chief informants were Hassan Moturba and his wife, Fatu. Hassan is of the Gayanko'en lineage of Kaceccere'en, born and brought up near Zonkwa. He is bilingual in Fulfulde and Hausa, and also speaks some English. As a result of attending adult education classes, he is able to read and write in Fulfulde, Hausa and English. In adult life, Hassan has lived in Zaria and Ngaoundéré (Northern Cameroon); and at present, he lives and works in Kano. His wife, Fatu, has a similar pattern of residence, though she was born in the Kagoro area, and is of the Wuntanko'en lineage. Fatu is bilingual in Fulfulde and Hausa, but she is not literate, and she speaks no English.

My other informants are still resident in Southern Zaria, except for Isa Pashi, who sadly passed away shortly after he had so greatly helped me. Isa lived in Kafanchan, and was of the Yillaabe lineage. He was the most highly educated of my informants, having a B.A. degree in History from Ahmadu Bello University, Zaria. He was equally at ease in Fulfulde, Hausa, and English, and would himself have made an excellent research linguist, for he had many insights into his mother tongue, Fulfulde. He was well versed in local lore and traditions; but he also knew much about the documented history of the area. His widow, Altine, is similarly of the Yillaabe lineage. She speaks no English, and only 'market Hausa'.

Dawobe Abayin is of the Bornanko'en lineage, and lives near Zonkwa. He is bilingual in Hausa and Fulfulde, speaks some English, and reads and writes Hausa. Sa'adatu, his youngest wife, is a girl in her teens, who is bilingual in Fulfulde and Hausa, but is not literate, and speaks no English.

Hajia Maryam is a woman of the Yaakanaaji lineage, bilingual in Fulfulde and Hausa, but not literate. She and her family live in Samaru Katab. Her two sons, Haruna and Adamu, are approximately 25 and 18 respectively. Haruna is just literate in Hausa, and is bilingual in Fulfulde and Hausa. Adamu has been attending the local Government Secondary School. He speaks and understands a lot of English; he is most at ease speaking Hausa; and although Fulfulde is his mother tongue, he did not feel capable of answering all my questions, complaining that his Fulfulde was not 'deep enough'.

Other Kaceccere'en Fulani also helped greatly with this study, either by letting me record their conversations or their folk-tales, or simply by being enthusiastic to teach me their language. Many of the data presented here have been extracted from such conversations; other data have been provided by the informants mentioned above.

0.3. Aims of this Study

The aims of this study are principally syntactic and morphological. Chapter 1 provides some phonological and morphological background information. Chapter 2 then considers Fulfulde sentences, verbal complexes and noun-phrases. The following three chapters are concerned with verbal morphology: first, the syntactic and semantic justification for the establishment of verbal paradigms (chapter 3), then the morphology of those paradigms (chapter 4), and finally the morphological realisation of morph-syntactic properties (chapter 5). In chapter 6, an outline is presented of the way in which Fulfulde focusses an NP and a verb; and NP focus is contrasted with the topic construction. The conclusion points out some areas of potentially fruitful research that could be carried out on Fulfulde in the future.

0.4. Conventions and Abbreviations

Before proceeding any further, I shall outline here some of the conventions and abbreviations that will be used in this study.

0.4.1. Presentation of Examples

The transcription used for Fulfulde words will be explained in §1.1.5. below. The only point that need be mentioned at this stage is that hyphens are used to provide a morphological analysis of verbal forms, for example:

- 1.a. Nge-wub - ake.
 it miscarry
 VAP
 'It (cow) miscarried.'

Here, a hyphen separates the verbal root, wub- from the subject pronoun, nge-, and from the Voice-Aspect-Polarity (VAP)-suffix, -ake-.

Under each morph in a verbal complex or participle, a gloss is given, as in 1.a. above. (The significance of the VAP-suffix will be discussed in §2.2.1. below.) Sometimes, I shall also include other information below the Fulfulde sentence. For example, the accompanying discussion might require the naming of the 'tense' of a verb, as has been done in 1.b..

- 1.b. Nge-wub - ake.
 it miscarry
 VAP
 GEN COMPL MID
 'It (cow) miscarried.'

The abbreviations used in such labels will be explained in §0.4.5. below: and the significance of the 'tenses' will become apparent in chapter 3.

0.4.2. Translation of Examples

Each Fulfulde example will be accompanied by a free translation, as

in 1.a. and 1.b. above. However, translation is no simple matter. Problems arise particularly with the translation of the pronouns and of 'tenses', and I shall therefore explain here the policy adopted with regard to these matters.

Let us consider pronouns first. There is no gender in Fulfulde; however, there are 19 singular nominal-classes, and 6 plural ones. (The nominal class system is explained in §1.3. below). One singular class is reserved for persons, as is one plural class, so pronouns referring to nominals of these classes may be translated by 'he/him' or 'she/her', and by 'they/them' respectively. However, pronouns referring to nominals of the other 18 singular and 5 plural classes cannot satisfactorily be translated by 'it' or 'they'. For example, in the Nge⁴ class, only the nominals referring to 'sun', 'fire' and 'cow' are found. Since neither the 'sun' nor a 'fire' is likely to 'miscarry', there is little doubt but that the pronoun nge in 1. refers to a 'cow'; for a different referent, such as a sheep or a goat, would require a pronoun of a different class. Thus, a pronoun referring to a nominal class (and third-person pronouns necessarily refer to a particular class), bears the semantic connotations of that class. In the translations that I give of Fulfulde sentences, I shall attempt to mention, as succinctly as possible, what those semantic connotations are.

The translation of Fulfulde so-called 'tenses' is even more problematic. (In Chapter 3, I argue that 'tense' is in fact an inappropriate term for the verbal inflectional paradigms in Fulfulde, and I argue that the term 'conjugation' is a suitable alternative. In anticipation of that section, I shall henceforth use 'conjugation' to refer to what Arnott and others have called 'tenses': cf. Arnott 1970: 179.) Now, the translation of a Fulfulde conjugation will depend on context; for example, the General Completive will be translated by the English preterite in one context, the present perfect in another, the future perfect in another, and the simple present in yet another; and vice-versa, the English preterite may be translated

by a Fulfulde General Completive, Relative Completive, Emphatic Completive, General Incompletive, etc.. The point is, there is no one-to-one correlation between the uses of the various verbal paradigms in the two languages. Given this fact, the choice of tense for an English translation is often rather arbitrary. For example, the Fulfulde sentence in 1, without any context, could just as well be translated by 'It has miscarried' as by 'It miscarried'. On the whole, if the choice is not determined by context, I choose the most 'neutral' or 'obvious' English tense to translate the Fulfulde verb. However, the above points concerning the lack of equivalence between the verbal systems of the two languages must be borne in mind when considering the translations given throughout this study.

0.4.3. Unacceptability

In discussing certain morphological and syntactic structures, I sometimes give examples which are preceded by an asterisk (*). This indicates that the sentence concerned is unacceptable, usually for morphological or syntactic reasons. Generally, the relevant, unacceptable, item is underlined, and is explained in the accompanying discussion.

0.4.4. Underlining

In order to draw attention to a point under discussion, the relevant part(s) of Fulfulde sentences may be underlined.

0.4.5. Abbreviations

The following abbreviations and symbols are used in this study. Each is followed by a reference, indicating where that particular item is first discussed or identified in the text.

<u>Abbreviation/Symbol</u>	<u>Meaning</u>	<u>Reference</u>
ACT	Active (Voice)	§3.5.1.
CL	Nominal-class-suffix	§1.3.1.
COMPL	Completive (Aspect)	§3.4.2.
CONT IMPER	Continuative Imperative	§3.4.7.
DO	Direct Object	§2.2.2.1.
EMPH	Emphatic Completive	§3.4.5.
EXHORT	Exhortative	§3.4.7.
EXT	Extension	§2.2.2.2.
GEN COMPL	General Completive	§3.6.1.1.
GEN INCOMPL	General Incompletive	§3.6.2.1.
H	Hausa	§0.1.
ID	Ideophone	§1.1.4.4.
IMPER	Imperative	§3.4.7.
INCOMPL	Incompletive (Aspect)	§3.4.2.
INF	Infinitive-suffix	-
IO	Indirect Object	§3.5.3.3.
MID	Middle (Voice)	§3.5.1.
NEG	Negative	§3.4.3.
NEG COMPL	Negative Completive	§3.6.1.2.
NEG INCOMPL	Negative Incompletive	§3.6.2.2.
NON REL	Non-relative	§3.4.4.
O	Object	§2.2.2.1.
PASS	Passive (Voice)	§3.5.1.
PL	Plural	§3.5.3.2.
pl	Plural	§3.5.3.2.
POS	Positive	§3.4.3.
PROG	Progressive	§3.6.2.1.
QU	Marker of yes/no question	§1.1.4.3.
REL	Relative	§3.4.4.
REL COMPL	Relative Completive	§3.7.1.1.
REL INCOMPL	Relative Incompletive	§3.7.2.1.
S	Subject	§2.2.2.1.
SG	Singular	§3.5.3.2.
sg	Singular	§3.5.3.2.
STAT	Stative	§3.6.1.1.
SUBJ	Subjunctive	§3.8.3.
TM	Topic-Marker	§6.1.3.
V	Vowel (phonolog. context)	§1.1.1.
V	Verb (other contexts)	§2.2.2.1.
VA	Voice-Aspect	§1.3.2.
VAP	Voice-Aspect-Polarity	§2.2.1.
VAGUE INCOMPL	Vague Incompletive	§3.6.2.3.
∅	Zero	§2.1.1.1.
1	First Person	§3.5.3.1.
lexcl	First Person exclusive	§3.5.3.1.
lincl	First Person inclusive	§3.5.3.1.
2	Second Person	§3.5.3.1.
3	Third Person	§3.5.3.1.
-	morph-boundary	§0.4.1.
<	derived/calque from	§0.1.
*	unacceptable	§0.4.3.
+	syllable-boundary	§1.1.3.

Introduction: Footnotes

1. It is not certain whether the second ch of Kachichere represents a geminate affricate ([ttʃ]), or not. The orthography I use for this name follows that of Temple (1922) and Gunn (1956). However, there is no doubt but that the Kaceccere'en Fulani refer to themselves as [katʃettʃerɛʔɛn]. In other words, the second affricate in their name is geminate, but the first is not.
2. For historical information given here (as well as for much linguistic help), I am grateful to the late Isa Pashi of Kafanchan.
3. The manuscript of a Fulfulde-English dictionary, covering 'Central Nigerian' Fulfulde, written by F.W. de St. Croix, is at the moment being edited at the Centre for the Study of Nigerian Languages, Bayero University, Kano.
4. I capitalise the first letter of the names of nominal classes, in order to distinguish them from class-pronouns: see §1.3..

Chapter 1

Linguistic Background Information:

Phonology, Consonant Alternation, and the Nominal Class System

1.0. Introduction

By comparison with most other African languages, Fulfulde is extremely well documented. The first grammars of the language were published over 100 years ago (Faidherbe 1875 and Reichardt 1876). They have been followed by numerous others, in various languages: one in Fulfulde, by the Waziri of Sokoto, Alhaji Waziri Junaidu, and the others in French, German and English.

Despite the proliferation of such works, Fulfulde studies are not as advanced as Hausa studies, for example. There are at least two reasons for this fact. Firstly, the diffusion of the Fulfulde language has given rise to various studies, each, on the whole, describing a different dialect from the others. For this reason, most studies have 'started from scratch', rather than building on a body of inherited knowledge. Secondly, since Fulfulde is not of paramount political or educational significance in any one modern political state, there has been no need felt (as there has in the case of Hausa) for an in-depth study of the grammar of the language.

The present study deals with a dialect that has been hitherto undescribed. However, it draws heavily on the work of Arnott in particular, for the Gombe dialect that he describes bears comparison with that of the Kaceccere'en; and it draws more generally on the work of Noye, Gaden, and Klingenheben. This study is primarily descriptive in nature, but it does assume the existence of a deep-structure, and reference will sometimes be made to the deep structure, at the phonological, morphological and syntactic levels.

In this chapter, I provide some background information concerning the Fulfulde of the Kaceccere'en, Kaceccereere. While the treatment of these matters by Arnott and others, is very adequate, it is felt that their inclusion here will considerably facilitate the reader's understanding of

subsequent parts of this study; and it will also highlight the ways in which Kaceccereere differs, however slightly, from other dialects. Section §1.1. deals with phonology. Section §1.2. is concerned with consonant alternation, and includes a discussion of such alternation in suffix-initial and root-final position, as well as in stem- and root-initial position. Finally, section §1.3. outlines the nominal class system.

1.1. Phonology

In this section, certain phonological features of Kaceccereere Fulfulde are explained, in order to justify the transcription used. In §1.1.1. and §1.1.2., the vowels and consonants of Kaceccereere are listed and discussed. Syllable-structure and prosodic features are outlined in §1.1.3. and §1.1.4.; and finally, in §1.1.5., the transcription is explained.

1.1.1. Vowels and Diphthongs

There are five short vowels and five long vowels in Fulfulde. Vowel-length is particularly important for the distinction between different verbal roots, and the following minimal pairs, using the infinitive form of the verb,¹ have been chosen for that reason:

Table 1

Vowels

<u>Orthographic</u> <u>Form</u>	<u>Phonetic</u> <u>Value</u>		<u>Minimal Pairs</u>
a	[a]	ha <u>ɗ</u> ugo	'refuse (someone something)'
aa	[a:]	ha <u>aa</u> ɗugo	'taste bitter, sharp'
e	[ɛ]	fe <u>w</u> ugo	'tell a lie'
ee	[e:]	fe <u>ee</u> wugo	'be cold'
i	[ɪ]	ɓ <u>i</u> rugo	'milk'
ii	[i:]	ɓ <u>ii</u> rugo	'wipe clean (eg. a calabash)'
o	[ɔ]	ho <u>r</u> ugo	'remain, be left'
oo	[o:]	ho <u>oo</u> rugo	'take home'
u	[ʊ]	fu <u>r</u> ugo	'snort'
uu	[u:]	fu <u>uu</u> rugo	'be startled'

The left hand column in table I shows the orthographic form of the vowels, while the middle column shows their phonetic values. Note that there is a difference of vowel-quality that correlates with the difference of vowel-length: for example, the quality of aa is not [a:], but [ɑ:].

Eight phonetic diphthongs are found in Kaceccereere Fulfulde, as follows:

Table II

Diphthongs

<u>Orthographic</u> <u>Form</u>	<u>Phonetic</u> <u>Value</u>	<u>Examples</u>	
ay	[aɪ]	sayditugo	'to fade'
ey	[eɪ]	leydi	'country, ground'
oy	[ɔɪ]	koydum	'easy; recovery'
uy	[ʋɪ]	wuybe	'thieves'
aw	[aʋ]	fawrude	'woman's calabash'
ew	[ɛʋ]	pewri	'cold(ness)'
iw	[iʋ]	diwnugo	'to tremble'
ow	[ɔʋ]	ɔowdi	'shade, shadow'

All diphthongs except uy occur in word-final, as well as in medial, position. Before a vowel, the second element of a diphthong 'becomes' its glide equivalent, [j] or [w].

Phonologically, diphthongs are best treated as a combination of vowel plus glide, and this fact is reflected in the orthography shown in table II, which is also the orthography adopted in this study.

1.1.2. Consonants

In consonants as well as vowels, length is phonemic, and table III below therefore shows minimal pairs, wherever possible, in order to illustrate this fact. There are, however, no minimal pairs to prove certain contrasts. Despite this fact, I shall always show consonantal length in the transcription used in this study, for it is relevant to the system of consonant alternation, as we shall see presently (in §1.2. below).

Table III has been arranged in such a way as to display groups of consonants according to their phonological and morph-phonological behaviour. Those in group (i) do not alternate with any others; but those in group (ii) do. This fact, and the choice of examples in table III (some with the relevant consonant in initial position, some with the relevant consonant in medial position), will be elucidated in section §1.2..

Table III

Consonants

	<u>Orthographic</u> <u>Form</u>	<u>Phonetic</u> <u>Value</u>	<u>Examples</u>		
(i) <u>Non-alternating</u> <u>Consonants</u>	d	[d]	fud <u>u</u> go	'(sun) to rise'	
	dd	[dd]	fud <u>du</u> go	'to begin'	
	β	[β]	ha <u>β</u> ugo	'to fight'	
	ββ	[ββ]	ha <u>ββ</u> ugo	'to tie'	
	'	[ʔ]	te' <u>u</u> go	'to marry'	
	'y	[y]	ta' <u>y</u> ugo	'to cut'	
	''y	[yy]	ma'' <u>y</u> ugo	'to blink'	
	t	[t]	fo <u>t</u> ugo	'to meet'	
	tt	[tt]	fo <u>tt</u> ugo	'to suit'	
	l	[l]	Mi-wa <u>l</u> aa-ngel	'I haven't got it'	
	ll	[ll]	Mi-wa <u>ll</u> aa-ngel	'I didn't help it'	
	n	[n]	won <u>u</u> go	'to be, live'	
	nn	[nn]	won <u>nu</u> go	'to spoil'	
	m	[m]	ta <u>m</u> ugo	'to roll (dough) in	
	mm	[mm]	ta <u>mm</u> ugo	'to think' <u>a ball</u> '	
	ny	[ɲ]	wan <u>y</u> ugo	'to refuse, reject'	
	nny	[ɲɲ]	san <u>ny</u> ugo	'to weave'	
ŋ	[ŋ]	ba <u>ŋ</u> ugo	'to migrate; marry'		
(ii) <u>Alternating</u> <u>Consonants:</u>	r	[r]	se <u>r</u> ugo	'to divorce'	
	w	[w]	ta <u>w</u> ugo	'to find'	
	Y	[y]	ma <u>y</u> ugo	'to die'	
	a. Continuants:	h	[h]	ma <u>h</u> ugo	'to build'
	f	[f]	fo <u>f</u> ugo	'to happen'	
	s	[s]	wa <u>s</u> ugo	'to dig'	

Table III (cont)

		<u>Consonants</u>			
		<u>Orthographic</u>	<u>Phonetic</u>	<u>Examples</u>	
		<u>Form</u>	<u>Value</u>		
(ii)	<u>Alternating Consonants</u>	d	[d]	seedugo 'to separate'	
		dd	[dd]	teddugo 'to be heavy'	
		g	[g]	tagugo 'to create'	
	b. Plosives and Affricates:	gg	[gg]	Taggugo 'to roll, curl up'	
		b	[b]	hubugo 'to throw'	
		bb	[bb]	hubbugo 'to dress (hair)'	
		k	[k]	takaago 'to cross (a bridge)'	
		kk	[kk]	takkaago 'to become stuck'	
		p'	[p]	ɛi-pusi ² 'they burst'	
		pp	[pp]	hippugo 'to spill, overturn'	
		j	[dʒ]	wujugo 'to rub, smear'	
		jj	[ddʒ]	wujjugo 'to steal'	
		cc	[ttʃ]	fec <u>c</u> ugo 'to split open'	
		c. Prenasalised consonants:	nd	[nd]	ndiyam 'water'
			ng	[ng]	ngaari 'bull'
			mb	[mb]	mbeewa 'goat'
			nj	[nj]	njumri 'honey'

The system of consonant alternation justifies the distinction between many of the above consonants, and also explains the arrangement of the consonants in the table. For the moment, however, let us turn to other, phonological matters.

1.1.3. Syllable Structure

I shall divide the discussion of syllable structure into two parts. First, I shall consider what we can term 'regular' syllable structure; and then, I shall consider 'exceptional' syllable structure.

1.1.3.1. 'Regular' Syllable Structure

In Kaceccereere Fulfulde, every syllable must begin with a consonant; and a long vowel occurring in a closed syllable is a rare, exceptional phenomenon. Thus, the following syllable types are most commonly found:

- (a) CV
- (b) CVV
- (c) CVC

Examples of these three types are found in table IV. A plus sign, '+', is used to mark syllable-boundaries.

Table IV

Examples of commonest syllable-types

- (a) CV mi 'I'; 'o 'he/she; ja+bi 'accepted'.
- (b) CVV moo 'him/her' (in certain 'tenses');
'aa 'you (sg)' (in certain 'tenses');
njaa+fee 'forgive (pl)!'
- (c) CVC mbal 'beer'; 'on 'you (pl)';
wal+lam! 'help (sg) me!'

Several points are worth noting about the exemplification in table IV.

(i) Syllable structure does not necessarily tally with morphological structure. The disyllabic examples given above are presented in terms of their syllable-structure, not their morphological structure. Ja+bi and njaa+fee in fact consist of a verbal root (jaβ- 'accept' and njaaf- 'forgive'), plus a voice-aspect-polarity (VAP)-suffix (-i and -ee: see §2.2.1. below), and wal+lam consists of a verbal root (wall- 'help') plus object pronoun (-am 'me'). Thus, morphologically these disyllabic examples would be presented as jaβ-i, njaaf-ee and wall-am.

(ii) Geminate consonants, such as -ll-, count as two different consonants, in two different syllables. This fact justifies their identification in the phonology, even if minimal pairs are lacking (as is true for d and dd).

(iii) Prenasalised consonants count as single consonants, unless they are geminate. Thus, nj of njaa+fee is a single consonant, as is mb of mbal. The same is true of other consonants that are conventionally written as digraphs: namely, ny ([ɲ]), and 'y ([ɣ]).

(iv) A glottal stop may occur in word-initial position: cf. 'o and 'aa in table IV. This fact will be reflected in the transcription used here, though in many transcriptions, glottal stop is only shown intervocalically (cf. UNESCO 1971).

(v) The distinction between short and long vowels is neutralised in word-final unstressed syllables (cf. §1.1.5.1. below). Thus, although I have quoted moo, 'aa and njaa+fee in isolation for the purposes of illustration, it must be understood that these forms only have a (final) CVV syllable when they are followed by another morph in the same word.

Moo and 'aa in fact only occur in a particular position in the verbal complexes of certain 'tenses', and are always followed by another morph. Njaa+fee would be phonetically [njɑ:fɛ], with CVV + CV syllable-structure, if uttered in pre-pausal position, but [njɑ:fe:], with CVV + CVV syllable structure, if followed, for example, by -be 'them'.

The syllable types in table IV can combine with each other. Here are some examples:

Table V

Combinations of the Commonest Syllable Types

(a)	CV + CVV	<u>wa+laa</u>	'There is/are not.'
	CV + CVC	<u>da+tal</u>	'path, way'
(b)	CVV + CV	<u>nyaa+mu</u>	'Eat (sg)!'
	CVV + CVC	<u>baa+tal</u>	'needle'
(c)	CVC + CV	<u>'ig+ga</u>	'It would be better than...'
	CVC + CVV	<u>moɔ+tee</u>	'Gather together (pl)!'

I shall not deal here with the question of which vowels or consonants may occur in which position in a syllable, although these matters will be touched on in the discussion of consonant alternation in §1.2. below.

Normally, both CVVC and CVCC syllables are unacceptable in the Fulfulde of the Kaceccere'en. The unacceptability of a CVVC syllable is evident from derivational and inflectional processes which involve a consonant-initial suffix. For example, when nyaa- 'eat'³ is followed by the -r-/-ir- extension (cf. §2.2.2.2. below), or by the -ndu class-suffix (cf. §1.3.1. below), then its vowel is shortened to a, as in 2.b. and c.:

2.a.	'On- <u>nyaa</u> -ay? you eat VAP	'On+nyaa+may CVC CVV CVC
	'Will you (pl) eat?'	
b.	Raa no <u>nyam-r</u> - at-on! see how eat you EXT VAP	nyam+ra+ton C VC CV CVC
	'See how you (pl) eat!'	
c.	<u>Nyam</u> -ndu wal-aa. eat is not CL NEG	nyam+ndu CVC CV
	'There's no food.'	

- 4.c. No kuugal ngal timm-ir - ta? tim+mir+ta
 how work this end CVC CVC CV
 EXT VAP
 'How will this work end?'
- 5.a. Biɓɓe njannng-ay. njan+ngay
 children read CVV CVC
 VAP
 '(The) children read.'
- b. Mi-jannng-in - ay biɓɓe. mi+jan+ngi+nay
 I read children CV CVC CV CVC
 EXT VAP
 'I teach (the) children.'
- c. Jawɗum njannng-ir - ∅ - mi -ɗi. njan+ngir+mi+ɗi
 quickly read I them CVC CVC CV CV
 EXT VAP
 'I quickly read them.'

Forms such as the following are unacceptable, because they involve syllables with CVCC structure, as shown on the right hand side:

- 4.d. *Min-timm-n-ay kuugal. min+*timm+nay
 we end work CVC CVCC CVC
- e. *No kuugal ngal timm-r-ta? *timm+*rta
 how work this end CVCC CCV
- 5.d. *Mi-jannng-n-ay biɓɓe. mi+*jannng+nay
 I read children CV CVCC CVC
- e. *Jawɗum njannng-r-mi-ɗi. *njannng+*rmi+ɗi
 quickly read I them CVC C CCV CV

4.e. and 5.e. contain two unacceptable syllables each - in fact, it is very difficult to assign any syllable structure to them at all.

1.1.3.2. 'Irregular' syllable structure

The three syllable-types described above are certainly the commonest in Kaceccereere Fulfulde, and the d. and e. sentences of 4. and 5. point to the fact that these CVC, CVV and CV syllable-structures need to be maintained. Nevertheless, certain uninflected words do have the exceptional CVCC or CVVC structure. Those that come to mind are:

- CVCC: koyɲ (diminutive plural class-suffix, etc. - see below)
minn 'me' (independent pronoun)
- CVVC: 'aan 'you (sg)' (independent pronoun).

Let us first consider koyɲ and minn, and then 'aan.

Koyn is a class-suffix for the diminutive plural nominal class.

It also 'represents' that class in various other functions: as a dependent pronoun, as deictic pronoun and adjective ('this'), and as an anaphoric determiner. (Concerning the nominal class system, see §1.3. below.)

It has the following cognates in various other dialects:

- kon: Gombe (Arnott 1970)
- kon: Northern Cameroon (Noye 1974)
- kony: Sokoto (Westermann 1909)
- koy: Nigerian Adamawa (Skinner and Pelletier 1979)

Each of these involves a CVC syllable. One might try to 'reanalyse' the Kaceccereere koyn, in order to make it conform to the general rules of syllable structure. Perhaps the diphthong, oy ([ɔɪ]) could be analysed as VV rather than VC: but this would result in an equally unusual CVVC syllable! Alternatively, one could argue that the final nasal is not segmentally realised, but that nasality is a supra-segmental feature of the whole form: thus, kōỹ ([kɔ̃ɪ̃]). Although the [ɔɪ] diphthong is indeed nasalised, there is no escaping the fact that this form does also entail a final [ŋ]; and I believe it must therefore simply be regarded as an exception to the 'no-CVCC' rule.

The 1sg independent pronoun is represented in other dialects as min or miin. In Kaceccereere Fulfulde, the vowel is [ɪ], not [i:]; and the alveolar nasal is always lengthened - unlike the final nasal of the 1pl (excl) pronoun, min. Despite the fact that nn occurs nowhere else in syllable-final position, and the fact that this gives us a CVCC consonant, we have no option but to regard this pronoun as another exception to the 'no-CVCC' rule.

The 2sg independent pronoun in Kaceccereere Fulfulde is identical to that found in Gombe, though in Adamawa, according to Noye (1974) and Skinner and Pelletier (1979), it is 'an rather than 'aan. There is little doubt but that it has CVVC structure, and it must therefore be regarded as an exception to the 'no-CVVC' rule.

1.1.3.3. Syllable Structure: Conclusions

Despite the exceptions described in §1.1.3.2., it is useful to consider CVC, CVV and CV syllables as the norm for Kaceccereere Fulfulde. In particular, as we shall see in §1.1.4.2. below, this analysis of syllable structure provides an extremely neat way of accounting for word-stress in nominals.

1.1.4. Prosodic Features

Fulfulde is an intonational language, and tone is not phonemic. I shall not be showing prosodic features in Fulfulde examples, except in this section, and in §2.2.3. below.

I shall discuss four features of prosody here: 'final glottality' (in §1.1.4.1.); word-stress (in §1.1.4.2.); intonation (in §1.1.4.3.); and hypertonic words (in §1.1.4.4.).

1.1.4.1. Final Glottality

Certain types of words are characterised by a glottal closure in pre-pausal position. This closure is not phonemic; it does not occur in non-pausal position; and it does not consistently occur, even in the speech of a single speaker. It is therefore best regarded as a feature of prosody. It occurs after nominals⁴ and after certain types of verbal complex. In the following examples, it is marked by a single inverted comma (as indeed is the glottal stop in initial and medial position):

6. Kanjum won-i hoore haala'.
that is head speech
VAP
'That is the introduction to (this) speech.'
7. 'E-mi-wood-i wiige baleere'.⁴
I have heiffer black
VAP
'I have a black heifer.'
8. 'O-yar - ay ndiyam'.
he drink water
VAP
'He drinks water.'
9. Ngam 'o-hokk-a- min habaru no Fulbe ngar-d- oy- i'.
so that he give us news how Fulani come
VAP EXT EXT VAP
'So that he may give us news of how the Fulani came
(from a distance).'

- 10.a. 'E-mi-wuund-ii-be'.
 I clasp them
 VAP
 'I'm clasping/embracing them.'

Examples 6. - 8. have a nominal in pre-pausal position, and thus have final glottality; and examples 9. and 10.a. have the sort of verbal complex in pre-pausal position that may have final glottality. The nominals hoore, wiige, habaru and Fulbe in 6., 7. and 9. do not have final glottality, because they are followed by other words in the sentence. Similarly, the verbal complex in 7., ('E-mi-wood-i), although it is similar to that in 10.a. ('E-mi-wuund-ii-be'), does not have final glottality, because it is not in pre-pausal position.

Final glottality does not occur with every verbal complex. Its occurrence is limited to complexes of conjugations of types 2 and 3 in table XXVII, chapter 4. In other words, it occurs with complexes of the Stative and Progressive, the Relative Completive and Incompletive, and the Subjunctive. Moreover, it does not occur in such complexes if a 2sg pronoun occurs in final position. For example, if the complex in 10.a., which is Stative, has maa 'you (sg)' instead of be as its object, then final glottality does not occur:

- 10.b. 'E-mi-wuund-i - maa.
 I clasp you
 VAP
 'I'm clasping/embracing you (sg).'

(The alternation between the long-vowelled -ii VAP-suffix and the short-vowelled -i, in 10.a. and b. respectively, is conditioned by the following pronoun: see §4.3.3..)

1.1.4.2. Word-Stress

The identification of the stressed syllable in a word is not a simple matter. Since vowel-length is phonemic, I shall take pitch as the chief criterion for identifying stress. However, there are in fact correlations between vowel-length and stress, especially in nominals.

The occurrence of stress in verbal complexes is discussed in §2.2.3. below. In nominals, it generally occurs on the last non-final CVC or CVV syllable.⁵ In the absence of such a syllable, the initial syllable of the nominal is stressed, regardless of its structure. In the following examples,

the stressed syllable is marked by preceding inverted commas ("):

Table VI

Stress in Nominals

(i) <u>Kacecce"reejo</u>	Ka+cec+ce+ree+jo CV CVC CV CVV CV	'Fulani of the Kaceccere'en clan'
<u>jala-jal"noowo</u>	ja+la+jal+noo+wo CV CV CVC CVV CV	'person who makes others laugh'
<u>nawli"raawo</u>	naw+li+raa+wo CVC CV CVV CV	'co-wife'
<u>mabbi"tirgel</u>	mab+bi+tir+gel CVC CV CVC CVC	'key'
<u>hon"ndoore</u>	hon+ndoo+re CVC CVV CV	'basket'
<u>joo"dorki</u>	joo+dor+ki CVV CVC CV	'chair'
<u>"koyngal</u>	koy+ngal CVC CVC	'leg'
<u>"nyiiiri</u>	nyii+ri C VV CV	'food'
(ii) <u>Ka"ceccere'en</u>	Ka+cec+ce+re+'en CV CVC CV CV CVC	'Fulanis of the Kaceccere'en clan'
<u>Wun"tanko'en</u>	Wun+tan+ko+'en CVC CVC CV CVC	'Fulanis of the Wuntako'en lineage'
<u>"njawdiri</u>	njaw+di+ri CVC CV CV	'ram'
<u>"hoccere</u>	hoc+ce+re CVC CV CV	'mountain'
<u>"fajiri</u>	fa+ji+ri CV CV CV	'dawn'
<u>"pamaro</u>	pa+ma+ro CV CV CV	'small (person)'
<u>"demal</u>	de+mal CV CVC	'farm'
<u>"'esam</u>	'e+sam CV CVC	'my in-law'

In each of the examples in (i) above, the penultimate syllable has CVV or CVC structure, and is thus stressed. This is not true in the examples in (ii), where the stress has therefore been 'pushed back' to an earlier CVC or CVV syllable if possible (as in the first four examples), or to the first syllable (as in the last four examples). Nominals with more than three syllables, but without a CVV or CVC syllable in penultimate position are very rare - most are proper names, as are Wuntanko'en and Kaceccere'en.

Names, and words of foreign origin, in fact provide regular exceptions to the rules of stress in nominals. For example, the Arabic numerals, borrowed via Hausa, generally have stress on their final syllable: tala"tin 'thirty', ham"sin 'fifty'. There are also other words that are possibly or definitely borrowed, and which similarly have stress on the final syllable. They include kabi"dow 'raincoat' (from Hausa), pogo"low 'bag', and gee"bol 'stream'.

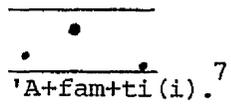
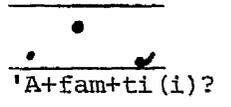
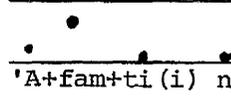
Word-stress will not be shown regularly in the examples given in this study. However, from time to time, when focus is under discussion (e.g. in §2.3.2. and chapter 6) a whole word will be underlined in a Fulfulde sentence. This will indicate that the word concerned is the focus of the sentence, and that its stressed syllable bears the intonation-peak of the sentence.

1.1.4.3. Intonation

The intonation-contour of a sentence is determined by many factors. Apart from such non-linguistic factors as the attitude of the speaker, these include: whether the sentence is a statement of a question; whether it has a topic or focus (cf. Chapter 6 below); and whether it is verbal or non-verbal. For present purposes, I shall assume that 'neutral' statements have gradually falling intonation, and I shall outline some of the ways in which 'neutral' questions, and non-neutral sentences, deviate from the norm.

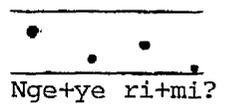
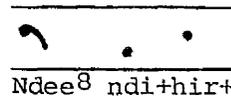
Yes/no questions are often distinguishable from statements only by their intonation. However, they may also have a 'question-marker', na, which I gloss in the examples as 'QU'. Yes/no questions have rising intonation, whereas statements have falling intonation, as can be seen from the graphic representation of the pitch of the following sentences.

The two horizontal lines represent the normal high and low limits of the voice.⁶

11. 'A-famt - ii.
you understand
VAP
'You (sg) have understood.'
- 
- 'A+fam+ti(i).'⁷
- 12.a. 'A-famt - ii?
you understand
VAP
'Have you understood?'
- 
- 'A+fam+ti(i)?'
- 12.b. 'A-famt - ii na?
you understand
VAP QU
'Have you understood?'
- 
- 'A+fam+ti(i) na?'

12.a. and b. are alternative yes/no-question equivalents of the statement in 11.. The rising intonation that is characteristic of yes/no questions occurs on the final syllable of the utterance. Thus, in 12.a., it is on tii, but in 12.b. it is on na.

A question that begins with a question-word (equivalent to the wh- questions in English), has falling intonation, like a statement. For example:

- 13.a Ngeye rim - i?
which bear
VAP
'Which (cow) has given birth?'
- 
- Nge+ye ri+mi?
- 14.a Ndee ndi hirs - aa?
when it slaughter
VAP
'When was it slaughtered?'
- 
- Ndee⁸ ndi+hirs+sa(a)?

The question-word may or may not be contrastively stressed. If it is, then the intonation pattern of the sentence will be as indicated in 13.b. and 14.b. below. If not, it will be as above.

A sentence with a focussed constituent often has contrastive stress (i.e. extra high pitch) on that constituent.⁹

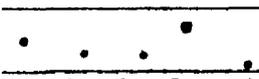
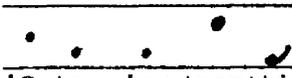
- 13.b. Ngeye rim-i?
which bear
VAP
'Which (cow) has given birth?'
- 14.b. Ndee ndi-hirs - aa?
when it slaughter
VAP
'When was it slaughtered?'
15. Ngetton rim-i.
that bear
VAP
'That one over there has given birth.'
16. Fajiri ndi-hirs - aa.
dawn/morning it slaughter
VAP
'It (eg. bull) was slaughtered at dawn.'
-

As can be seen from the accompanying pitch-representations, contrastive stress involves exceptionally high pitch on the relevant syllable of the focussed item; thus, the first syllable of ngeye in 13.b. has higher pitch than its counterpart in 13.a., for example. If the verb of a sentence is focussed, its root may receive contrastive stress.

17. Ndi-hirs-a, naa ndi-waat-u.
It slau- not it die
ghter
VAP VAP
'It (eg. bull) was slaughtered, it didn't (simply) die.'
-

NP-, adverb-, and verb-focus will be more fully discussed in §6.2. below.

If a sentence begins with a topic (which Arnott calls a 'prelude': see his 1970: §7.17., and §6.1. below), there is a potential for pause between the topic and the rest of the sentence. The rest of the sentence has intonation as if the topic were not there. This pause is represented by a comma in the Fulfulde text:

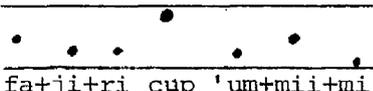
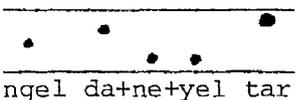
18. Kanko, 'o-famt - ii.
 him he understand
 TOPIC VAP
 ' (As for) him, he's understood.'

 Kan+ko 'o+fam+ti (i)
19. 'Onon, 'on-pamt - ii?
 you you understand
 TOPIC VAP
 ' (As for) you (pl), have you
 understood?'

 'On+on 'on+pam+ti (i)

Intonation will not be marked in the Fulfulde sentences of this study, unless it is particularly relevant to the discussion in hand.

1.1.4.4. Hypertonic Words

Certain Fulfulde words are always hypertonic: in other words, they always bear pitch that is higher than any other syllable in the sentence. They thus 'break' the general rules of intonation contours that have just been given. These hypertonic words include ideophones; and three quantifiers: fu and pat (both meaning 'all' or 'each'), and tan (meaning 'only').

The hypertonic words in sentences 20. - 25. are underlined, and their high pitch is indicated in the accompanying pitch-representations. Cup in 20. emphasises the earliness of fajiri; similarly, tar emphasises the whiteness of daneyel in 21.. In 22., det does not have an emphatic function; rather, it adds a meaning to its own to the verb wad- 'do'. (Christiane Seydou, in personal communication and in Seydou (*ed*) (1979) calls words such as det 'ideophones', and those such as cup and tar 'intensifiers'.) Fu and pat in 23. and 24. are interchangeable, both meaning 'all', 'each' or 'every'. These, and tan in 25., most commonly occur in prepausal position, and especially at the end of a topic (cf. chapter 6).

20. Fajiri cup 'umm-ii-mi
 dawn rise I
 ID VAP
 'At the crack of dawn I got up.'

 fa+ji+ri cup 'um+mii+mi
21. Ngel daneyel tar!
 it white
 ID
 'It's gleaming white.'

 ngel da+ne+yel tar

- 26.a. Bello yar - ii.
 Bello drink
 VAP
 'Bello drank.'

the -ii is not noticeably longer than the -i of:

- 27.a. Sey Bello yar - i.
 then Bello drink
 VAP
 'Then Bello drank.'

However, the -ii vs. -i distinction is maintained in the transcription used here, because there is an audible difference in the length of these two vowels if they are followed by another morph in the same word. Thus:

- 26.b. Bello yar - ii-ndi.
 Bello drink it
 VAP
 'Bello drank it (eg. njumri 'honey').'

has a noticeably long-vowelled VAP-suffix, whereas:

- 27.b. Sey Bello yar - i - ndi
 then Bello drink it
 VAP
 'Then Bello drank it (eg. honey).'

has a noticeably short-vowelled VAP-suffix.

The choice of -ii or -i as the VAP-suffix in 26. and 27. is determined by the inflectional paradigm to which the verbal complex (yar-ii or yar-i) belongs. The General Completive Active has the long-vowelled -ii, whereas the Relative Completive Active has the short-vowelled -i suffix. (The former is used in 'neutral sentences', the latter is necessitated by the occurrence of sey 'then'.)

Vowel-length in word-final position is transcribed here according to its potential, rather than its actual, length. This principle will be applied to the transcription of aa, ee, oo and uu, as well as of ii.

1.1.5.2. 'Weak' Consonants

Certain consonants in root-final position are sometimes phonetically realised as a vowel: I therefore term them 'weak consonants'. The consonants concerned are h, ' (glottal stop), w and y.

When the root-final -h in yah- 'go' is followed by a zero morph, or by a consonant-initial suffix, it is assimilated to the preceding a vowel; thus yah- is realised as [ya:]. This fact is recorded in the transcription. Thus, we may contrast 28.a. below with 28.b., c. and d.:

- 28.a. Min-njah-aa to.
 we go not yet
 VAP
 'We (excl) haven't gone yet.'
- | | | |
|---|------------------------------------|--------------------------------------|
| b. Yaa-∅ ton'.
go there
VAP
'Go over there!' | c. Yaa-go
go
INF
'To go.' | d. Yaa-du.
go
CL
'Journey.' |
|---|------------------------------------|--------------------------------------|

Similarly, when the root-final glottal stop in wi'- 'say' is followed by a zero morph, by a consonant-initial suffix, or by an i-initial suffix (cf. 33. on page 41 below), then it is assimilated to the preceding i, and wi'- is realised as [wi:]. Again, the a. form below may be contrasted with the b., c. and d. forms:

- 29.a. No be - mbi'-etee?
 how they say
 VAP
 'What are they called?'
- | | | |
|---|---------------------------------------|---|
| b. Wii-∅-mo!
say him
VAP
'Tell him!' | c. Wii-go.
say
INF
'To say.' | d. Bii-∅-do
say
VA CL
'Person who said.' |
|---|---------------------------------------|---|

In 28.a. and 29.a., the transcription reflects the phonological and phonetic reality. In the b., c. and d., forms, however, the transcription is phonetically, but not phonologically, true.¹⁰

The sequences -uw and -iy in root-final position are realised as [u:] and [i:] respectively when they are followed by zero morph or by a consonant-initial suffix. Thus, in the a. sentences below, the root-final consonant is realised as such; but in the b. and c. forms, it is realised vocally:

- 30.a. 'O-huw-ay - no.
 he work
 VAP ANT
 'He used to work.'
- b. 'On-kuu-d - ii.
 you work
 EXT VAP
 'You (pl) worked together.'
- c. Kuu-gal
 work
 CL
 'Work (noun).'
- 31.a. Mi-fiy-et-e.
 I hit you
 VAP
 'I'll hit you (sg).'
- b. Mi-fii-r - ii-mo - ndu.
 I hit with him it
 EXT VAP
 'I hit him with it.'
- c. Fii-go.
 hit
 INF
 'To hit.'

In the transcription used here, the phonemes /w/ and /y/ are written as u and i if they are preceded by an u or i and followed by a consonant: cf. -kuu-d- in 30.b. and fii-r- in 31.b.. Otherwise, they are written as w and y: cf. -hw-ay- in 30.a. and fiy-et- in 31.a., and the examples of diphthongs in table II on page 22 above.

1.1.5.3. Transcription: General

The transcription used here shows a certain amount of phonetic information. For example, didab- 'second' becomes didaw- before certain consonants, and this fact is represented orthographically. Thus, the transcription can be effectively used as a guide to pronunciation, bearing in mind the rules of stress and intonation mentioned in §1.1.4.2-3., and in §2.2.3..

Much of this study, however, is concerned with morphology and syntax - and in particular, the morphology and syntax of verbal complexes. For this reason, a detailed morphological analysis is presented for each verbal complex, with each morph identified in the gloss below each example: cf. 30. and 31.a. and b. above. There are instances where in quick speech, the form of the complex would be considerably reduced, for example:

32.a. 'O-sood-u-nde.
 he buy it
 VAP
 'He bought it.'

would become:

32.b. 'O-son-nde.
 'He bought it.'

In 32.b., only the pronoun subject, 'o- has retained its integrity, and sonnde is morphologically difficult to analyse, without reference to rules of consonant assimilation and vowel reduction. For this reason, when such a choice exists, the fuller, slow-speech version, is always given. Sometimes, the fuller version in fact no longer occurs at all, and in these cases, the morphologically-analysable deep-structure form will be given, together with the surface-structure form. Thus:

33. 'On-ngii-be.
 (<'On-ngi'-ii-be)
 you see them
 VAP
 'You saw them.'

With the root yi'- 'see', as with wi'- 'say/call/tell', the final glottal stop (') of the root is dropped when an i-initial suffix follows; and the i vowel of the root coalesces with the i or ii vowel of the suffix. The form 'On-ngi'-ii be is not normal in Kaceccereere (though it is

recorded by Arnott for the Gombe dialect), but since it facilitates a morphological analysis of 'On-ngii-De', it is represented in brackets with the latter form.

The only nominals for which I sometimes give a morphological analysis are participles, since they have many verbal characteristics. Other nominals will only be morphologically analysed during the course of the discussion of consonant alternation and the nominal class system, which are the subject of the next two sections, §1.2. and §1.3..

1.2. Consonant Alternation

If the reader refers back to the table of consonants (table III), he will notice that the alternating consonants have been arranged into three groups: continuants, plosives, and prenasalised consonants. The justification for this arrangement will now become evident.

In verbal roots and nominal stems, there are in fact eight sets of alternating consonants, as shown in the vertical columns of table VII. Each member of each set can conveniently be classified as belonging to a 'continuant', 'plosive' or 'prenasalised' series, as shown in the horizontal lines in table VII.

Table VII

Alternating Consonants in Verbal Roots and Nominal Stems

Continuant series:	w	w	y	y	r	h	f	s
Plosive series:	b	g	g	j	d	k	p	c
Prenasalised series:	mb	ng	ng	nj	nd	k	p	c

In considering table VII, the following three points must be borne in mind:

- (i) The labels 'continuant', 'plosives' and 'prenasalised' are morpho-phonologically useful, but they do not always correspond to phonetic reality: j and c are affricates, not plosives, and k, p and c are not prenasalised.

- (ii) k, p and c do 'double duty' as plosive and prenasalised alternants of h, f and s respectively.
- (iii) w and y alternate with two different sets of plosive and prenasalised consonants, the choice of set being to a large extent phonologically determined, as shown in table VIII:

Table VIII

Alternants of w and y

<u>y</u> alternates with <u>g</u> and <u>ng</u> ,	if followed by <u>e</u> , <u>ee</u> , <u>i</u> or <u>ii</u> ;
<u>y</u> alternates with <u>j</u> and <u>nj</u> ,	if followed by <u>a</u> , <u>aa</u> , <u>o</u> , <u>oo</u> , <u>u</u> or <u>uu</u> .
<u>w</u> alternates with <u>b</u> and <u>mb</u>	if followed by <u>e</u> , <u>ee</u> , <u>i</u> or <u>ii</u> ;
<u>w</u> alternates with <u>b</u> and <u>mb</u> , or <u>g</u> and <u>ng</u>	if followed by <u>a</u> , <u>aa</u> , <u>o</u> , <u>oo</u> , <u>u</u> or <u>uu</u> .

There is no way of predicting which alternation takes place when w is followed by a, aa, o, oo, u or uu: one simply has to know the character of the particular word concerned.

Consonant alternation most obviously takes place at the beginning of verbal roots and nominal stems; but since these facts have been very adequately described in the literature (eg. Arnott 1970 and Klingenberg 1963), they will only be briefly outlined here (sections §1.2.1 and §1.2.2).. However, alternation also takes place at the beginning of nominal-class suffixes, and at the end of verbal roots; and since these facts have been barely mentioned elsewhere,¹¹ they will be treated more fully here, in sections §1.2.3. and §1.2.4..

1.2.1. Consonant Alternation in Verbal Complexes

The verbal complex will be defined and discussed in §2.2. below. Essentially, it consists of a verbal root and a cluster of appendages. The latter include at least a suffix denoting Voice, Aspect and Polarity (which I call the 'VAP-suffix'), and often a pronominal subject and pronominal object(s) too. Although participles also contain a verbal root, they necessarily inflect for nominal-class, and they are syntactically NP's. The distinction between participles and verbal complexes is further discussed in §2.1.2.1. below.

If a verbal root begins with an alternating consonant, the continuant alternant is used when the subject both precedes the root, and is singular. For example.

- 34.a. Ndee 'o-war-i?
 when he come
 S V VAP
 'When did he come?'

Here, the verbal root, war-, begins with the continuant w, since the subject ('o-) both precedes the root, and is singular. However, the prenasalised alternant, ng, is used if the subject is plural (as is be- in 34.b.), and/or if the subject follows the root (as does -daa in 34.c. and -'on in 34.d.):

- 34.b. Ndee be - ngar-i?
 when they come
 S V VAP
 'When did they come?'

- c. Ndee ngar- \emptyset - daa?
 when come you
 V VAP S

'When did you (sg) come?'

- d. Ndee ngar- \emptyset - 'on?
 when come you
 V VAP S

'When did you (pl) come?'

The prenasalised alternant, ng-, is 'triggered' by the plural subject, be- in 34.b.; and by the following subject, -daa in 34.c. and -'on in 34.d.. Note that the prenasalised alternant is used in 34.c. despite the fact that the subject is singular; thus, the position of the subject overrides its number (ie. whether it is singular or plural) in determining the choice of alternant.

Here are some further examples of the operation of consonant alternation in verbal complexes. In each a. sentence, the subject is singular, and a continuant alternant is therefore used; and in each b. sentence, the subject is plural, and a prenasalised alternant is used. (Note that whether the subject is pronominal or not is immaterial.) Each c. and d. sentence has the subject following the verbal root: the c. subject is singular, the d. one plural.

- 35.a. Debbo 'am wuw-ii-ndu.
 wife my sweep it
 S V VAP O
 'My wife swept it (eg. hut/room).'
- b. Rewbe 'am mbuw-ii-ndu.
 wives my sweep it
 S V VAP O
 'My wives swept it (eg. hut/room).'
- c. Ngim dume mbuw-u-mi-ndu?
 for what sweep I it
 V VAP S O
 'Why did I sweep it?'
- d. Ngim dume mbuw-u-'en-ndu?
 for what sweep we it
 V VAP S O
 'Why did we (incl) sweep it?'
- 36.a. 'A - yar - ay kosam?
 you drink milk
 S V VAP O
 'Will you (sg) drink some milk?'
- b. 'On-njar - ay kosam?
 you drink milk
 S V VAP O
 'Will you (pl) drink some milk?'
- c. Kosam njar - at-aa?
 milk drink you
 O V VAP S
 'Will you (sg) drink milk (not anything else)?'
- d. Kosam njar - at-on?
 milk drink you
 O V VAP S
 'Will you (pl) drink milk (not anything else)?'

Since we are only concerned with consonant-alternation at this stage, the reader is referred to §4.1. below for an explanation of the factors that determine whether a subject precedes or follows the verbal root.

By way of contrast with the examples given so far in this section, here are some examples of a root whose initial consonant does not alternate. Sentences 37.a. - d. are comparable to the a. - d. sentences of 34. - 36; however, the verbal root in 37. consistently begins with d, despite variations in subject-position and -number:

- 37.a. Mi-doft - ay-be.
 I accompany them
 S V VAP O
 'I'll accompany them.'
- b. 'En-doft - ay-be.
 we accompany them
 S V VAP O
 'We (incl) will accompany them?'
- c. Har tokoye doft - ay-mi-be?
 to where accom- I them
 pany
 V VAP S O
 'How far shall I accompany them?'
- d. Har tokoye doft ay-'en-be?
 to where accom- we them
 pany
 V VAP S O
 'How far shall we (incl) accompany them?'

In 37., the verbal root begins with d-, whether the subject is singular (as in 37.a.), or plural (as in 37.b.); and whether the subject precedes the root (as in 37.a. and b.), or follows it (as in 37.c. and d.).

Note that when a verbal root occurs in a verbal complex, only the continuant and prenasalised alternants occur (cf. 34. - 36.). However, when a verbal root is part of a participle, then a plosive alternant may also be found. This will be discussed in §1.2.2..

1.2.2. Consonant Alternation in Nominals

For the time being, I shall subsume nouns, participles, and adjectives under the term 'nominal', since they all necessarily display class-concord in their class suffixes. This matter will be further discussed in §1.3.2. below.

The Fulfulde nominal-class system is reminiscent of that found in Bantu languages. Each of the 25 classes is 'associated with' only one of the consonant series shown in table VII; and most classes also have semantic connotations (cf. Arnott 1970: appendix 4). For example, if a nominal stem begins with an alternating consonant, and occurs in the Ngel class, its initial consonant must be a plosive, not a continuant or prenasalised consonant; and it will indicate diminutive singular meaning. However, if the same stem occurs in the Koyŋ class, its initial consonant must be a prenasalised one, not a continuant or a plosive; and it will indicate diminutive plural meaning. These facts are illustrated in 38. and 39. In 38.a., the Ngel class determines the occurrence of the stem-initial plosives, g and d, and in 38.b., the Koyŋ class determines the occurrence of the initial prenasalised consonants, ng- and nd-. (The class of these nominals is indicated by the -el, -yel, -oyŋ, and -hoyn suffixes, which will be discussed in §1.2.3. below). The nominals in 39. are unacceptable, because an inappropriate stem-initial consonant has been used.

- 38.a. Gapal-el dane - yel. b. Ngapal-oyŋ ndane-hoyn.
 gown white gown white
 CL CL CL CL
 'Small white gown.' 'Small white gowns.'
- 39.a. *Wapal-el rane - yel. b. *Gapal-oyŋ dane-hoyn
 gown white gown white
 CL CL CL CL
- c. *Ngapal-el ndane-yel. d. *Wapal-oyŋ rane-hoyn
 gown white gown white
 CL CL CL CL

By way of contrast, consider the nominals in 40.a. and b.. Although they are of the Ngel and Koyn classes (as are those of 38.a. and b.), the initial consonants of the tuute- and bale- stems are constant. This is because t and b are not alternating consonants.

- 40.a. Tuute-yel bale - yel. b. Tuute-hoyn bale - hoyn.
 flag black flag black
 CL CL CL CL
 'Small black flag.' 'Small black flags.'

Once the nominal-class system has been more fully explained, then a list of classes and their corresponding 'consonant+series' will be given (in table XIV below.)

1.2.3. Consonant Alternation in Class-suffixes

Each nominal class is characterised by up to 4 class-suffixes. For example, the Ngel class has suffixes -el and -yel (seen in 38.a. above), and also -gel and -ngel; the Koyn class has suffixes -oyŋ and -hoyn (seen in 38.b. above), and also -koyn. Further examples of class-suffixes are -ngal and -wal in 41.a. (both of the Ngal class), and -de and -je in 41.b. (both of the De class).

- 41.a. Dem - ngal feere - wal. b. Dem - de feeree - je.
 tongue/ different tongue/ different
 language language
 CL CL CL CL
 'A different language.' 'Different languages.'

(The length of the final vowel in the feere/feeree- stem is conditioned by the initial consonant of the following suffix.)

A particular nominal stem can only combine with one suffix of any class. For example, it would be impossible to swop the class-suffixes of the two stems in 41.a. or 41.b., thus:

42.a. *Dem - <u>wal</u> feere - <u>ngal</u> . tongue/ different language CL CL	b. *Dem - <u>je</u> feeree - <u>de</u> . tongue/ different language CL CL
---	--

42.a. is unacceptable, because dem- cannot combine with -wal, nor feere- with -ngal. Similarly, 42.b. is unacceptable, because dem- cannot combine with -je, nor feeree- with de.

Two important questions arise concerning the class-suffixes. How can we best describe the various suffixes for each nominal class? And is there any way of predicting which type of suffix will combine with a given nominal stem? I shall deal with the first of these questions in some detail; and the second I shall deal with more cursorily.

1.2.3.1. Suffix-Grades

Arnott (1970: ch.17) establishes four 'grades' of class-suffixes, 'A', 'B', 'C' and 'D'. I should like to suggest that his 'suffix-grades' are in fact the manifestation of the consonant-alternation system operating in class-suffixes.

The system of consonant alternation is not quite the same in suffixes as it is in nominal stems and verbal roots. One difference is the fact that there is what we can call a 'zero' series in the system, as well as the continuant, plosive and prenasalised ones we have already seen. The 'zero' series of suffixes mostly have zero initial consonant, although there is one exception (with r-), which can be seen in table IX below.

Table IX

Alternating Consonants in Nominal Class Suffixes

Grade/Series:	Zero	Continuant	Plosive	Prenasalised
	∅	w	g	ng
	∅	y	g	ng
	r	r	d	nd
	∅	h	k	k
	∅	j	d	d

Another difference is the fact that certain sets of consonants do not occur in suffix-initial position, namely w/b/mb, y/j/nj, f/p/p and s/c/c (compare table VII, where these do occur). Furthermore, the j/d/d alternation found in suffixes does not occur in verbal roots and nominal stems; and within this set, j is one of the continuant, not the plosive, series (of table VII).

Tables X and XI below illustrate the system of consonant alternation in Fulfulde nominal-class suffixes. Table X gives the four suffixes for certain representative nominal classes: the relevant consonants are underlined.

Table X

Representative Nominal Class Suffixes

Grade/Series	Zero	Continuant	Plosive	Prenasalised
<u>Class</u>				
<u>Ngu</u>	- <u>u</u>	- <u>wu</u>	- <u>gu</u>	- <u>ngu</u>
<u>Ngel</u>	- <u>el</u>	- <u>yel</u>	- <u>gel</u>	- <u>ngel</u>
<u>Nde</u>	- <u>re</u>	- <u>re</u>	- <u>de</u>	- <u>nde</u>
<u>Koyŋ</u>	- <u>oyŋ</u>	- <u>hoyŋ</u>	- <u>koyŋ</u>	- <u>koyŋ</u>
<u>De</u>	- <u>e</u>	- <u>je</u>	- <u>de</u>	- <u>de</u>

The horizontal lines in table X show the four class-suffixes that characterise the nominal class shown on the extreme left. Each vertical column shows suffixes of a single grade (zero, continuant, etc.), but of different classes. The underlined consonants in table X pattern with the consonants shown in table XI.

Table XI shows the same suffixes as table X, but this time in morphological context i.e. with nominal stems. For each of the classes mentioned in table X, table XI shows one example of each suffix-grade. (I shall henceforth refer to 'suffix-grades', but 'continuant (etc.) series' of consonants.) The factors that determine which grade of suffix occurs with which stem will be discussed presently (in §1.2.3.2. below).

Table XI

Nominal Stems, with Nominal Class Suffixes

Grade:	Zero	Continuant	Plosive	Prenasalised
<u>Class</u>				
<u>Ngu</u>	tatab- <u>u</u>	bale- <u>wu</u>	ngor- <u>gu</u>	taarii- <u>ngu</u>
<u>Ngel</u>	tatab- <u>el</u>	bale- <u>yel</u>	gor- <u>gel</u>	taarii- <u>ngel</u>
<u>Nde</u>	tatab- <u>re</u>	balee- <u>re</u>	wor- <u>de</u>	taarii- <u>nde</u>
<u>Koyŋ</u>	tatab- <u>oyŋ</u>	bale- <u>hoŋ</u>	ngor- <u>koyŋ</u>	taarii- <u>koyŋ</u>
<u>De</u>	tatab- <u>e</u>	balee- <u>je</u>	gor- <u>de</u>	taarii- <u>de</u>
Meaning:	'third'	'black'	'male'	'entwined'

(Note: The length of the final vowel of the bale-/balee- stem is conditioned by the initial consonant of the following suffix.)

The horizontal lines in table XI show different stems in combination with the four grades of class-suffix. Any one stem can only combine with one grade of suffix. Tatab-, for example, combines with zero grade, bale- with continuant grade, and so on. The vertical columns, on the other hand, show a single stem in combination with suffixes of the same grade but different classes. For example, taarii- is shown with suffixes of the Ngu, Ngel, Nde, Koyŋ and De classes. The meaning of stems plus class-suffixes will be discussed in §1.3.1.2. below: That shown at the foot of each column is in fact the meaning of the stem alone.

Table XI does not only show consonant alternation in suffixes: it also shows such alternations in a stem, wor- 'male'. Non-alternating stems, such as tatab-, bale- and taarii- are only subject to two variables: class-suffix and suffix-grade. Alternating stems, such as wor-, however, are subject to a third variable: the consonant series 'associated with' each nominal class. From table XI, we see that the Ngu class is associated with the prenasalised consonant series (hence the ng of ngor-), the Ngel class with the plosive series (hence the g or gor-), the Nde class with the continuant series (hence the w or wor-), and so on. The operation of this third variable, in addition to the other two, often effectively disguises the identity of a stem: the uninitiated might not guess, for example, that ngor-gu and worde both mean 'male' - though, as we shall see in §1.3.1.2. below, they in fact mean more than simply 'male'.

1.2.3.2. Which grade with a given stem?

Which grade of suffix will combine with a given stem? There do not appear to be any absolute rules concerning this. However, I shall make some general observations here, which are similar to, though not the same as, those made in Arnott (1970: ch. 17, and appendix 5).

Class-suffixes of the zero grade often occur with stems that end in a plosive consonant, whether that consonant is single, geminate, or part of a cluster.¹² For example:

43.a. Goot <u>a</u> .	b. Ndu <u>bb</u> - o.	c. Kolt - e.
one	fan-palm	clothe
CL	CL	CL
'One (eg. donkey).'	'Large fan-palms.'	'Clothes.'

In all of the above, the class-suffix begins with 'zero-consonant'. The final consonant of the nominal stem in 43.a. is -t, in 43.b. -bb, and in 43.c., the plosive t is part of a consonant cluster, -lt.

Class-suffixes of the continuant grade only occur with stems that end in a vowel, for example:

44.a. Meere <u>wol</u> .	b. Sirati <u>yel</u> .	c. Beydaa - ri.
useless	Kanuri	increase
CL	CL	CL
'Useless (eg. pen).'	'Child/small person of the Kanuri tribe.'	'Increase (e.g. in salary).'

Note that a stem-final vowel is always long before a suffix that begins with j- or r- (cf. 41.b., and balee-re/balee-je in table XI); but that otherwise, a stem-final vowel is short (cf. 41.a., and bale-wu, bale-yel and bale-hoyn in table XI). This fact explains the variation in the length of stem-final vowels in 44. (e- and i- in 44.a. and b., but aa- in 44.c.).

Class-suffixes of the 'plosive grade' always occur after a stem that ends with the r of the instrumental or locative verbal extensions. (The extensions are explained in §2.2.2.2.. See also Arnott 1970: chs. 57 - 59). For example:

45.a. Daar <u>or</u> - gal.	b. Jood <u>or</u> - ki.	c. Juul <u>ir</u> - de.
look	sit	pray
EXT CL	EXT CL	EXT CL
'Mirror.'	'Chair.'	'Mosque.'

(Note that inasmuch as only certain, morphologically-defined, types of -r- final stems regularly combine with the plosive-grade suffixes, we are dealing here with morpho-phonology, and not only phonology.)

Class-suffixes of the prenasalised grade often combine with stems ending with a continuant (cf. the examples given in 46.); and they always combine with participial stems (cf. 47.):

46.a.	Bow - 'di. mosquito CL 'Mosquitoes.'	b.	Yim - be. person CL 'People.'	c.	Bun - ndu. well CL 'Well.'
47.a.	Gid - aa-do. love VA CL 'Beloved (person)'	b.	War - ay-nde. come VA CL 'Coming/next (eg. week).'	c.	Sennd - u - be. separate VA CL '(People) who have separated.'

The participial stems in 47. in fact consist of a verbal root (gid-, war- and sennd-), followed by a 'Voice-Aspect-Suffix' (VA-suffix)¹³, and then by a class-suffix.

1.2.3.3. Suffix-grades: Conclusions

By way of conclusion to this discussion of consonant alternation in class-suffixes, I should point out that there are many features of the class-suffix system that have yet to be explored. Most important is the question of what really is the final consonant of a nominal stem: in many instances, an underlying 'archiphoneme' has to be postulated, whose surface-structure form is determined by the class-suffix. For example, the stem meaning 'child' is biC-, where 'C' represents a consonant that is the same as the initial consonant of the class suffix. Thus: bid-do 'child', biβ-be 'children', bin-ngel 'little child', and bik-koyŋ 'little children'. Such assimilation we can term a type of 'forwards sensitivity', for the realisation of the one consonant is 'sensitive' to what follows. Yet the observations made above concerning the correlation between nominal stem and suffix-grade involve the opposite, ie. 'backwards sensitivity'. It is clear, then, that what happens at the juncture of stem and suffix needs considerably more investigation.

1.2.4. Consonant Alternation in Root-final Position

Consonant-alternation in root-final position is less obvious than elsewhere. Moreover, it is not an active synchronic process. Rather, it is found by analysis of the phonological structure of verbal roots.

Most Fulfulde verbal roots have a basic CVC, CVVC or CVCC structure. Roots that are synchronically derived by the addition of one or more verbal extensions (cf. §2.2.2.2.) may be polysyllabic, as indeed may roots of foreign origin. The observations made here pertain only to the 'basic', monosyllabic, roots.

Taking 'basic' roots, we find that there is a certain patterning of consonants in root-final position, as shown in table XII:

Table XII

A. Consonants most commonly found in
root-final position¹⁴

<u>Type</u>	<u>Examples</u>
(i) <u>Any non-alternating consonant</u> (single or geminate)	fi ḅ - 'tie', ma ḅḅ - 'close' wa m - 'dance', la mm - 'be bitter' wo n - 'live' hin n - 'greet'
(ii) <u>Alternating Consonants:</u>	
a. <u>Non-geminate continuants</u> ¹⁵	mar- 'own', d ay - 'be distant' he w - 'be full', la ah - 'pant' wo of - 'err', we s - 'winnow'
b. <u>Geminate Plosives and Affricates</u>	w add - 'bring', tig g - 'establish' d abb - 'foment', tik k - 'be angry' s ipp - 'hawk(wares)', maj j - 'be lost'
c. <u>Geminate Prenasalised Consonants</u>	nan nd - 'resemble', jen ng - 'be late' 'omb b - 'cover'

Table XII (cont.)B. Consonants rarely found in root-
final position¹⁶

- a. Non-geminate Plosives and Affricates: Some exceptions are found in table III; others are:
 ɓad- 'approach', jog- 'hold'
 sood- 'sell', wooj- 'be red'
- b. Non-geminate Pre-nasalised consonants: Exceptions are:
 wuund- 'embrace, clutch'
 foond- 'measure'.

What table XII shows us is that the following most commonly occur in root-final position:

- (i) non-alternating consonants:
- (ii) a. non-geminate continuants;¹⁵
 b. geminate plosives and affricates;
 c. geminate prenasalised consonants.

Of the alternating consonants, then, continuants on the one hand alternate with geminate plosives, affricates, and prenasalised consonants on the other. In other words, the phonology of verbal roots is such that a root-final plosive, affricate or prenasalised consonant is likely to be geminate (cf. A (ii) b. and c. in table XII); but a root-final continuant is not. In view of the CVC, CVVC or CVCC 'basic' structure of verbal roots, the following are, therefore, the most commonly-occurring types:

Table XIIIPhonology of commonest Verbal Roots

- (i) CV + Non-alternating Consonant
 CVV + Non-alternating Consonant
- (ii) a. CV + Continuant
 CVV + Continuant
- b. CV + Geminate Plosive or Affricate
- c. CV + Geminate Prenasalised Consonant.

A long vowel is not possible with types (ii) b. or c., because this would create an unacceptable CVVCC root. In this respect, Kaceccereere Fulfulde differs from the Fulfulde described by Noye and Arnott, for example. Both these writers quote roots with such a CVVCC structure, for

example, suumt- 'break one's fast' (Noye 1974: 342), and mooɓt- 'assemble' (Arnott 1970: 344). The Kaceccereere equivalents of these words have a short vowel, thus CVCC structure.

Although in root-final position there is no morph-phonologically-conditioned alternation of consonants on a grand scale, there is nevertheless some slender evidence of such alternation in certain derivational processes.¹⁷ The example that most easily springs to mind is the alternation between heew- and hebb- as the root for 'be full'. The former is the 'basic' root. However, when the causative extension, -in, is added, the 'basic' root becomes hebb-, and the derived root is thus hebb-in- 'fill'. Here, then, we see alternation between w and bb, continuant and geminate plosive. (The variation in vowel-length (ee vs. e) could be explained, in Kaceccereere Fulfulde, in terms of the unacceptability of CVVCC roots. However, hebb-in- (not *heebb-in-) is recorded in other dialects too (cf. Taylor 1932: 76, Gaden 1914: 95). It is in fact more usefully explicable in terms of a fairly general correlation between CVVC and CVCC, especially with the causative extension. For example wojj-in- 'cause to become red' is derived from wooj- 'be red'; and ɗuɗɗ-in- 'increase, make much/many' is derived from ɗuud- 'be much/many'.)

1.2.5. Consonant Alternation: Conclusions

When the list of consonants was presented in table III, pages 23 - 24, it was pointed out that minimal pairs cannot be found for absolutely every consonant that is distinguished in the transcription used here. Some of these distinctions can only be justified on phonetic grounds: ŋ vs. ng, and ' vs. 'y. Others can be justified on phonetic grounds, and because they are useful for the analysis of syllable structure: ny vs. nny, 'y vs. 'y, d vs. dd. Others, however, can be justified in terms of morphophonology. Thus, while p cannot be established by means of a minimal pair, it is useful to distinguish it because it systematically alternates with f.

There are few minimal pairs to prove the phonemic status of the prenasalised consonants. This is partly because they so rarely occur in root-final position. One example is the following pair:

wuud- 'be intractable' vs. wuund- 'embrace'

This minimal pair satisfactorily establishes the need to distinguish d from nd. However, no equivalent contrasts exist for ng, mb or nj. Nevertheless, the morpho-phonological status of these consonants in stem- and root-initial position is indubitable.

There are no minimal pairs to establish the phonemic status of the geminate prenasalised consonants either. Moreover, these do not alternate in stem-, root- or suffix-initial position. It was pointed out in §1.2.4. that they do alternate, in a non-active, 'fossilised', way, in root-final position. However, since the latter alternation is not a significant morpho-phonological process in the language today, I have not listed the geminate prenasalised consonants in table III.

Despite their lack of status, either phonemic or morpho-phonological, I do distinguish geminate from non-geminate prenasalised consonants in the transcription. This is because they are an undeniable phonetic reality; and because the CVC vs. CVCC distinction is necessary for the purposes of discussing syllable-structure.

1.3. The Nominal Class System

Fulfulde is a language with a highly developed inflectional morphology. Two important types of 'content words' can be identified, according to their inflectional paradigms and their syntactic behaviour. On the one hand, there are what I call nominal stems; and on the other hand, verbal roots. (I shall consistently use 'stem' for nominals, and 'root' for verbs, though this choice is quite arbitrary.) Nominal stems necessarily inflect for nominal class: in other words, they must be accompanied by a nominal-class suffix. Verbal roots necessarily inflect for voice, aspect and polarity: these are expressed in the 'Voice/Aspect/Polarity-suffix' (VAP-suffix). They may also inflect for other categories too: these matters are discussed in chapters 3 - 4. Participles are hybrid forms: they consist of a verbal root and a 'Voice/Aspect-suffix', but they also take a nominal-class suffix, and they behave, syntactically, like nominals. Since the major part of this study is devoted to the morphology and syntax of verbs, I shall spend a little time here on nominal morphology.

1.3.1. The Classes

Each of the 25 classes in Fulfulde is 'associated with' the continuant, plosive, or prenasalised series of consonants (cf. table VII, page 42), and each is also characterised by a set of up to four class-suffixes (cf. table XI, page 50). A nominal stem occurring with a particular class must begin with a consonant of the series appropriate to that class; and it will combine with one of the suffixes characteristic of that class. These facts are illustrated in the examples of 38. and 41., page 47 above.

The class-system in Kaceccereere Fulfulde is essentially the same as that described in Arnott (1970) for the Gombe dialect. Using consonant alternation and class-suffixes as our criteria, we can distinguish 24 classes, 19 singular and 5 plural. However, since one of the classes so distinguished, the Nga class, corresponds to two different plural ones -- the choice depends on whether augmentative meaning is present or not -- it is convenient to split the (morphologically-defined) Nga-class into two, each corresponding to one plural class. This gives us 20 singular classes, and 5 plural ones, which I shall name as indicated in table XIV below, according to the form of the dependent subject pronoun that is characteristic of the class.

Table XIV

Nominal Classes

<u>Class Name</u>	<u>'Meaning'</u>	<u>Initial Consonant Series</u>	<u>Class Name</u>	<u>'Meaning'</u>	<u>Initial Consonant Series</u>
<u>'O</u>	Sg. Pers.	Plosive	<u>Nge</u>		Continuant
<u>Be</u>	Pl. Pers.	Continuant	<u>Ngo</u>		Continuant
<u>Ngel</u>	Dim. Sg.	Plosive	<u>Ngu</u>		Prenasal
<u>Koyŋ</u>	Dim. Pl.	Prenasal	<u>Ngal</u>		Plosive
<u>Kal</u>	Dim. Qu.	Prenasal	<u>Ngal</u>		Plosive
<u>Ngum</u>	Dim. Pejor	Prenasal	<u>Ka</u>		Prenasal
<u>Nga</u>	Aug. Sg.	Prenasal	<u>Ki</u>		Prenasal
<u>Ko</u>	Aug. Pl.	Prenasal	<u>Ko</u>		Continuant
<u>Nde</u>		Continuant	<u>Kol</u>	'calf'	Plosive
<u>Ndi</u>		Prenasal	<u>Dam</u>	liquids	Prenasal
<u>Ndu</u>		Continuant	<u>Dum</u>	neutral	Plosive
<u>Nga</u>		Prenasal	<u>De</u>	non-human plural	Plosive
			<u>Di</u>	non-human plural	Plosive

Notes:

- (i) Table XIV is based on Appendix 3 of Arnott (1970), where further details regarding the nominal classes and their morphology will be found. The observations there are almost all pertinent to the Kaceccereere dialect.
- (ii) The following abbreviations have been used in table XIV:
- | | |
|---------------------|------------------------------------|
| sg. = singular | dim. = diminutive |
| pl. = plural | aug. = augmentative |
| qu. = 'of quantity' | pejor. = pejorative |
| pers = personal | prenasal. = prenasalised consonant |
- (iii) If no 'meaning' is mentioned for a class, that indicates that the connotations of the class are too diverse to be summarised. The reader is referred to Arnott (1970 Appendix 4), and to Arnott (1967) for further information regarding the meaning or connotations of the various classes. 'Calf' is mentioned with the Kol class, because this is its sole meaning.
- (iv) The 'Initial Consonant Series' mentioned in the the third and sixth columns of table XIV refers to the three series of consonants indicated in table VII, page 42 above.

I shall now discuss two issues arising from table XIV. First, the relationship between singular and plural classes (in §1.3.1.1.), and then the 'meaning' of a nominal that is composed of a stem plus class-suffix (in §1.3.1.2.).

1.3.1.1. Singular and Plural Classes

There is a one-to-one correlation between three of the singular and three of the plural classes. This fact is illustrated in table XV:

Table XV

One-to-one Correlation between
Singular and Plural Classes

<u>Singular</u>			<u>Plural</u>		
<u>Class</u>	<u>Example</u>	<u>Meaning</u>	<u>Class</u>	<u>Example</u>	<u>Meaning</u>
'O	joodii-do	'settled (person)'	Be	joodii-be	'settled (people)'
Ngel	meere-yel	'useless (dimin.)'	Koyŋ	meere-hoyŋ	'useless (dimin.)'
Nga	bin-nga	'large child'	Ko	bik-ko	'large children'

As well as being in one-to-one relationship with their singular or plural counterparts, these six classes also have the most clearly identifiable 'meaning': 'O and Be are the classes expressing person; Ngel and Koyŋ express diminutives; Nga and Ko express augmentatives. (This Nga class is one of the two Nga classes mentioned on page 57.)

The classes depicted in table XV are so predictable in their meaning and in their singular-plural equivalents, that one might want to argue that they constitute only three classes, each divisible into singular and plural. However, this would not be a practicable treatment of the other classes; and for the sake of uniformity, it seems best to consider singular and plural classes as distinct.

There is no simple correlation between the other seventeen classes and their plural equivalents. The Ndu, Ngu, Kol and Ngol-classes, and the non-augmentative Nga-class, always correlate with the Di plural class. (There are certain exceptions, but they need not concern us here: the details given in Arnott 1970: ch.16 are relevant to the Kaceccereere dialect, as well as to the Gombe dialect.) These correlations are illustrated in table XVI:

Table XVI

Correlation between Singular and Plural Classes

<u>Singular</u>			<u>Plural</u>		
<u>Class</u>	<u>Example</u>	<u>Meaning</u>	<u>Class</u>	<u>Example</u>	<u>Meaning</u>
Ndu	waa-ndu	'monkey'	Di	baa-di	'monkeys'
Ngu	ndane-wu	'white (eg. horse)'	Di	danee-ji	'white (eg. horses)'
Kol	nyal-ol	'calf'	Di	nyal-i	'calves'
Ngol	keh-ol	'bamboo'	Di	keh-i	'bamboos'
Nga	nood-a	'crocodile'	Di	nood-i	'crocodiles'
Ngal	gell-al	'guinea-fowl'	De	gell-e	'guinea-fowls'
Nde	juulir-de	'mosque'	De	juulir-de	'mosques'
Ki	lek-ki	'tree'	De	led-de	'trees'
Ko	feere-ho	'different (eg. soup)'	De	feeree-je	'different (eg. soups)'
Dum	bodfee-jum	'red (eg. thing)'	De	bodfee-je	'red (eg. things)'

As mentioned briefly in §1.2.3.3 above, various phonological and morpho-phonological changes may occur at the juncture of nominal stem and class-suffix. This explains the variation in certain stems in table XVI: lek- vs. led-, ndane- vs. danee-, and feere- vs. feeree-.

Because two plural classes correlate with seventeen singular classes (of which only ten are exemplified in table XVI), there is less precision of reference in the plural than in the singular. This is especially true of stems that may occur in many different classes, which we can for the moment call 'adjectives'. For example, the -wu suffix of ndane-wu restricts the reference of this word to 'nouns' that occur in the Ngu class. Thus, the rules of class concord would prevent ndanewu from being used with any of the other 'nouns' in table XVI. The -ji suffix of daneeji similarly restricts the reference of the word to 'nouns' that occur in the Di-class. However, such 'nouns' are extremely numerous. For example, daneeji could refer to any of the plural 'nouns' in the upper half of the table, since these are all of the Di class. The same principles apply, *mutatis mutandi*, to the referential properties of feereho and feereeje, and to bodfeejum and bodfeeje, in the lower half of the table.

(There is some doubt concerning the adjective/noun distinction in Fulfulde, hence my use of inverted commas in the preceding paragraph. This matter will be discussed in §1.3.2. below).

1.3.1.2. The 'Meaning' of Nominals

Some nominal classes have a definable 'meaning', such as was ascribed to the classes featured in table XV. For example, a nominal stem occurring in the 'O-class necessarily refers to a person (either male or female); a stem occurring in the Kol class necessarily refers to a calf. Other classes have connotations with certain types of meaning, but they are not so clearly definable. For example, a stem occurring in the Ngol class is likely to refer to a long thin thing; a stem occurring in the Dam class is likely to refer to a liquid; and a stem occurring in the Ki class is likely to refer either to a tree, or to a bladed instrument. The class-suffix thus limits the reference of the stem.

The 'meaning' of a nominal is, then, composite. It is composed at least of the meaning of the stem and the meaning of the suffix. If it is a participle, it is also composed of the meaning of the VA-suffix. This allows great flexibility of expression. For example, there is a class-suffix meaning 'big' and a stem meaning 'big'; there is a class-suffix meaning 'person' and a stem meaning 'person'. Thus, both the following forms occur:

48.a. Nen - nga. person big CL 'Big person.'	b. Maw-d'o big person CL 'Big person.'
---	---

These Fulfulde words in fact have different connotations: nen-nga is 'a huge person', whereas maw-d'o is more 'a chief, boss'. What concerns us here, however, is the morphological composition of Fulfulde nominals, rather than their precise semantic analysis.

The above examples do not only show that Fulfulde nominals are morphologically and semantically composite. They also show the doubtfulness of the 'noun' vs. 'adjective' distinction in Fulfulde: for 'big' is expressed in the one instance by a suffix (-nga in 48.a.), and in the other by a stem (maw- in 48.b.); and 'person' is expressed in the one instance by a stem (nen-¹⁸ in 48.a.), and in the other by a suffix (-d'o in 48.b.). Let us now turn to the issue of nouns and adjectives, which was brushed aside at the beginning of §1.2.2..

1.3.2. Nominals: Nouns, Adjectives and Participles

A stem such as nen-, seen in 48.a., occurs in few of the nominal classes. Those that it does combine with are indicated in table XVII. Note that its stem-final consonant assimilates to the initial consonant of the class-suffix.

Table XVII

Range of classes occurring with nen- 'person'

<u>Class</u>	<u>Nouns</u>	<u>Meaning</u>
'O	ned-do	'person'
Ngel	nen-ngel	'little person'
Koyŋ	nek-koyŋ	'little people'
Nga	nen-nga	'big person'
No	nek-ko	'big people'
Ngu	nedfaa-ku	'humanity, kindness'

The plural of ned-do is yimbe, a suppletive form. Nedfaa-ku is probably a derived noun, for it is obviously based on ned-do, rather than the 'simple stem', nen-.

By way of contrast, a stem such as maw- 'big', seen in 48.b., occurs in all 25 nominal classes. Those shown in table XVIII are only a sample. Note, again, that assimilation often occurs between the final consonant of the stem and the initial consonant of the suffix.

Table XVIII

Sample of classes occurring with maw- 'big , important'

<u>Class</u>	<u>Adjectives</u>	<u>Approximate Meaning</u>	<u>Class</u>	<u>Adjectives</u>	<u>Approximate Meaning</u>
'O	maw-do	'important (person)'	Be	maw-be	'important (people)'
Ngel	man-ngel	'important (little person or thing)'	Ki	mak-ki	'big (eg. tree)'
Koyŋ	mak-koyŋ	'important (little people or things)'	Nde	maw-nde	'big (eg. book)'
Nga	man-nga	'huge (person or thing)'	Nge	man-nge	'big (eg. cow)'
Ko	mak-ko	'huge (people or things)'	Dum	maw-dum	'big (thing)'
Ngu	man-ngu	'big (eg. horse)'	Ndi	maw-ndi	'big (eg. bull)'
			Di	maw-di	'big (eg. horses)'
			De	maw-de	'big (eg. beans)'
			Ka	mak-ka	'big (eg. speech)'
			Kol	mak-kol	'big (calf)'

The classes on the left in table XVIII are the same as those in table XVII; those on the right are a sample of other classes with which maw- may combine.

Traditionally, forms based on a stem such as nen- are termed 'nouns', and those based on a stem such as maw- 'adjectives'. This is the approach adopted by Taylor (1921: ch.7), Noye (1974: §296), and Skinner and Pelletier (1979: 362), for example. Arnott, although he uses both terms, expresses considerable scepticism concerning the distinction (1970: §15.1.). However, he defends it on two grounds. Morphologically, 'adjectives' occur in a wider range of classes than 'nouns'. This is certainly borne out by the evidence of nen- and maw-; yet could it not be explained in terms of the semantic compatibility of stems and class-suffixes? Syntactically, he claims that 'nouns' cannot qualify the head of an NP, except in a genitival capacity. This point is worthy of investigation, which I shall not pursue here. Arnott could have added a further difference: namely, the fact that 'adjectives' almost always have verbal cognates. There is, for example, a verb mawn- meaning 'to be or become big', but there is no parallel cognate verb for nen-.

I share Arnott's scepticism concerning the adjective - noun distinction, despite the points made in the latter half of the above paragraph. Morphologically, 'nouns' and 'adjectives' occur in whichever classes semantic compatibility allows. The combination of rew- 'female' with -dam (the class-suffix commonly referring to liquids) is no more ridiculous than the combination of nag- 'cow' with -do (the class-suffix reserved for 'person') - though both are conceivable in a non-factive environment (cf. Lyons 1977: 795). Yet rew- is commonly considered to be an adjectival stem, and nag- a noun one. Moreover, the combination of rew- with the 'O' class suffix (and certain morpho-phonemic changes) gives the form debb-o 'woman' - presumably a 'noun'.

Debb-o's membership of the rew- class paradigm, and its function as the word for 'woman' highlights another point concerning 'nouns' and 'adjectives'. Every 'adjective' in Fulfulde can be used, syntactically,

as an NP. In other words, a so-called adjective can be the subject or object of a sentence; and it can also be the topic or focus of a sentence - these matters will be further discussed in §2.3. and in chapter 6 below. An 'adjective' does not have to be accompanied by the 'noun' that it supposedly qualifies - it can stand quite independently.

This is not the place for the detailed syntactic and morphological analysis that is needed in order to do justice to the noun/adjective issue in Fulfulde. For present purposes, I shall ignore such differences as there may be between stems, and concentrate on their similarities - namely, the fact that both 'adjective' and 'noun'-stems necessarily inflect for class; the fact that their initial consonant is sensitive to class, if it is of the alternating type; and the fact that a word consisting of an 'adjective'- or 'noun'-stem plus class-suffix may behave syntactically as an NP. These are also the characteristics of participles, though the latter also inflect for Voice and Aspect: for example, the -ii- in jood-ii-do and jood-ii-be in table XV expresses Middle Voice and Completive Aspect.¹⁹ Given the characteristics that nouns, adjectives and participles have in common, I have included them all under the umbrella term 'nominals' for the purposes of this discussion of the class-system in Fulfulde.

1.3.3. The Nominal Class System: Conclusions

Each nominal class has its own set of pronouns. These include independent (or emphatic) pronouns, which are anaphoric in reference, and are used as topic or focus of a sentence (cf. §2.3.1. - 2.); and dependent pronouns, which are similarly anaphoric, but are used in verbal complexes (ch. chapters 3 and 4). They also include deictic pronouns, of which there are several types in Kaceccereere Fulfulde; and interrogative pronouns.²⁰ Here is the full paradigm of pronouns for a single class, the Nge class.

Table XIXPronouns of the Nge class

Independent Pronoun:	kange	'the one (eg. cow) referred to'
Dependent Pronoun:	nge	'it (eg. cow)'
Near-deictic Pronouns:	ngee	'this one (eg. cow)'
	ngeedoo	'this one (eg. cow)'
	ngeddon	'this one (eg. cow)'
Far-deictic Pronouns:	ngeya	'that one (eg. cow)'
	ngetton	'that one (eg. cow)'
Interrogative Pronoun:	ngeye	'which one (eg. cow)?'

It is not clear how the various near- and far- deictic pronouns differ in meaning and/or usage. Several of them are in fact morphologically composite: doo means 'here', doo 'around/present', and ton 'there', and forms such as ngetton obviously originate from the coalescence of nge and ton.

In the discussion of verbal morphology, I shall frequently give examples of dependent pronouns occurring in verbal complexes. In Fulfulde sentences, I use pronouns from as many different classes as possible. However, in tables (such as XXIII in chapter 4, and in Appendix A), it would be impracticable to show the dependent pronoun for each and every class, and I therefore show the Be class-pronoun as representative of other classes. Usually, I place 'etc.' after Be, in order to indicate its representative role.

There is one nominal class, however, which has different dependent pronouns, according to conjugation ('tense') and case. This is the 'O' class. The dependent pronouns for this class are therefore presented separately from others. In its range of pronoun-variation, the 'O' class is similar to the 1st and 2nd person pronouns, which are not, of course, class-pronouns.

1.4. Conclusion

In this chapter, we have seen some of the essential linguistic features of Kacecereere Fulfulde: its phonology, the system of consonant alternation, and the nominal class system. We are now in a position to consider larger linguistic units: Fulfulde sentences, Noun Phrases (NP's), and Verbal Complexes.

Chapter 1: Footnotes

1. The infinitives given in table I are of the Active Voice. The u vowel only occurs obligatorily after a CVVC or CVCC verbal root, and I argue in §4.2.1. that it should be regarded as anaptyctic. It is shown in all the examples here for the sake of uniformity.
2. Non-geminate p is never found in root-final position. This example shows p in root-initial position.
3. Certain common verbal roots and nominal stems, including nyaam-, are identical. Which is derived from which, or indeed whether either is more 'basic' than the other, is immaterial to our concerns here.
4. Concerning the definition of 'nominal', see §1.3.2. below.
5. This analysis of stress in nominal; differs considerably from that in Arnott (1965: 78), where it is claimed that stress occurs, basically, on the first syllable.
6. The system of pitch-representation used here is very *ad hoc* in nature, but the following principles have been adhered to:
 - (i) The syllable with highest pitch is marked by a large dot, the others with a small dot.
 - (ii) Pitch-movement on a given syllables is indicated by a tail, the length of the tail corresponding to the amount of pitch-movement.
7. In word-final unstressed syllables, the difference between long and short vowels is neutralised. Although my transcription consistently shows long and short final vowels in this position (cf. §1.1.5.1. below), the former must be considered short for the purposes of syllable-analysis, unless they are stressed. Where appropriate, I therefore place brackets around the second part of final vowels in the syllable-analysis that accompanies the pitch-representations.
8. Since this monsyllabic word is stressed, its final long vowel is not shortened.
9. Concerning focus and contrastive stress, see footnote 24, p. 118.
10. Another common verbal root that behaves like wi'- is yi'- 'see'. It may be that yah- is the only root that drops its final h, as described here. Of the other, rare, h-final roots, mah- 'build', for example, retains its final h in all inflectional and derivational paradigms.
11. Consonant-alternation in class-suffixes is mentioned in Labatut (1973: §6.1.), and in Sapir (1971: 72-73).

12. Professor Jack Carnochan has suggested that there may be a correlation between non-alternating stem-final consonants and zero grade nominal class suffixes. It may well be that further investigation of this issue will enable such a correlation to be established.
13. See note 19 below.
14. Table XII is based on a count of some 1,000 verbal roots. It was found that for the number of roots ending in a continuant, only approximately a quarter of that number end in its corresponding non-geminate plosive. It is on the basis of these observations that the terms 'most commonly' and 'rarely' are used.
15. Of the alternating continuants shown in table VII (page 42), only r has a geminate counterpart, found for example in torru_go 'to bother, trouble'. This fact tallies with the observations made in the discussion after table XII (page 54). Non-alternating continuants, such as l, n, and m, on the other hand, usually do have geminate counterparts, found in Pullo 'a Fulani person', hinn- 'greet' and lamm- 'be bitter', for example.
16. The following non-geminate consonants are never found in root-final position in this dialect: p, ng, mb and nj.
17. Observations about consonant-alternation in root-final position, both in Wolof and the Fulfulde (or Pulaar) of Senegal are to be found in Sapir (1971: 76-77 and 104-106).
18. This stem is quoted as nen- for convenience. As can be seen from table XVII, its final consonant is usually conditioned by the following suffix.
19. Participles are by definition positive rather than negative. It is therefore not possible to argue that the -ii- of jood-ii-d_o, for example, expresses positive polarity, since negative polarity cannot occur in this environment. In this respect, participles differ from verbal complexes, which do express polarity.
20. Deictic and interrogative adjectives are morphologically identical to their pronominal counterparts.

Chapter 2

The Fulfulde Sentence, Noun Phrase,
and Verbal Complex

2.0. Introduction

In this chapter, I shall discuss the Fulfulde sentence, and give working definitions of the verbal complex and the noun phrase, since these categories are crucial for the discussion in the following chapters.

2.1. The Fulfulde Sentence

I use the term 'sentence' here in the way in which it is used in transformational grammar, i.e. to refer to what is called a clause, or a one-clause sentence, in traditional grammar.

Fulfulde sentences can be divided into two main types, verbal and non-verbal. I shall give some examples of each here, and then discuss and define each in more detail. First, here are six examples of verbal sentences:

- | | |
|--|---|
| <p>49.a. 'E-mo-woow-a - dum.¹
 he get it
 used
 S V VAP O
 'He's getting used to it.'</p> | <p>b. 'E-be - mboow-a - um.
 they get it
 used
 S V VAP O
 'They're getting used
 to it.'</p> |
| <p>c. Dume mboow - at - aa?
 what get used you
 O V VAP S
 'What are you (sg) getting used to?'</p> | |
| <p>50.a. Mi-hul - ay - ngel.
 I fear it
 S V VAP O
 'I fear it.'</p> | <p>b. Min-kul - ay - ngel.
 we fear it
 S V VAP O
 'We (excl) fear it.'</p> |
| <p>c. Ndee kul - ay- mi-ngel?
 when fear I it
 V VAP S O
 'When do I fear it?'</p> | |

- 53.a. Be woow-u - be dum.
 they get it
 used
 VA CL
 'They're (people who have got) used to it.'
- 54.a. Nyaako 'am Sarkin Fulaani Naaraayi.⁴
 father my Sarkin Fulani Narayi
 'My father is Sarkin Fulani Narayi.'
- 55.a. 'O Sarkin Fulaani Naaraayi.
 he Sarkin Fulani Narayi
 'He's Sarkin Fulani Narayi.'
- 56.a. Labi wondon.
 knife is
 'It's a knife.'
- 57.a. Dum labi.
 it knife
 'It's a knife.'
- 58.a. 'E-ngel don doo.
 it here
 'It's here.'
- 59.a. Yillaabe 'e don.
 'The Yillaabe (lineage) exist(s).'/ 'There's the Yillaabe
 (lineage).'

These sentences represent three types of non-verbal sentences: those expressing attribution (51.a. - 53.a.); identification (54.a. - 57.a.); and location and/or existence (57.a. - 59.a.). These three types will be dealt with in sections §2.1.2.1. - §2.1.2.3. respectively

Although 52.a. and 53.a. each contains a participle, none of the sentences in 51.a. - 59.a. contains a verbal complex. The difference between participles and verbal complexes will be elaborated on in greater detail in §2.1.2.1. below. For the moment, however, it is worth noting two points concerning sentences 51.a. - 53.a.. Firstly, each of the nominals in these sentences has a nominal-class suffix, which I have

separated from the nominal stems: the -hoyn, -'o and -e suffixes represent the Koyn, O and Be classes respectively; and these suffixes display class-concord with the subject of these sentences. Secondly, the initial consonant of each nominal is one of the consonant-series required by the class represented by the class-suffix. For example, the Koyn class requires a prenasalised consonant: thus ndane-hoyn in 51.a. begins with nd-; the 'O class requires a plosive consonant, and boow-u-ŋo in 52.a. thus begins with b-. These points are highly relevant to the distinction between verbal and non-verbal sentences.

2.1.1. Verbal Sentences

We have already noted the following points about verbal sentences:

- (i) They necessarily contain a verbal complex;
- (ii) If the initial consonant of a verbal root in a complex is an alternating one, then it is sensitive to the number and position of its subject.
- (iii) Although the verbal complex may contain class-pronouns (such as be and dum), there is no class-concord between the subject and any suffixes of the verbal root.

2.1.1.1. Deletion

Let us now consider some other characteristics of verbal sentences. One of these is the fact that under identity conditions, a subject or object noun-phrase, or the verbal complex itself, may be deleted from the surface-structure of the sentence. In sentence 60., for instance, the verbal complex koot-i has zero subject in surface structure, because its deep-structure subject is the same as that of the preceding verbal complex, 'umm-ake:

60.	Bibbe	'umm - ake,	sey	∅-koot-i
	children	arise	then	go
				home
	S	V	VAP	S V VAP

'(The) children got up and went home.'

Sentence 61., on the other hand, has zero object as well as zero subject; again this is caused by the fact that the subject and object of the second verbal complex, wad-a, are in deep structure the same as those of the first verb, wadd-a.

61. Sey nedfo wadd - a nebbam na'i, sey ∅ wad-a ∅.
 then person bring oil cows then put
 S V VAP O S V VAP O
 'Then one should bring butter, and put it in.'

We see an example of zero verbal complex in sentence 62.b., where the njar-u-mi of 62.a. has been deleted. Such deletion is possible despite the fact that the subject of the two verbal complexes ('o-yar-i and njar-u-mi) is different; the reason for this is no doubt the presence of a topic noun-phrase at the beginning of each sentence: kanko and minn in the first and second sentences respectively.

- 62.a. Kanko, mboyri 'o - yar - i; minn bo, kosam njar-u - mi.
 him gruel he drink me milk drink I
 TOPIC O S V VAP TOPIC TM O V VAP S
 '(As for) him, he drank gruel, (as for) me, I drank milk.'
 'He drank gruel, whereas I drank milk.'
- b. Kanko, mboyri 'o - yar - i; minn bo, kosam ∅.
 him gruel he drink me milk
 TOPIC O S V VAP TOPIC TM O VS⁵
 'He drank gruel, I milk.'
 'He drank gruel, whereas I drank milk.'

Zero subject is also found with affirmative imperative verbal complexes. The fact that the subject is present in deep-structure but deleted in surface-structure is suggested by the consonant alternation that can be seen operating between singular and plural imperatives. Thus, for instance, in the sentences of 63., we see that the verbal root has its continuant/plosive form, jood- for the singular imperative, and its prenasalised form, njood-, for the plural imperative. (This verbal root has no *yood- form, and jood- thus doubles as the continuant and the plosive form.)

- 63.a. Jood-a!
 sit
 VAP
 'Sit down! (sg.)'
- b. Njood-ee!
 sit
 VAP
 'Sit down! (pl.)'

2.1.1.2. Verbal Categories

Another characteristic of verbal sentences is the fact that, by virtue of the verbal complex they necessarily contain, they can express properties of verbal categories such as:

If we compare these sentences with their affirmative equivalents, we notice that the -a VAP suffix has been replaced by -ataa, and also that the 'e morph before the subject has been dropped. We also notice that -mo- has been replaced by 'o- as the subject pronoun. In fact, two negative conjugations, or 'tenses', are equivalent to six positive conjugations, and this means that various distinctions found in positive verbal sentences are neutralised in negative verbal sentences (cf. §3.6.1.2. and §3.6.2.2.). That is why I have given alternative translations to sentences 64.a. and b..

There are, however, three conjugations whose negative counterparts involve a special sentence-initial negative particle, rather than a negative conjugation. The Imperative and the Subjunctive form their negative with the sentence-initial taa⁷ or to, as in 65.b. and 66.b. below; and the Emphatic Completive forms its negative with naa, as in 67.b. In each instance, the rest of the sentence is identical to its positive counterpart.

<p>65.a. Hubb - u hiite. light fire VAP 'Light a fire!'</p>	<p>b. <u>Taa</u> hubb-u hiite. light fire NEG VAP 'Don't light a fire!'</p>
<p>66.a. De - kebb-in - ee. they full EXT VAP 'They (eg. calabashes) should be filled.'</p>	<p>b. <u>To</u> de - kebb-in - ee. they full NEG EXT VAP 'They (eg. calabashes) should not be filled.'</p>
<p>67.a. Mi-sur - a! I prevent VAP 'I was <u>prevented/held up!</u>'</p>	<p>b. <u>Naa</u> mi-sur - a! I prevent NEG VAP 'I wasn't <u>prevented/held up!</u>'</p>

The naa seen in 67.b. is also used to form the negative of various types of non-verbal sentences, and for this reason, negation is not a tight criterion for the distinction between verbal and non-verbal sentences.

2.1.2. Non-Verbal Sentences

Non-verbal sentences do not contain a verbal complex, though they are often equivalent to sentences containing a copular verb. In this section, I shall discuss attributional, identificational, and locative/existential sentences, and I shall also mention certain types of non-verbal sentences that do not fit any of these categories.

2.1.2.1. Non-Verbal Sentences: Attribution

Sentences involving the attribution of a quality to the subject usually consist of the subject, followed by a nominal expressing that quality. The subject and the nominal display class-concord. Thus, koyŋ and -hoyŋ in 51.a. are of the same class, as are 'o and -dɔ in 52.a. and be and -be in 53.a..

51.a. Koyŋ ndane-hoyŋ.
they white

CL

'They (dim.) are white.'

52.a. 'O boow-u - dɔ dum.
he get it
used

VA CL

'He's (a person who has got) used to it.'

53.a. Be woow-u - be dum.
they get it
used

VA CL

'They're (people who have got) used to it.'

Sentences involving attribution have counterparts using the copular verb woni⁸:

51.b. Koyŋ-ngon-i⁹ ndane-hoyŋ.
they are white
VAP CL

'They are white.'

52.b. 'O-won-i boow- u- d̄o d̄um.
 he is get it
 used
 VAP VA CL
 'He's (a person who has got) used to it.'

53.b. Be - ngon-i woow-u - ðe d̄um.
 they are get it
 used
 VAP VA CL
 'They are (people who have got) used to it.'

It seems likely, in fact, that the a. sentences are derived from their b. equivalents. However, the former are much more commonly used than the latter.

The negative counterparts of attributional sentences are formed by placing naa in front of the non-verbal positive sentence, thus:

51.c. Naa koȳ ndane-hoȳ.
 not they white
 CL
 'They (dim.) are not white.'

52.c. Naa 'o boow-u-d̄o d̄um.
 not he get it
 used
 VA CL
 'He's not (a person who is) used to it.'

53.c. Naa ðe woow-u - ðe d̄um.
 not they get it
 used
 VA CL
 'They're not (people who are) used to it.'

However, naa cannot be placed in front of attributional sentences which include woni (such as 51.b. - 53.b.). Thus, the c. sentences above are the only negative counterparts of both the a. and the b. sentences. (This naa is the same naa as was seen in 67.b. on page 74 above.)

Attributional sentences generally have interrogative counterparts involving the use of noy 'how?' and woni. For example, 51.a. would be a suitable answer to 51.d.:

51.d.	Noy koyŋ ngon-i? how they are 'What are they like?'	51.a.	<u>Koyŋ</u> ndane-hoyŋ. they white CL 'They (dim.) are white.'
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Sentences 52.a. and 53.a. provide interesting test-cases for the definition of verbal and non-verbal sentences, and especially if they are compared with 49.a. and b.. The sentences concerned are juxtaposed below, and the suffixes and consonants under discussion are underlined:

49.a.	'E-mo- <u>woow</u> -a - dŋm he get it used VAP 'He's getting used to it.'	49.b.	'E- <u>be</u> - <u>mboow</u> -a - dŋm. they get it used VAP 'They're getting used to it.'
52.a.	'O <u>boow</u> -u - <u>do</u> dŋm. ¹⁰ he get it VA CL 'He's (a person who's got) used to it.'	53.a.	Be <u>woow</u> -u - <u>be</u> dŋm. they get it VA CL 'They're (people who've got) used to it.'

Sentences 49.a. and 52.a. are similar, inasmuch as they both have a singular subject pronoun of the 'O class; similarly, the subject of both 49.b. and 53.a. is be. Moreover, all these sentences end with a pronoun of the Dum class.

There are, however, three respects in which 49.a. and b. on the one hand differ from 52.a. and 53.a. on the other:

(i) Whereas in 52.a. and 53.a., the nominal class of the subject (-'o-, be-) is picked up later in the sentence (by the -do and -be suffixes), this is not the case in 49.a. and 49.b., where the only other class-like item is dŋm.

(ii) In 49.a. and 49.b., the verbal root displays sensitivity to the preceding subject: cf. §1.2.1. above, and the following further examples:

68.a. Mi-woow-ii - mo.
 I get her
 used
 VAP

b. Min-mboow-ii - mo.
 we get her
 (excl) used
 VAP

"I've got used to her."

"We've got used to her."

It is characteristic of this 'sensitivity' that a preceding singular subject correlates with a continuant consonant (such as w-), whereas a preceding plural subject correlates with a prenasalised consonant (such as mb-).

(iii) In 52.a., although the subject precedes and is singular, the root begins with b- (not w-); and in 52.b., although the subject precedes and is plural, the root begins with w- (not mb-). A plosive initial consonant in fact characterises the 'O' class, and a continuant the Be class (cf. table XIV).

Given these facts, we can but conclude that 49.a. and b. are verbal sentences, ie. include a verbal complex; but that 52.a. and 53.a. are non-verbal sentences, ie. consist of a subject and juxtaposed nominal, but include no verbal complex.¹¹

2.1.2.2. Non-Verbal Sentences: Identification

I shall divide sentences involving identification into two types: those that involve the use of a dummy subject, dum (as in 56.a.) or a clefting particle wondon (as in 57.a.); and those that do not (such as 54.a. and 55.a.). I shall consider the latter first.

Sentences 54.a. and 55.a. are in many respects similar to 51.a. and 53.a. on page 75 above. Although it is not immediately obvious in 54.a., there is class concord between the subject and the juxtaposed NP in each sentence. In 54.a., two NP's are juxtaposed:

54.a. Nyaako 'am Sarkin Fulaani Naaraayi.
father my Sarkin Fulani Narayi
 NP NP

'My father is Sarkin Fulani Narayi.'

If the intonation peak of 54.a. falls within Sarkin Fulaani Naaraayi, then Sarkin Fulaani Naaraayi identifies the preceding NP, nyaako 'am. (With an alternative intonation pattern, 54.a. might be analysed as two NP's, the second in apposition to the first.) Although proper names do not have a class-suffix, their nominal class becomes evident when they are referred to anaphorically. Sarkin Fulaani Naaraayi would be referred to by 'o, as indeed would nyaako 'am; thus there is, in effect, class-concord between the two NP's in 54.a.. In 55.a., the subject is obviously of the 'O class; and there is thus agreement between the subject NP and the 'predicating NP' there too:

55.a. 'O Sarkin Fulaani Naaraayi.
 he Sarkin Fulani Narayi
 'He's Sarkin Fulani Narayi.'

Woni may intervene in 54.a. and 55.a. (cf. 51.b. - 53.b. on pages 75 - 76):

54.b. Nyaako 'am won-i Sarkin Fulaani Naaraayi.
 father my is Sarkin Fulani Narayi
 VAP
 'My father is Sarkin Fulani Narayi.'

55.b. 'O-won-i Sarkin Fulaani Naaraayi.
 he is Sarkin Fulani Narayi.'
 VAP
 'He's Sarkin Fulani Narayi.'

Moreover, the negative counterparts of sentences 54.a. and 55.a. involve the use of naa, thus:

54.c. Nyaako 'am naa Sarkin Fulaani Naaraayi.
 father my not Sarkin Fulani Narayi.
 'My father is not Sarkin Fulani Narayi.'

55.c. Naa 'o Sarkin Fulaani Naaraayi.
 not he Sarkin Fulani Narayi
 'He's not Sarkin Fulani Narayi.'

As can be seen from 54.c., naa occurs after an NP, but before a pronoun subject in such sentences. The implications of this fact are considerable - chiefly because there is some doubt as to whether

nyaako 'am is the subject or the topic of 54.c., and indeed of 54.a.. This matter will not be discussed any further.¹²

Although in the above respects, identificational sentences are identical to attributional sentences, there is one respect in which they differ. The interrogative counterparts of 54.a. and 55.a. are formed not with noy (cf. 51.d. on page 77) but with an interrogative class pronoun, such as moye:

54.d.	Moye won-i nyaako maadfa?	55.d.	Moye 'o-won-i?
	who is father your		who he is
	VAP		VAP
	'Who is your father?'		'Who is he?'

The fact that nyaako maadfa follows, whereas 'o precedes, won-i in 54.d. and 55.d. respectively is attributable to the fact that 'o is a dependent pronoun, whereas nyaako maadfa is an NP.

Let us now turn to identificational sentences involving wonfon or dum:

56.a.	Labi wonfon.	57.a.	Dum labi
	knife is		it knife
	'It's a knife.'		'It's a knife.'

56.a. and 57.a. are in fact synonymous. Syntactically, however, they are very different: for wonfon is a clefting particle of verbal origin, and with certain verbal characteristics, whereas dum is a class pronoun of the 'neutral' class (cf. table XIV). Both wonfon and dum are used to help focus an NP: see §6.2.1.7. of chapter 6.

Wonfon is derived from the copular verb woni plus the adverb don 'present, around': in fact, wonidon (with -i-) is in free variation with wonfon (without -i-). The initial consonant of wonfon alternates according to the number of its preceding subject, thus:

- 56.a. Labi wonfon. b. Labe ngonfon.
 knife is knives are
 'It's a knife.' 'They're knives.'

Despite this verbal characteristic, wonfon does not take any verbal inflections, except the -i- seen in wonifon - if indeed that is an inflection.¹³ Nor can a dependent pronoun subject be appended to it: contrast 56.c. with 55.d. above, where 'o- is appended to won-i:

- 56.c. *Ki - wonfon.
 it
 (eg.
 knife)

Wonfon thus hardly qualifies to be considered a verbal complex, and I treat sentences involving wonfon as non-verbal.

Whereas wonfon always follows, dum always precedes the NP that it identifies. There is no evidence to suggest that sentences with dum are derived from verbal sentences, for a construction such as 57.b. is unacceptable:

- 57.b. *Dum won-i labi
 it is knife

Like the other identificational and attributional sentences discussed in this section, and in §2.1.2.1., sentences with wonfon or dum have negative equivalents with naa:

- 56.d. Naa labi wonfon. 57.c. Naa dum labi
 not knife is not it knife
 'It's not a knife.' 'It's not a knife.'

The interrogative counterparts of identificational sentences with wonfon or dum involve the use either of dume 'what?', or of an interrogative class pronoun of another, non-neutral, class, which will convey 'which?'. Thus:

- | | |
|---|--|
| <p>56.e. Dume wondon?
 what is
 'What is it?'</p> | <p>f. Kiye wondon?
 which is
 'Which is it?'</p> |
| <p>57.d. Dum dume?
 it what
 'What is it?'</p> | <p>e. Dum kiye?
 it which
 'Which is it?'</p> |

The factors that determine the choice between dume and a pronoun of a non-neutral class are not easy to describe, and it is not entirely certain whether the 'what'/'which' dichotomy just mentioned correlates exactly with the Fulfulde facts. Consider, for example, sentences 55.a. and 57.a. on pages 79 and 80. In the former, we see the juxtaposition of a class-pronoun, 'o, and an NP, nyaako 'am. Syntactically, this is the same as 57.a., where we see the juxtaposition of dum and an NP, labi. The difference is that whereas 'o and nyaako 'am display class-concord, dum and labi do not.

For the moment, we can say that if the speaker knows that the item to be identified is likely to be of a particular nominal-class (for example, most bladed instruments are in the ki class), then the class-pronoun is likely to be used; but if the probable class of the item to be identified is not known, then the neutral dum is more likely to be used. This distinction is not watertight, however, for dum is often used where a dummy 'it' occurs in English, and even where the item concerned is bound to be personal. For instance, Dum moye? 'It's who?' will be said when a person is heard arriving at a compound (homestead) - not 'O moye? 'He/she is who?' It may be that questions of reference determine such usage: in any case, a lot more research is needed to clarify these issues.

2.1.2.3. Non-Verbal Sentences: Location and Existence

Under this heading, I shall consider sentences such as the following:

- | | |
|---|---|
| <p>58.a. 'E ngel don doo.¹⁴
 it here
 'It (dim.) is here.'</p> | <p>59.a. Yillaabe 'e don.
 Yillaabe
 'The Yillaabe (lineage)
 exist(s). '/ 'There are the
 Yillaabe (lineage).'</p> |
|---|---|

These both involve a subject (ngel, Yillaabe) with 'e and don; though 58.a. also involves doo 'here'. Moreover, they both have negative equivalents using the defective verb walaa:¹⁵

<p>58.b. Ngel wal-aa doo. it is here NEG 'It (dim) is not here.'</p>	<p>59.b. Yillaabe ngal-aa. Yilla e are NEG 'The Yillaabe don't exist.' 'There aren't any Yilla e.'</p>
--	--

The essential difference between such sentences is the fact that a sentence including a locative adverb, such as doo in 58.a., expresses location; whereas a sentence without such an adverb, such as 59.a. 'only' expresses existence.

'E will be discussed again in §2.2.2.4. below. It is uncertain whether this 'e, which I shall term 'predicating 'e', is cognate with the preposition 'e meaning 'with'/'by', and with the conjunction 'e meaning 'and' (between NP's only). For the moment I shall disregard the existence of the other types of 'e, and regard the latter as homophones of the former.

Predicating 'e occurs optionally in locative and existential sentences: both 58.a. and 59.a. would be acceptable without 'e, for example:

<p>58.c. Ngel don doo. it here 'It (dim) is here.'</p>	<p>59.c. Yillaabe don. Yillaabe 'The Yilla e exist.'</p>
--	--

Nevertheless, Kaceccere'en speakers prefer to use 'e in such sentences: in some sense, it seems to 'smooth over' the predication of existence or location to the subject - which is why I call it 'predicating 'e'. Note that when 'e does occur, it precedes a pronoun subject. (cf. 58.a.), but follows an NP subject (cf. 59.a.). The reverse order is unacceptable:

<p>58.d. *Ngel 'e don doo.</p>	<p>59.d. *'E Yillaabe don.</p>
--------------------------------	--------------------------------

In the glosses of Fulfulde examples, I do not translate 'e, since it is very difficult to assign a definable 'meaning' to it.

Don is, morphologically, a member of a paradigm of locative adverbs, which include ton 'there' and doo 'here'. Don can be assigned the meaning 'present', 'around', or even 'existant': it does not have such deictic force as ton and doo.

In locative sentences, don is optional; though if it is deleted, e must be retained. Thus, an alternative to 58.a. and c. is 58.e.; but not 58.f.:

58.e.	'E ngel doo. it here 'It (dim) is here.'	58.f.	*Ngel doo. it here
-------	--	-------	-----------------------

58.e. is slightly less emphatic than its counterparts with don: for example, it is less suitable as a response to a question regarding the whereabouts of 'it'. In existential sentences, however, don occurs obligatorily. Thus 59.e. and f. are not alternatives to 59.a. and c.:

59.e.	*Yillaabe 'e.	f.	*Yillaabe.
-------	---------------	----	------------

Both e and don are used in the formation of the Progressive and Stative verbal conjugations, as can be seen in:

70. E-mo-don-nokk - a hiite.
 he pick up fire
 VAP
 PROGRESSIVE ACTIVE
 'He's picking up a burning twig from one fire to light
 another.'

71.a. Musuuru e-don-daan - ii.
 cat sleep
 VAP
 STATIVE MIDDLE
 'The cat's asleep.'

I have argued elsewhere that the Progressive and Stative have arisen, diachronically, from the conflation of existential sentences and a verbal form: 70. and 71.a. might have meant, at an earlier stage in the language 'He is around (e-mo-don), picking up fire (nokk-a hiite)', and 'The cat's around (musuuru e-don), asleep (daan-ii)'. Regarding this historical hypothesis, see McIntosh (1980); regarding the morphology of the Stative and Progressive, see §2.2.2.4. below.

2.1.2.4. Non-Verbal Sentences: 'Rag-bag'

There are two particles in Fulfulde that are probably of verbal origin, but that do not inflect, and whose use in effect produces sentences without a verbal complex, ie. non-verbal sentences. There is also another particle, hin, which has no obvious verbal connections, and which is used as a complete sentence in itself.¹⁶

The first mentioned above are raa/ndaa and 'igga. Raa/Ndaa is presumably cognate with raarugo 'to see'. Although the initial-consonant alternation between r- and nd- suggests a singular/plural subject correlation, raa and ndaa are used interchangeably, regardless of the number of the subject. They are very similar to French voici. Here are some examples of their usage:

- | | | | |
|-----|---|-----|--|
| 72. | Raa paɗe maad'a.
see shoes your
'Here are your (sg) shoes.' | 73. | Ndaa de.
see them
'Here they (eg. shoes) are.' |
|-----|---|-----|--|

'Igga means 'It would be better...'. It may be followed either by an NP (cf. 74.a. and b.), or by a sentence with a Subjunctive verbal complex (cf. 75.a. and b.).¹⁷

- | | | | |
|-------|--|-------|--|
| 74.a. | 'Igga nditton.
better that
'That one over there
would be better.' | 74.b. | 'Igga jaango.
better tomorrow
'Tomorrow would be better.' |
| 75.a. | 'Igga njah-∅ - aa.
better go you
VAP
'You (eg.) had better go.' | 75.b. | 'Igga Hassan jood-oo.
better Hassan sit
VAP
'Hassan had better sit down.' |

Although 'igga does not inflect for voice, aspect, polarity or other verbal categories, it may be followed by the Anteriority Marker ('ANT'), as in 75.c.:

- | | |
|-------|---|
| 75.c. | 'Igga - no njah-∅ - aa.
better go you
ANT VAP
'It would have been better if you (sg.) had gone.' |
|-------|---|

The Anteriority Marker is usually appended to verbal roots, and its occurrence with 'igga suggest that the latter is of verbal origin.

Hin is used to mean 'Here you are', 'Here it is' or 'Take it (ie. what I'm offering to you)', but does not combine with an NP or any other item.

2.1.2.5. Non-Verbal Sentences: Conclusions

On the basis of their interrogative equivalents, I have separated attributional and identificational sentences - the former having an interrogative equivalent with noy? 'how', the latter with an interrogative class-pronoun. On the basis of their negative equivalents, however, these types of sentences are similar, since they both employ naa. More research is needed in order to establish whether the attributional/identificational distinction is syntactically useful. Locational and existential sentences, on the other hand, are syntactically clearly distinguishable from attributional and identificational sentences: for they (locational and existential sentences) both use 'e and fon, and both have negative equivalents with walaa. It may be that this two-way distinction within non-verbal sentences is more useful than the three-way distinction that has been described here. (For the moment, I am ignoring the 'rag bag' non-verbal sentences.)

2.1.3. The Fulfulde Sentence: Conclusions

The ultimate purpose of this section on the Fulfulde sentence has been to identify verbal complexes, and their occurrence in sentences. Let us therefore now consider more precisely what characterises a verbal complex.

2.2.0. The Verbal Complex

We have already noted various characteristics of verbal complexes (cf. §2.1.). These include the following:

- (i) They consist of a verbal root plus a VAP-suffix, and sometimes other appendages too;
- (ii) The initial consonant of the verbal root, if it is an alternating one, is sensitive to the number of a preceding subject, and to the position of the subject.

In this section, I shall define the verbal root and the verbal complex, and elaborate on some of the characteristics mentioned above, in preparation for the following three chapters, which deal with the internal syntax and semantics of the verbal complex, its morphology, and with types of exponence of verbal properties (such as active voice, completive aspect, etc.).

2.2.1. The Verbal Root

Verbal roots can be distinguished from nominal stems by the range of inflections they can take. Verbal roots, whether part of a verbal complex or of a deverbal nominal, are usually followed by a suffix expressing voice and aspect;¹⁸ whereas nominal stems are followed by a nominal-class suffix. This does not mean to say, however, that a stem cannot become a root, or vice-versa. In fact, some nominal stems can be 'converted' into verbal roots by the addition of the -d/-id- suffix; and verbal roots are commonly 'converted' into nominal stems by the addition of a VA -suffix plus nominal-class suffix. In this section, I shall explore some of these facts.

Most verbal roots combine with a range of VAP suffixes each of which expresses a group of properties that characterise a particular conjugation. These groupings will be the subject of the next chapter. For the moment, let us consider, by way of example, the VAP-suffix -ii in 71.a. which is repeated here for convenience:

71.a. Musuuru 'e-don-daan- ii.
 cat sleep
 VAP
 'The cat's asleep.'

This -ii VAP-suffix contrasts with -oo:

71.b. Musuuru 'e-don-daan - oo.
 cat sleep
 VAP

'The cat is falling asleep.'

Sentences 71.a. and b. form a minimal pair, since they are in every respect identical except for the -ii and -oo VAP-suffixes: the former expresses middle voice, completive aspect, and positive polarity; whereas the latter expresses middle voice, incompletive aspect, and positive polarity. They differ, then, with respect to aspect. This same verbal root, daan- can also take other VAP-suffixes, such as -ake and -aaki in 76.a. and b.:

76.a. Hawwa daan - ake.
 Hawwa sleep
 VAP

b. Hawwa daan - aaki.
 Hawwa sleep
 VAP

'Hawwa's gone to sleep.'

'Hawwa's not gone to sleep.'

Although both these suffixes, -ake and -aaki, express middle voice and completive aspect, they differ with respect to polarity: -ake is positive, but -aaki is negative.¹⁹

As well as a range of VAP-suffixes, a verbal root can also take one or more verbal extensions. These in some sense modify the meaning of the root, creating what we can call an 'extended root'. An extended root has the same inflectional potential as an unextended root, and will be treated indiscriminately in the next two chapters. However, at this point, it is worth giving a couple of examples of extensions, since they are a characteristic of verbal roots, but not of nominal stems. They will also be further discussed in §2.2.2.2. of this chapter.

Consider, for example, sentences 77.a., b. and c.. In 77.a., we see a verbal root, hokk- in its 'unextended', or simple, form. In 77.b. the extension -it has been added, and in 77.c., the extension -ir:

77.a. Mi-hokk- \emptyset - e sed \dot{d} a?
 I give you some
 VAP

'May/shall I give you some?'

77.b. Mi-hokk-it-∅ - e sedda?
 I give you some
 EXT VAP
 'May/shall I give you some back?'

c. Non kokk-ir-∅ - daa-mi-nga.
 thus give you me it
 EXT VAP
 'That's how you gave it to me.'

The effect of -it in 77.b. is to add the meaning 'back' to 'give'. The -ir- extension in 77.c. has a less definable meaning: it always occurs with a verbal root in a complex, if the complex is preceded (and sometimes if it is followed) by an expression denoting time, manner or place. Non expresses manner, and -ir- therefore occurs.

Another characteristic of verbal roots is the fact that participles can be formed from them. Participles consist of a root plus VA-suffix plus nominal class-suffix, and were exemplified by 52.a. and 53.a. on page 75 above. Here is a further example:

78. Ndu daan - ii-ndu.
 it sleep
 VA CL
 'It's (one, eg. a cat, that has) gone to sleep.'

Here, the VA-suffix, -ii-, expresses middle voice and completive aspect. The participle would be incomplete without the class-suffix, -ndu. This is a suffix of the prenasalised consonant grade, ndu class.

Nominal stems, and their inflectional morphology, have been amply discussed in the preceding chapter. Here, I shall simply highlight some respects in which they obviously differ from verbal roots.

Nominal stems must be followed by a nominal-class suffix. For example, musuu- is the stem meaning 'cat', and -ru is the continuant

grade class-suffix for the Ndu class: musuu- could not occur alone. Similarly, the stem bun- 'well' could not occur without a class-suffix, such as -ndu or -di. These are the prenasalised grade suffixes of the Ndu and Di nominal classes. Thus: bun-ndu 'well', bun-di 'wells'.

Unlike verbal roots, nominal stems may not, normally, be followed by a VAP-suffix. For example, if the VAP-suffixes -ake and -aaki (seen in 76.a. and b.) were added to bun- nonsense words would result: *bun-ake, *bun-aaki. However, there are certain stems and roots that are identical (cf. footnote 3, chapter 1); and some nominal stems may be converted into verbal roots by means of the verb-forming suffix, -id-/-d-²⁰. By way of example, consider the stem yam- 'healthy'. This can be made verbal by the addition of -d-, thus jam- in 79.a. is a nominal stem; but yam-d- in 80.a. is a verbal root:

79.a. Ngal jam - al.
 it healthy
 CL
 'It (eg. chicken) is healthy.'

80.a. Ngal yam - d-ay.
 it healthy
 VAP
 'It (eg. chicken) will recover/become healthy.'

The -al suffix in 79.a. is the zero grade suffix for the Ngal nominal class. The -d- suffix in 80.a. is the verb-forming suffix mentioned above; and once this has been added to yam-, then the composite yam-d- becomes a verbal root, thus capable of taking a VAP-suffix such as -ay. The fact that a VAP-suffix such as -ay cannot be suffixed to a nominal stem (cf. 79.b.), and the fact that a nominal-class suffix such as -al cannot be suffixed to a verbal root (cf. 80.b.), are both facets of the inflectional distinction between nominal stems and verbal roots.

79.b. *Ngal yam - ay.
 it healthy
 VAP

Sentence 81.a. consists of a subject NP, and a verbal complex composed of a verbal root (beyd-) and a VAP-suffix (-ake). In 81.b., however, the subject is an unfocussed pronoun, de. Such a pronoun cannot stand alone, as answer to a question, for example (see §2.3.3. below); and it is therefore 'appended' to the verbal root. In §4.3.2. I in fact argue that class-pronouns like de- are clitics within the verbal complex. In 81.c., the subject is pronominal, but focussed. Rather than de-, kanje is therefore used. Kanje is an anaphoric pronoun of the de class, as is de; but whereas de is a dependent pronoun, kanje is independent, for it can stand alone, as answer to a question. I argue below that the independent pronouns are NP's (see §2.3.). The use of the -i VAP suffix in place of -ake is caused by the change of conjugation ('tense') which is necessitated by the presence of a focussed NP in the sentence.

The sentences of 82. illustrate the pronominalisation of an object NP:

82.a. Mi-bil - ii Hassan.
I trouble Hassan
VAP

'I troubled Hassan.'/'I was a nuisance to Hassan.'

b. Mi-bil - ii -mo.
I trouble him
VAP

'I troubled him.'/'I was a nuisance to him.'

c. "Kanko bil - u - mi.
him trouble I
VAP

'It's him I troubled/was a nuisance to.'

In 82., the same relationship holds between Hassan, -mo, and kanko, as holds between ceede, de and kanje in 81., except that Hassan, -mo and kanko are each the direct object of their respective sentences. In 82.a., Hassan is the NP object; in 82.b., -mo is a dependent pronoun object - like de- it cannot stand alone, and is therefore part of the verbal complex; and in 82.c., kanko is an independent pronoun object, which is focussed and therefore fronted. Because of the focussing of the object, the conjugation of the verbal complex in 82.c. is different from that in 82.a. and b., hence the change from mi-bil-ii to bil-u-mi.

However, in 82., the verbal complex does not only consist of the verbal root, VAP-suffix, plus or minus an object pronoun. The subject pronoun is appended to the root, and thus part of the complex too. In fact, 1st and 2nd person pronouns are necessarily part of a complex, unless they are focussed - this is because, unlike 3rd person pronouns, they are not anaphoric, and do not refer back to an NP. Thus, the only way in which the subject pronoun in 82. could not be part of the complex would be if it were focussed, as in 82.d.:

82.d. "Minn ôil - i Hassan.
me trouble
VAP

'It's me who troubled Hassan/was a nuisance to Hassan.'
'I troubled Hassan/was a nuisance to Hassan.'

Minn is the independent first person pronoun, and functions as an NP: see §2.3. below.

2.2.2.2 Extensions

Verbal extensions, mentioned on page 88 above, may occur between the 'simple', or unextended root, and the VAP-suffix. They constitute part of the derivational, rather than the inflectional, morphology of the language, and a derived root has the same inflectional potential as a simple root, syntactic and semantic compatibility allowing. An extension may affect the valency or voice of a root: for example, it may render an intransitive root transitive, it may allow a root to take two objects rather than simply one, or it may render a normally active root middle. In this section, I shall review a few of these extensions, in order to show that they must be considered part of the verbal complex in which they are found.

Some extensions combine with a simple verbal root to produce a root with a different, though related, meaning. For instance, -t-/-it- can contribute reversive meaning, as can be seen by comparing the a. and b. sentences of 83. and 84.. (The occurrence of -i- in this, and other, extensions, is phonologically determined.)

83.a. 'O-war-ii
he come
VAP
'He came.'

b. 'O-war- t - ii.
he come back
EXT VAP
'He came back.'

'quickly' is usually indicated by an adverb, yawke-yawke; and the extension that is presumably cognate with Arnott's 'celerative' means 'early' or 'a long time ago'; it has the form -iloy- before i and consonants, and -ilow- before other vowels:

- 89.a. 'O-war-ii yawke-yawke.
 he come quickly
 VAP
 'He came quickly.'
- b. 'O-war-iloy-ii.
 he come
 EXT VAP
 'He came early/a long time ago.'
- c. 'O-war-iloy-taa.
 he come
 EXT VAP
 'He won't come early.'
- d. 'O-war-ilow-aayi.
 he come
 EXT VAP
 'He didn't come early.'

Here are examples of several extensions co-occurring with the same verbal root; the b. sentences are ungrammatical, because the order of the extensions is wrong:

- 90.a. 'O-war-t-iloy-ii.
 he come
 EXT EXT VAP
 'He came back early.'
- b. *'O-war-iloy-t - ii.
- 91.a. 'O-dill-id-an-ii-ma 'e maakoyŋ.
 he go+ for you with them
 away
 EXT EXT VAP
 'He went away with them for you (sg).'
- b. *'O-dill-an-id-ii-ma e maakoyŋ.
- 92.a. 'O-jipp-in-an-i-yam donngal am.
 he put+ for me load my
 down
 EXT EXT VAP
 'He put down my load for me.'

92.b. *'O- jipp-an-in-i-yam donngal am.

The order of co-occurring extensions is as given by Arnott (1970: §57.2. and §59.4.).

It is perhaps worth noting in passing that an extended root has not only the same inflectional potential, but also the same derivational potential as does a simple root. Thus, the extended root war-t-ilo-, seen in 90.a. above, may form the basis of a participle:

93. Gar - t - iloy - \emptyset - do.
 come back early
 EXT EXT VA CL
 'Person who has come back early.'

Here, the nominal-class suffix, -do, has been added to the extended verbal root, gar-t-ilo-, just as the pronoun 'o- and the VAP suffix -ii have been added to the same root in 90.a.. (The w-/g- alternation is of course determined by the subject in 90.a., and the class-suffix in 93.)

2.2.2.3. The Anteriority Marker

The 'anteriority marker' will be discussed in greater detail in the next chapters. Essentially, it sets the action depicted by the verbal complex one step back in time, using the moment of utterance or a time determined within the discourse as its point of reference. Arnott (1970) calls it the 'preterite particle'; its form is no or noo, depending on the particular constellation of verbal properties that occur within the verbal complex. Here are some examples of its occurrence:

- 94.a. 'O - huw - ay.
 he work
 VAP
 'He works/will work.'
- b. 'O - huw - ay - no.
 he work VAP ANT
 'He used to work.'
- 95.a. 'O - suud^f-ake-ma.
 he hide you
 VAP
 'He hid/has hidden (himself) from you (sg).'

95.b. 'O - suud-ake-no - ma.
 he hide you
 VAP ANT

'He had hidden (himself) from you.'

96.a. Ngim maajum koll - u - mi-be - dum.
 because that show I them it
 VAP

'That's why I showed it to them.'

b. Ngim maajum koll-u - noo-mi-be - dum.
 because that show I them it
 VAP ANT

'That's why I had shown it to them.'

From the b. sentences of 94. - 96., we see that no follows immediately after the VAP-suffix, but that it precedes pronouns within the complex. Thus, if dependent pronouns (such as -mi-, -be- and -dum in 96.b.) are morphologically part of the verbal complex, no must be too.

2.2.2.4. 'E and Don

We saw in §2.1.2.3. above that these two 'particles' occur in sentences expressing existence and/or location; and that they also occur in Stative and Progressive complexes (cf. 70. and 71.a. on page 84). Here are some further examples of such complexes:

97.a. 'E-mo-don-jood-ii.
 he sit
 VAP

'He is seated.'

b. 'E-mo-don-jood-oo.
 he sit
 VAP

'He is sitting down.'

'E and don do not occur in complexes of any other conjugation, and they often morphologically distinguish the Stative from the Relative Completive, and the Progressive from the Subjunctive, since these pairs of conjugations have the same 'basic' VAP-suffix (see §4.2.).²²

Whether occurring in an existential/locative sentence (cf. 58. and 59. a. and d.), or in a Stative or Progressive verbal complex, 'e precedes a dependent pronoun subject, but follows an NP subject, as can be seen in 98.a. and b.:

98.a. Hawwa 'e-don-ronnd-ii.
 Hawwa carry
 VAP

'Hawwa is carrying a head-load.'

- 98.b. 'E-mo - don-ronnd-ii
 she carry
 VAP
 'She's carrying a head-load.'

The reverse order is unacceptable:

- 99.a. *'E-Hawwa-don-ronnd-ii.
 b. *Mo-'e-don-ronnd-ii.

The presence of 'e in a Stative or Progressive complex is not obligatory. Thus, the b. sentences below, where 'e does not occur, are just as acceptable as the a. sentences, where 'e does occur:

- 100.a. 'E-mi-don-sood-a nagge.
 I buy cow
 VAP
 'I'm buying a cow.'
- b. Mi-don-sood-a nagge.
 I buy cow
 VAP
 'I'm buying a cow.'
- 101.a. Muusa 'e-don-janng -a to Kano.
 Musa study in Kano
 VAP
 'Musa is studying in Kano.'
- b. Muusa don-janng-a to Kano.
 Musa study in Kano
 VAP
 'Musa is studying in Kano.'

However, 'e never occurs with 'en ('you and I') or 'on ('you', pl.); and in the pronoun 'aa ('you', sg.), it seems likely that 'e and 'a have coalesced, for this would explain the long vowel of this pronoun, which only occurs in Stative and Progressive complexes. Here are some examples: the b. sentences are unacceptable, because 'e co-occurs with 'en, 'on or 'aa:

- 102.a. 'En-don-njah-a.
 we go
 (incl) VAP
 'We're going.'
- b. *'E-'en-don-njah-a.
 we go

109.a. Be - njooɔ'-ake ɔ'oo.
 they sit here
 VAP
 'They sat down here.'

b. *'Be-ɔ'oo-njooɔ'-ake.
 VAP

110.a. Min-kawt-ii ton.
 we meet there
 VAP
 'We met (over) there.'

b. *Min-ton-kawt-ii.
 VAP

111.a. Be - ɔ̃aŋŋ-ii nii.
 they move thus/
 house simply
 VAP
 'They simply moved.'

b. *Be - nii-ɔ̃aŋŋ-ii.
 VAP

From the discussion in this section, we conclude that 'e and ɔ̃on are dependent particles that contribute towards the marking of stativity and progressivity, in the presence of suitable VAP-suffixes in the same verbal complex. Moreover, we have seen that Stative and Progressive verbal complexes are the only ones that allow any deictic adverbs to interrupt the verbal complex. The Stative and Progressive are therefore in some way 'special'; this impression is confirmed by the fact that no other conjugations have any sort of marker (other than subject pronoun) occurring before the verbal root.

2.2.3. Intonation

In listening to verbal complexes, it is tempting to search for a stressed syllable, which can then be neatly marked in the transcription. In the event, such a search proves difficult, and, I suspect, futile. For the fact is that since vowel length is phonemic in Fulfulde, a long-vowelled syllable often sounds 'stressed' to the ear - or at least to the English ear. Yet closer examination proves that there is always one, or more than one, high-pitched syllable in the complex, which often does not sound 'stressed' at all. It is this feature of high pitch, and

its placing in the complex, that I want to discuss here.

This line of investigations is at a very preliminary stage, and what is important is the fact that patterns are being found, rather than the precise nature of those patterns. Taking into account such a proviso, a fairly cursory consideration of the data available suggests that in verbal complexes that are not in relative clauses or in yes/no questions, high pitch generally falls on the penultimate syllable of the complex. One thus finds sentences such as the following, where the syllable bearing high pitch varies according to the number of appendages in the complex (I have marked the relevant syllable by preceding inverted commas,"):

- 112.a. 'Aa-don-hel"l-a-mmi.
 you slap me
 VAP
 'You (sg) are slapping me.'
- b. 'Aa-don-"hell-a minyaa.
 you slap your younger sibling
 VAP
 'You (sg) are slapping your younger sibling.'
- 113.a. 'Igga mbal"l- ø -aa - min.
 better help you us
 VAP
 'You (sg) had better help us (excl).'
- b. 'Igga mball-an - ø - aa-"min - be.
 better help for you us them
 EXT VAP
 'You (sg) had better help them on our (excl) behalf.'

In sentence 112.a., the high pitch occurs on the penultimate syllable of the complex, which is lam; and in 112.b., since the NP minyaa does not belong to the verbal complex, and since nothing follows the conjugation-suffix, the high pitch is one syllable earlier than in 112.a., namely, it occurs on the hel syllable. In sentence 113.a., the high pitch again occurs on the penultimate syllable, laa; and in 113.b., it occurs on the following syllable, min, since a suffixed pronoun, -be, follows min.

A variation of the 'penultimate high pitch' rule sometimes occurs. When the penultimate syllable has CV structure, then the preceding CV

syllable can also take high pitch. One thus finds, for example:

114.a. Mo-yaa["]f- et- e.
 he forgive you
 VAP
 'He'll forgive you (sg).'

b. Mo-yaa["]f- o["]to-'en.
 he forgive us
 VAP
 'He'll forgive us (incl).'

In 114.a., the penultimate syllable bears high pitch, as usual; in sentence 114.b., however, both the penultimate syllable, to, and the preceding syllable fo, bear high pitch. This does not happen if either the penultimate or the preceding syllable has CVV or CVC structure:

115.a. Kanjum wad^ˈ- i njann^g- a["]t-aa- mi footo.
 that cause take you me photo
 VAP VAP
 'That's why you (sg) will take my photo.'

b. *Kanjum wad^ˈ- i njan["]ng-a["]t-aa- mi footo

116.a. Ndee ngubit-otoo-"mi-'on sauru?
 when throw I you stick
 VAP
 'When shall I throw you (pl) the/a stick?'

b. *Ndee ngubit-o["]too-"mo-'on sauru?

Sentence 115.b. is unacceptable, because the penultimate syllable in the verbal complex has CVV structure, so the preceding syllable cannot also bear high pitch; and sentence 116.b. is unacceptable, because the syllable before the penultimate has CVV structure, and so cannot bear high pitch.

The above variation could be reformulated to read 'Two penultimate light syllables, or one penultimate heavy syllable, may receive high pitch in the verbal complex'. Another variation of the 'penultimate high pitch' rule is that generally speaking, a syllable containing an anaptyctic u (cf. §4.2.1.) may not take high pitch. Verbal complexes whose penultimate syllable does contain such a u have high pitch on the second syllable before last. For example:

- 117.a. 'E-mo-don"suu^f-u-maa pa^fe.
 he hide you shoes
 VAP
 'He's hiding (your) shoes from you (sg).'

b. *'E-mo-don-suu^f-u-maa pa^fe.

In 117.a., the verbal complex has an anaptyctic -u- between the verbal root and the suffixed pronoun -maa; the high pitch therefore falls on the suu syllable, not on the du syllable (as in 117.b.).

In relative clauses, it is the final syllable, rather than the penultimate one, which generally receives high pitch. For example:

118. 'O-yaaf - ataa"ko-mo boofi di 'o-wa^f-an -i-"mo.
 he forgive her mistakes which she do to him
 VAP EXT VAP
 'He won't forgive her the mistakes she made against him.'
119. Ko njah - u - noo-"mi ngii- \emptyset - moo-mi.
 when go I see him I
 VAP ANT VAP
 '(It's) when I had gone (that) I saw him.'

In sentence 118., the verbal complex 'o-wa^f-an-i-mo has high pitch on the final syllable mo, rather than on the penultimate syllable, ni; however, the complex which is not in a relative clause, 'o-yaaf-ataako-mo, has the high pitch on the 'normal', penultimate syllable, ie. ko. The first clause in sentence 119. is a relative clause introduced by ko 'when', and the high pitch falls here on the final syllable (mi) of the verbal complex; in the second clause, the high pitch falls on the penultimate syllable (moo) of the complex, since the clause is not a relative one (- the relative conjugation here is necessitated by the focussing of the first clause).

It cannot be emphasised too much that the generalisations being made here concerning the occurrence of high pitch are very tentative; and it must be borne in mind that many of the sentences quoted (eg. 112. - 117., but not 118. and 119.) were elicited in an 'interview situation', rather than recorded in a 'natural' speech-situation. They may therefore be unrepresentative. What is important, however, is the fact that even in citation forms, patterns emerge; and the existence of such patterns lends weight to the argument that the verbal

complex is a single unit in terms of phonological analysis.

Further lines of investigation that could be followed in this connection include the relationship of high-pitch in the verbal complex to the general intonation-contours of Fulfulde sentences; and the possible correlation between the occurrence of high pitch and certain types of syllables (eg. light and heavy syllables).

2.2.4. The Verbal Complex. as a morphological word

The preceding discussion has pointed to the fact that on the phonological level, the verbal complex is a unit - let us call it a 'phonological word'. There is also considerable evidence, in fact, for considering the verbal complex as a 'morphological word' too.

The morphological evidence will be more fully developed in the next two chapters. Essentially, it consists of the fact that there is morphological interdependence between the component morphs of a complex. For example, the person and/or number of the subject may determine the shape of other morphs, as in 118.:

118.a. Ndee ðad - i - ɗaa Kano?
 when approach you Kano
 VAP
 'When did you (sg) approach Kano?'

b. Ndee ðad - ii-mi Kano?
 when approach I Kano
 VAP
 'When did I approach Kano?'

Here, the length of the vowel of the VAP-suffix is determined by the following subject pronoun. Similarly, the conjugation of the complex may influence the shape of pronouns, as in 119.:

119.a. 'Aa-ɗon-hoot-a na?
 you go
 home
 VAP QU
 'Are you (sg) going home?'

b. 'A-hoot-ii na?
 you go
 home
 VAP QU
 'Did you (sg) go home?'

119.c. Ngim dume koot-u-daa?
 for what go you
 home

VAP

'Why did you return hom?'

Here, the form of the 2sg subject is determined by the conjugation in which it occurs: the complex in 119.a. is of the Progressive, in 119.b. of the General Completive, and in 119.c. of the Relative Completive.

Lyons (1968: 202-4), in discussing the word as a morphological unit, mentions two criteria: internal stability, and positional mobility. The Fulfulde verbal complex is internally stable to the extent that its form is pre-determined, given a particular set of morpho-syntactic properties to be realised (cf. chapter 5, which deals with exponence). Since Fulfulde is a language with fairly fixed order, it is difficult to discuss the positional mobility of the complex. The only constituents of a sentence that do have a degree of positional mobility are in fact unfocussed adverbial phrases. In relation to these, one can show the fact that a verbal complex moves as a unit. For example:

120.a. Fabbiijaango 'en-'umm-oto.
 day after we arise
 tomorrow

VAP

'The day after tomorrow we (incl) shall arise (and depart).'

b. 'En-'umm-oto fabbiijaango.
 we arise day after
 tomorrow

VAP

'We (incl) shall arise (and depart) the day after tomorrow.'

It would be impossible for the adverbial phrase, fabbiijaango to interrupt the verbal complex, 'en-'umm-oto:

120.c. *'En-fabbiijaango-'umm-oto.

The case for treating appendages before the verbal root as part of the 'verbal complex word' is much weaker, both on phonological and morphological grounds, than the case for treating appendages after the root as part of such a 'word'. Given the essential, minimal, 'root + VAP-suffix' morphological structure of the complex, and its essential

'final or penultimate high-pitch' prosodic structure, there is no way of testing the occurrence of high pitch on items that precede the root. Moreover, the fact that nii, doo and ton can intervene between the subject pronoun and the verbal root in Stative and Progressive complexes (cf. 105. - 108.), weakens the argument for considering such complexes as one morphological word. Nevertheless, it is descriptively convenient to treat the Stative and Progressive as inflectional paradigms, and I shall not investigate the issue of the word-status of the verbal complex any further.

Another issue is the syntactic status of the verbal complex. In many senses, it is the 'verbal counterpart' of the NP, which will be discussed in the next section. Nevertheless, I hesitate to call it a VP. This question will have to be left for future research.

2.3.0. The Noun Phrase

While the term 'nominal' was discussed and provisionally defined in the last chapter, the term 'NP' has been used so far without definition. Moreover, it is useful to identify NP's, in order to clearly separate them from verbal complexes, and in order to establish the essential difference between the type of pronouns that may occur in verbal complexes ('dependent pronouns') and the types of pronouns that may not (cf. the list of types of pronouns given in §1.3.3.).

'Nominal' is a morphologically-defined category. 'NP', however, is syntactically defined. I shall use three criteria to establish the identity of NP's. These are the ability of a constituent to stand as:

topic
focus
answer to a question.

I shall consider these three criteria in §2.3.1. - §2.3.3. below, and particularly with reference to different types of pronouns. Then in §2.3.4., I shall mention other types of NP.

2.3.1. Topic

In this and the next section, I anticipate the establishment of categories that are more fully discussed in chapter 6.

A topic is a constituent in sentence-initial position, which the rest of the sentence in some sense comments on. Examples are nagge ngee and keddiraawo 'am in these two sentences:

121.a. Nagge ngee, nge-rim - ii.
 cow this it give
 birth
 TOPIC VAP
 'This cow, it's given birth.'

122.a. Keddiraawo 'am, 'e-mo - wood-i 'endfam.
 neighbour my she has kindness
 T O P I C VAP
 '(As for) my neighbour, she's kind.'

The commas in the transcription indicate that these constituents are potentially followed by pause.

Let us take the 'slot' filled by nagge ngee and keddiraawo 'am, and see what other items may occur in their place. First, let us test the various types of class-pronouns mentioned in §1.3.3.. We find that if we place a dependent class-pronoun in this position, unacceptable sentences result:

121.b. *Nge, nge-rim - ii. 122.b. *'O, 'e-mo - wood-i 'endfam.
 it it give she she has kindness
 birth

On the other hand, if we take the other types of class-pronouns, we find that they may all occur in this slot. (I take ngee and 'oo as representative of all the deictic pronouns.)

121.c. Ngee, nge-rim - ii.
 this it give
 one birth
 TOPIC VAP
 'This one (cow), it's given birth.'

d. Ngeye, nge-rim - ii?
 which it give
 birth
 TOPIC VAP
 'Which one (cow) has given birth?'

- 121.e. Kanng, nge-rim - ii.
 the one it give
 mentioned birth
 TOPIC VAP
 'The one (cow) mentioned, it's given birth.'
- 122.c. 'Oo, 'e-mo - wood-i 'endam.
 this she has kindness
 one
 TOPIC VAP
 'This one (person), she's kind.'
- d. Moye, 'e-mo - wood-i 'endam?
 who she has kindness
 TOPIC VAP
 'Who is kind?'
- e. Kanko, 'e-mo - wood-i 'endam.
 the person she has kindness
 mentioned
 TOPIC VAP
 'The one (person) mentioned, she's kind.'

I shall consider those pronouns which may fill the nagge ngee and keddiraawo 'am slots to be NP's. Thus, comparison of the b. sentences and the c. - e. sentences above suggests that while dependent pronouns are not NP's, deictic, interrogative, and independent pronouns are.

The above are all third person pronouns referring to particular nominal classes. There are only two types of 1st and 2nd person pronouns: dependent and independent. As might be expected, dependent 1st and 2nd person pronouns may not be topic of a sentence, but independent ones may be. For example:

- 123.a. *Mi, to London ngon-Ø-mi.
 I in London live I
- b. Minn, to London ngon-Ø-mi.
 me in London live I
 TOPIC VAP
 '(As for) me, I live in London.'
- 124.a. *'En, 'en Kaceccere'en.
 we we Kaceccere'en

124.b. 'E^{en}, 'en Kaceccere'en.
 us we Kaceccere'en
 TOPIC

'(As for) us (incl), we're Kaceccere'en.'

123.a. and 124.a. have a dependent pronoun (mi, 'en) in topic position, and are unacceptable; 123.b. and 124.b., on the other hand, have their independent pronoun equivalents (minn, 'enen), and are acceptable.

2.3.2. Focus

The focus of a sentence is a constituent that represents new, or highlighted information, and which often, though not necessarily, receives contrastive stress.²⁴ Examples are Dere and Ngaari in 125.a. and 126.a.. (The syllable bearing contrastive stress is preceded by inverted commas.)

125.a.	"Dere te' - ay-mi. Dere marry I FOCUS VAP 'I'll marry <u>Dere</u> .'	126.a.	"Ngaari sood-u - daa? bull buy you FOCUS VAP 'Did you (sg) buy a <u>bull</u> ?'
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Both Dere and Ngaari contrast with other items that implicitly (cf. 125.a. and 126.a.) or explicitly (cf. 125.b. and 126.b.) might have filled the same 'slot':

125.b.	" <u>Dere</u> te' - ay-mi, naa Fada. Dere marry I not Fada FOCUS VAP 'I'll marry <u>Dere</u> , not Fada.'
126.b.	" <u>Ngaari</u> sood-u - daa, naa nagge? bull buy you not cow FOCUS VAP 'Did you buy a <u>bull</u> , not a cow?'

Let us do now as we did in the discussion of topic: test which other types of 'item' may fill the Dere and ngaari slots. In fact, we find the same as in 121. and 122.: a dependent pronoun may not occur (hence the unacceptability of the c. sentences below); but deictic, interrogative, and independent pronouns may occur (hence the acceptability of the d., e. and f. sentences below). (This time, I use 'otton and nditton as representative of all deictic pronouns.)

The answer may be a complete sentence in itself, such as 129.b.;
or one word, such as 129.c.:

129.b. Puccu ngii- \emptyset - mi. horse see I VAP 'I saw a horse.'	129.c. Puccu. horse 'A horse.'
--	--------------------------------------

Let us now investigate what items may occur in the puccu 'slot' in 129.c., on the same lines as above. Again, we find that a dependent pronoun, such as ngu in 130.a., is unacceptable, but that a deictic or independent pronoun (such as in 130.b. - c.) is acceptable:

130.a. *Ngu. c. Kanngu. that one mentioned 'The one (eg. horse) that we've been discussing.'	130.b. Nguya. that one 'That one (eg. horse).'
---	--

(It is difficult to test interrogative pronouns in this 'slot', since they are semantically unsuitable to be given as answer to a question.)

Yet again, the same observations may be made concerning 1st and 2nd person dependent and independent pronouns: the former may not stand alone in answer to a question (cf. 131.b. and 132.b.), but the latter may (cf. 131.c. and 132.c.):

131.a. Moye won-i ndottiijo maada? who is husband your VAP 'Who is your husband?'	b. *'A. you	c. 'Aan. you 'You (sg).'
132.a. Moye yan - i? who fall VAP 'Who fell?'	b. *Mi. I	c. Minn. me 'Me.'

134.d. Ko min-nan-i:
 what we hear
 VAP
 'What we've heard.'

135.c. Moy bur - i wood-ugo?
 who exceed good
 VAP INF
 'Who's better?'

d. Mo naane.
 he former days
 'The former one (eg. Emir).'

According to all three of our criteria, then, relative clauses and genitival complexes are, syntactically, NP's.

2.3.5. The NP: Conclusions

In this section, we have established that the following are syntactically NP's:

deictic pronouns
 interrogative pronouns
 independent pronouns
 relative clauses
 genitival complexes.

There are, of course, other sorts of NP, such as nominals. However, the structure of the NP is not so important to us at present as is the structure of the verbal complex. We shall therefore leave the more detailed study of Fulfulde NP's to a future date.

2.4. The Fulfulde Sentence, Verbal Complex and NP: Conclusions

In this chapter, we have identified verbal and non-verbal sentences, the former containing a verbal complex, the latter not. We have also shown some characteristics of verbal complexes, and identified some types of NP. Let us now turn to the more detailed analysis of the verbal complex: first, its syntax and semantics, and then its morphology.

Chapter 2: Footnotes

1. Hyphens are used to link the constituent morphs of verbal complexes and participles.
2. I use 'appendage' as a cover-all term for suffixes and clitics that occur with the verbal root in a verbal complex. The morphological status of these various appendages is discussed in chapter 4.
3. Although I link a dependent pronominal subject to the verbal complex with which it occurs, I do not so link a dependent pronominal subject to the nominal with which it occurs. Thus, I have placed no hyphen between koyɲ and ndane-hoyɲ in 51.a., or between 'O and boow-u-do in 52.a.. Nor have I linked boow-u-do and its object pronoun, dum, by a hyphen. This is because I do not want to pre-judge these morphological issues at this point: the morphological status of verbal complexes, and to a lesser extent, of participles, are what concern us here.
4. In order to exemplify what is unequivocally an identificational sentence, I give this example of an equative sentence, where the two NP's could occur in reverse order, without changing the 'basic' meaning. (Intonation and stress could change its information structure - what is new, and what is given.) In fact, there is evidence to suggest that the first NP in such non-verbal sentences has topic, rather than subject, status. This evidence includes the fact that pause and/or what I call a 'topic marker' may occur between the two NP's (cf. ch.6); and the fact that the negative counterpart of such sentences has naa between the two NP's (cf. 54.c., p. 79), not in sentence-initial position. This matter is peripheral to our central concern here - the identification of sentences with or without a verbal complex - and will therefore not be pursued further.
5. Since the verbal complex that has been deleted contains the subject as well as the verbal root (cf. 62.a.), I have glossed \emptyset as 'VS', not only as 'V'.
6. A comparable distinction is found in Hausa, and in several other African languages. It is discussed, for example, in Schachter (1973).
7. Taa is reduced from to + 'a, where to is the negating particle, as in 66.b., and 'a is the 2sg subject pronoun. In Kacecereere, to 'a-huɓɓ-u hiite is a less common alternative to 65.b..
8. Woni is based on the root won-, which means 'live', in the locative, rather than the existential, sense. As 'live', won- takes a normal range of inflections; but as 'be', it only occurs as won-i (with singular subject), and ngoni (with plural subject); and as won-do/ ngon-do 'used to be', where the -do is a variant of the Anteriority Marker, no.
9. There is no obvious way of testing the length of this vowel, for it is never followed by a dependent pronoun and is therefore usually in word-final position. (Concerning the word-status of verbal complexes, see §2.2.4. below. Concerning word-final vowels, see §1.1.5.1. above.) However, I mark the vowel as short, because when won-i is followed by no, the -i is dropped. If the -i were long, one would expect it to

be reduced to a short vowel, but not to disappear altogether. I make this judgement in anticipation of the discussion in §4.3.4..

10. The precise difference in meaning between a sentence such as this, and a sentence with a Stative verbal complex:

'E-mo-woow-i - dūm.

he get

used

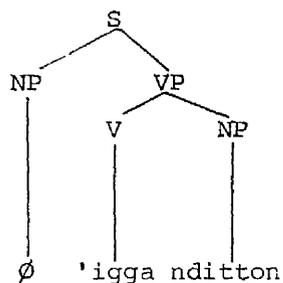
VAP

'He's used to it.'

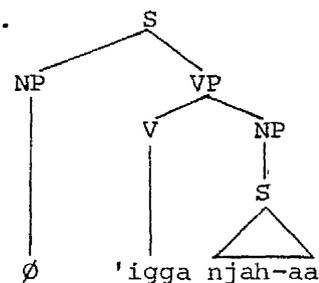
is not clear. The use of brackets in the translation of 52.a. is an attempt to convey the fact that 52.a. contains a participle.

11. The non-verbal nature of 52.a. and 53.a. is further confirmed by the fact that a verbal complex with woni can be added to these sentences (cf. 52.b. and 53.b.), which is not possible with sentences already containing a complex, such as 49.a. and b..
12. Cf. footnote 4 above, concerning the possible topic status of the first NP in 54.a. and c..
13. The fact that the -i- of wonidon is short is possible corroborating evidence for considering the -i of woni to be short too: cf. the discussion in footnote 9. above.
14. Here again (cf. footnotes 1. and 3. above), the problem arises of whether these morphs ('e, ngel, dōn and dōo) should be linked by hyphens; and yet again, I do not confront the issue. For the moment, I do link 'e and dōn to each other and/or to other parts of a verbal complex, when they constitute part of a Progressive or Stative complex (cf. 70. and 71.a., p.84); but I do not so link them in existential or locative sentences.
15. The -aa of walaa is suspiciously like the VAP-suffix of the Negative Completive Active (cf. table XXII). However, the 'root' wal- occurs with no other inflections, and I therefore treat it as an abnormal, defective verb.
16. There is another particle of verbal origin, haani, which is similar in usage to 'igga, but has the meaning 'ought'. However, haani does sometimes take a subject pronoun, and is therefore less qualified than 'igga to be mentioned in this section.
17. If 'igga is a defective verbal form (as is suggested by its ability to take no, cf. 75.c.), then it may be that we should analyse sentences such as 74.a. and 75.a. as:

74.a.



75.a.



Since it can be followed by an NP that does not govern S, it is unlikely that 'igga is 'simply' a sentence-initial modality-marker. If the above analysis is correct, then some doubt is cast on the idea that sentences with 'igga are non-verbal.

18. Amongst deverbal nominals, participles always contain a VA-suffix; but abstract nominals, such as gar-ol 'coming, arrival', dem-al 'farming', and laam-u 'reign', 'leadership', contain only a root-become-stem, plus a class-suffix.
19. Although voice, aspect and polarity are expressed in the VAP-suffix, other distinctions, such as Stative vs. Non-stative, are made in other ways, such as by the presence or absence of 'e and don in the complex.
20. The occurrence of -i- in -id/-d- is phonologically determined by the shape of the stem to which it is added.
21. Ceede literally means 'cowrie-shells', and is plural.
22. With a 3rd person subject, 'e and/or don do crucially distinguish these pairs of conjugations; however, with a 1st or 2nd person subject, morph-order also comes into play.
23. This sentence assumes that don is within the verbal complex, as does my use of hyphens in Stative and Progressive complexes. The inclusion of don (and by extension, 'e which precedes it) within the verbal complex might be disputed, especially given the fact that don can be replaced by doo, ton and nii; this matter will be taken up again in §4.4.2.3.. One of the reasons for including don and 'e in Stative and Progressive complexes is the fact that in other dialects, their respective cognates have coalesced with other parts of the complex (cf. Arnott 1970: 195, footnote 3).
24. Recent research (e.g. Dik et al, 1980) distinguishes different types of focus. For present purposes, I am simply concerned with an NP or adverb that is fronted, and that potentially bears contrastive stress.
25. By 'genitival complex', I mean a constituent consisting of a head plus genitival modifier. When the head is a nominal, such as keddiraawo in 122.a., then the NP status of the whole constituent is fairly obvious. However, when the head is a dependent pronoun, such as nge in 135. or mo in 136., then the NP status of the whole is less obvious, and is therefore discussed in this section.
26. For the moment, the issue of whether these relative clauses are 'headless' or not does not concern us.
27. When in a sentence with a focussed NP, this complex is necessarily of a Relative (rather than General) conjugation (see §6.2.1.1.), and therefore has a short-vowelled VAP-suffix - contrast 133.a. and 135.a..

Chapter 3

Paradigms of Verbal Inflections:

Syntax and Semantics

3.0. Introduction

Fulfulde is an inflecting language, with an intricate verbal and nominal morphology. The nominal morphology has already been briefly described in §1.3., and is only of further interest in this study inasmuch as it affects participles and dependent class-pronouns. The verbal morphology, on the other hand, will now be treated in some detail. The aim of this chapter is to present the syntactic and semantic grounds for the establishment of inflectional paradigms based on verbal roots. The morphology of these paradigms is explained in the next chapter.

I shall first mention certain derivational processes that operate on verbal roots (§3.1.), in order to distinguish them from inflectional processes (§3.2.). Then, in §3.3., the difference between verbal categories and verbal properties is established. I go on, in §3.4., to identify those properties which, in various combinations, establish the syntactic and/or semantic distinction between the fourteen inflectional paradigms. In §3.5., those properties are discussed which may vary within an inflectional paradigm, and which do not crucially distinguish one paradigm from another. Finally, in §3.6. - §3.9., I review the various paradigms, the properties they realise, and how they differ in usage and meaning.

3.1. Derivational Processes

It is useful to distinguish two types of derivation process (cf. Robins 1964: 258): 'class-maintaining' and 'class-changing' processes. The former effect no change on the syntactic potential of the root or stem on which they operate, whereas the latter do. As regards verbal roots, verbal extensions fall into the former category, whereas participles and other deverbal nominals fall into the latter.

3.1.1. Extensions

As was observed in §2.2.2.2., verbal extensions effect multifarious modifications on verbal roots. What concerns us here is the fact that extended verbal roots have the same potential for inflection as do unextended roots. This can be exemplified by comparison of the a. and b. sentences below: the a. sentences contain an unextended (or 'simple') root, war- 'come', whereas the b. sentences contain an extended root war-t- 'come back':

- | | |
|--|--|
| <p>140.a. 'O-war-ii.
he come
VAP
'He came.'</p> | <p>b. 'O-war - <u>t</u> - ii.
he come .back
EXT VAP
'He came back.'</p> |
| <p>141.a. Ngim dume 'o-war-i¹?
for what he come
VAP
'Why did he come?'</p> | <p>b. Ngim dume 'o-war-<u>t</u> - i¹?
for what he com back
EXT VAP
'Why did he come back?'</p> |
| <p>142.a. Daga tokoye ngar-u-daa?
from where come you

'Where did you (sg) come
from?'</p> | <p>b. Daga tokoye ngar-<u>t</u> - u-daa?
from where come back you
EXT VAP
'Where did you (sg) come
back from?'</p> |
| <p>143.a. Ngol-war-aayi.
it come not
VAP
'It (eg. letter) didn't
arrive.'</p> | <p>b. Ngol-war-<u>t</u> - aayi.
it come back not
EXT VAP
'It (eg. letter) didn't
come back.'</p> |

We see that, apart from the presence or absence of the extension -t-, the verbal complex in each pair of sentences is identical.

The verbal extensions in fact form part of the syntagm of units in the sentence; and, unlike the inflectional suffixes, they are not mutually exclusive. Another extension can, for example, be added to the already-extended roots in the b. sentences of 140.-143., thus:

- 140.c. 'O-war-t - iloy-ii.
he come back
EXT EXT VAP
'He came back early/a long time ago.'

- 141.c. Ngim dume 'o-war-t - iloy-i?
 for what he come back
 EXT EXT VAP
 'Why did he come back early/a long time ago?'
- 142.c. Daga tokoye ngar-t - iloy- ϕ -daa?
 from where come back you
 EXT EXT VAP
 'Where did you (sg) come back from (so) early/a
 long time ago?'
- 143.c. Ngol-war - t - ilow-aayi.
 it come back not
 EXT EXT VAP
 'It (eg. letter) didn't come back early/a long time ago.'

In these c. sentences, we see that two extensions co-occur in the same complex. (The alternation between -iloy- and -ilow- is phonologically determined: -iloy- before consonants and -i or -ii; -ilow- elsewhere.) From such evidence, then, we know that the extensions are not in paradigmatic contrast with each other. I shall therefore establish the inflectional paradigms of Fulfulde without regard to the extensions, since extended roots equally share in the inflectional processes that I describe below.

3.1.2. Nominals

Nominals can be derived from verbal roots by the addition of a nominal-class-suffix. For example, the deverbal nominal gar-ol 'coming/arrival' is derived from the verbal root war- 'come' via the nominal-class-suffix -ol. Similarly, 'annd-al 'knowledge', for example, is derived from 'annd- 'know', via the nominal-class-suffix -al.

Participles are derived from a verbal root via a nominal-class-suffix plus an additional, intervening, suffix. The latter suffix expresses properties of voice and aspect. Thus, in joo ϕ -ii-be 'settled (people)', -ii- expresses middle voice and completive aspect, while -be is a nominal-class-suffix. Likewise, in war-ay-nde 'coming/next', -ay- expresses active voice and incompletive aspect, while nde is a nominal-class-suffix.

By virtue of their two suffixes, participles straddle the nominal and verbal systems of the language. The nominal-class-suffix is a

member of a paradigm of such suffixes, which, as we saw in §1.3.1., characterise nominals. The intervening suffix, on the other hand, characterises verbal roots, and is homonymous with the VAP-suffix of verbal complexes. For example, -ii suffix characterises complexes of the Relative Completive Middle and of the Stative Middle, as well as Completive Middle participles; and -ay suffix characterises complexes of the General Incompletive Active, as well as Incompletive Active participles.

3.2. Inflectional Processes

Unlike the derivational morphology just described, inflectional morphology determines the relationship between a verbal root and other items in the syntagm in which the root occurs. It is the identification of paradigms of verbal inflections that will be the concern of the rest of this chapter, after we have defined more precisely what properties may be expressed in these inflectional paradigms.

3.2.1. 14 Inflectional Paradigms: 14 'Conjugations'

Taking morphological, syntactic and semantic factors into consideration, fourteen paradigms of verbal inflections are identifiable in Kaceccereere Fulfulde. Each paradigm represents the intersection of particular morpho-syntactic properties. I shall refer to the various paradigms as follows:

General Completive
 Relative Completive
 Stative
 Negative Completive
 Emphatic Completive
 General Incompletive
 Relative Incompletive
 Progressive
 Negative Incompletive
 Vague Incompletive
 Subjunctive
 Imperative
 Continuative Imperative
 Exhortative

Each of these names includes the minimal properties whereby the relevant paradigm can be identified. Traditionalists would in fact call each of these paradigms a 'tense' (cf. Arnott 1970: 179); and in some ways, it would be convenient to continue with this term, perhaps modifying its meaning according to need. However, the factors that crucially distinguish

one paradigm from another are not 'tense' (with its implications of time), but aspect, mood, polarity and stativity, for example. I should therefore prefer to avoid the term 'tense'.

This poses a problem, which could be solved by simply continuing to use 'paradigm'. Yet this term is surely too useful for descriptions of nominal morphology, as well as of verbal morphology, to be limited in this way. I therefore resolve the issue by making rather idiosyncratic use of 'conjugation'. My use of this term is substantially different from its application to Latin verbs, where a 'conjugation' represents an arbitrary verb-class. There are no such morphologically-defined verb-classes in Fulfulde. The term 'conjugation' is therefore available; and I shall henceforth use it in this study, without inverted commas, to refer to an inflectional paradigm of verbal forms.

A verbal complex is any one member of a conjugation. The complexes of a particular conjugation express a particular group of verbal properties.² For example, all and only the complexes of the Negative Incomplete conjugation express the combination of negative polarity, incomplete aspect, and indicative mood. Any one complex of that conjugation (and indeed of any conjugation) must also be marked for voice; and may additionally be marked for anteriority, person, number and case.

There is rarely a one-to-one correlation between verbal properties and morphs. (Verbal properties are, of course, abstract, and might have been termed 'morphemes'. I use 'morph' concretely.) A morph may express several properties (as does a VAP-suffix, for example); and a single property may be expressed over several morphs. These matters will be the concern of chapter 5.

3.3. Verbal Properties and Verbal Categories

In considering the various conjugations, their syntactic and semantic functions, and their morphology, I shall use the general approach of Matthews (1972 and 1974) and of Carstairs (1981). I shall identify certain verbal 'properties', some of which (such as active voice) can be seen as terms in larger, verbal 'categories' (such as voice). The properties in any one category are mutually exclusive. For example,

active voice and middle voice cannot co-occur in the same complex. However, the properties of different categories do co-occur: for example, active voice and positive polarity.

In the following sections, I shall first identify 'conjugational properties', which in various combinations crucially distinguish one conjugation from another; and I shall then identify those properties that may or may not be expressed in any one complex of a conjugation, and which are not crucial to the identification of the conjugation.

3.4. Conjugational Properties

The following properties come under this bracket:

- Indicative and Non-Indicative
- Completive and Incompletive
- Positive and Negative
- 'Relative' and 'Non-Relative' (or 'General')
- Emphatic and Non-Emphatic
- Stative and Progressive
- Imperative
- Exhortative
- Subjunctive
- 'Vague'.

Those properties mentioned in the first three lines are terms in the categories of mood, aspect and polarity, respectively and will be treated in some detail here. The other properties cannot be so easily pigeon-holed in terms of categories; and they will be more fully treated in the discussion of the various conjugations (3.6. - 3.9. below).

3.4.1. Indicative and Non-indicative Mood

The properties indicative and non-indicative are not formally realised in the inflectional morphology of Fulfulde; and there is even some doubt as to whether a certain conjugation, the Subjunctive, realises indicative or non-indicative (see below). Nevertheless, it is useful to establish the existence of these properties, both for semantic and other reasons.

Complexes of conjugations that express indicative mood generally express statements or questions; whereas those of non-indicative mood

generally express commands, exhortations, obligations, requests for permission, or the granting of permission - what Lyons (1977: 745ff) calls 'mands'. Consider the sentences of 144. and 145., for example. The former contain complexes of indicative mood, whereas the latter contain complexes of non-indicative mood:

- | | |
|--|--|
| <p>144.a. Faatu natt-ay suudu mum.
Fatu enter hut her
VAP
'Fatu enters/will enter
her hut.'</p> | <p>145.a. Faatu natt-a suudu mum!
Fatu enter hut her
VAP
'Fatu should enter her
hut!'</p> |
| <p>b. Be - soor-ii tew nguu.
they sell meat this
VAP
'They sold this meat.'</p> | <p>b. Soor-u tew nguu!
sell meat this
VAP
'Sell (sg) this meat!'</p> |
| <p>c. 'A-huw - ay jemma.
you work night
VAP
'You work/will work at
night.'</p> | <p>c. Huw - atay!
work
VAP
'Keep on (sg) working!'</p> |
| <p>d. Na'i 'am didi majj-ii.
cows my two lose
VAP
'Two of my cows have got
lost.'</p> | <p>d. Na'i maafa majj-a!
cows your lose
VAP
'May your cows get lost!'</p> |
| <p>e. 'O-wii nge-tuf - aama.
(<wi'-ii)
he say it vaccinate
VAP VAP
'He said it (cow) was vaccin-
ated.'</p> | <p>e. 'O-wii nge-tuf - ee.
(<wi'-ii)
he say it vaccinate
VAP VAP
'He said it (cow) should
be vaccinated.'</p> |

Sentence 144.a. expresses a statement of what Fatu does habitually, or is going to do; whereas 145.a. expresses a command. A similar contrast between statement and command holds between the b., c. and e. sentences. While 144.d. is also a statement, 145.d. expresses a wish, almost a curse.

Apart from the 'statement vs. mand' contrast, two other features clearly distinguish the two moods. Firstly, indicative can combine with anteriority (see §3.5.2. below), whereas non-indicative cannot. Thus, the sentences of 146. (which are the same as those of 144., except for the addition of no, the marker of anteriority) are acceptable, whereas

those of 147. are not:

146.a. Faatu natt-ay- no suudu mum.
Fatu enter hut her
VAP ANT

'Fatu was going to/used to enter her hut.'

147.a. *Faatu natt-a-no suudu mum!
ANT

146.b. Be - soor-ii - no tew nguu.
they sell meat this
VAP ANT

'They had sold this meat.'

147.b. *Soor-u-no tew nguu.
ANT

146.c. 'A - huw - ay-no jemma.
you work night
VAP ANT

'You (sg) used to work at night.'

147.c. *Huw-atay-no.
ANT

146.d. Na'i. 'am didi majj-ii-no.
cows my two lose
VAP ANT

'Two of my cows had got lost.'

147.d. *Na'i maad'a majj-a-no.
ANT

146.e. 'O-wii nge-tuf - aa-no - ma³.
(<wi'-ii) vacc-
he say it inate
VAP VAP ANT VAP

'He said it had been vaccinated.'

147.e. *'O-wii-nge-tuf-ee-no.
ANT

In most instances of non-indicative mood, its incompatibility with anteriority can probably be explained in terms of the fact that commands, requests, exhortations, etc., are necessarily interpreted as referring to the moment of utterance, and cannot be 'pushed back a step in time'.

Secondly, while both positive and negative polarity can combine with indicative mood in a verbal complex, this is not true of non-indicative mood. A sentence containing a non-indicative complex is negated by means of a sentence-initial particle, to, which in the Imperative Singular is realised as taa. We can see these two types of negation in the sentences of 148. and 149. respectively:

- 148.a. Faatu natt-ataa suudu mum.
Fatu enter not hut her
VAP
'Fatu doesn't/won't enter her hut.'
- b. Be - soor-aayi tew nguu.
they sell not meat this
VAP
'They didn't sell this meat.'
- c. 'A - huw-ataa jemma.
you .work not night
VAP
'You don't/won't work at night.'
- d. Na'i 'am didi majj-aayi.
cows my two lose not
VAP
'Two of my cows haven't got lost.'
- e. 'O-wii nge-tuf - aaka.
(<wi'-ii) vacc-
he say it inate not
VAP VAP
'He said it had not been vaccinated.'
- 149.a. To Faatu natt-a suudu mum!
not Fatu enter hut her
NEG VAP
'Fatu should not enter her hut!'
- b. Taa soor-u tew nguu!
not sell meat this
NEG VAP
'Don't sell this meat!'
- c. Taa huw-atay!
not work
NEG VAP
'Don't keep on working!'

149.d. To na'i maada majj-a!
 not cows your lose
 NEG VAP
 'May your cows not get lost!

e. 'O-wii to nagge ngee tuf - ee.
 he say not cow this vacc-
 inate
 NEG VAP
 'He said this cow should not be vaccinated.'

In the sentences of 148., negative is expressed within the verbal complex, by means of the VAP-suffix, which is different from the VAP-suffix in the comparable positive complexes in 144.. In the sentences of 149., however, negative is not expressed within the verbal complex at all - in fact, the verbal complexes have the same VAP-suffix as their positive counterparts in 145.. Rather, the property negative is expressed by the to or taa at the beginning of each sentence of 149..

Although the distinction between indicative and non-indicative looks neat and tidy as presented in 144. - 149., the picture is not in fact quite so perfect; for the Subjunctive conjugation sometimes realises indicative, sometimes non-indicative mood. This fact seems to be a function of the relationship between incompletive aspect, non-indicative mood, and non-factive modality (cf. Givón 1973). I shall give here one example of the problem posed by the Subjunctive. Consider the following:

150. Min-njonng-in - a ndiyam?
 we boil water
 EXT VAP
 'May we boil the water?'

151. To min-ndef-ay sogora, sey min-kett-a doyaaje,
 if we cook pounded then we peel yams
 VAP yam VAP
 min-njonng-in-a ndiyam,.....
 we boil water
 EXT VAP
 'If/when we cook pounded yam, (then) we peel yams,
 boil water,.....'

In 150., the verbal complex, min-njonng-in-a is of the Subjunctive conjugation, and expresses either a request for permission, or the

granting of permission. This is the 'typical' use of the Subjunctive, and clearly, the Subjunctive is here expressing non-indicative mood. In 151., we have the beginning of a recipe. It is introduced by a conditional clause (To min-ndef-ay sogora), followed by a series of clauses containing a Subjunctive verbal complex (min-kett-a, min-njonng-in-a . . .). Here, the Subjunctive is not expressing a 'mand'; rather, it is used in a series of clauses expressing incomplete aspect. As we shall see in §3.7.2.1. and §3.8.3. below, this use of the Subjunctive is comparable to the use of the Relative Completive in a series of clauses expressing complete aspect; and it is tempting to say that it is here not expressing non-indicative mood, but rather, indicative mood.

3.4.2. Completive and Incomplete Aspect

Each conjugation expresses one or the other aspect, as we shall see in the discussion of the individual conjugations in §3.6. - §3.9. below. At this stage, it is perhaps appropriate to explain why I establish the category of 'aspect' rather than 'tense'. (For discussion of the theoretical issues involved in the aspect - tense distinction, the reader is referred to Comrie 1976, and references therein. For discussion of the formal differences between the two aspects the reader is referred to sections §4.2. and §4.3. of the next chapter.) Let us consider the meaning of sentence 144.a., which is repeated here for convenience:

144.a. Faatu natt-ay suudu mum.
 Fatu enter hut her
 VAP

'Fatu enters/will enter her hut.'

Here, natt-ay may express a habit (eg. 'enters regularly', 'always enters'), or a future action ('will enter', 'is going to enter') - in other words, it expresses an action that hasn't been completed. The action may have started, and be continuing through the present into the future; or it may not have started yet. The fact that we are dealing with incomplete aspect, rather than future tense, is further corroborated by the fact that a complex expressing incomplete ('future') may be used for a past habit. In such circumstances, the anteriority-marker, no (cf. 146.a.-e.) explicitly tells us that the habit has ceased. Consider 152.a.:

- 152.a. Nde 'o-war - \emptyset - no fu, min-mbel-mbel-t-ay-no.
 when he come all we glad glad
 VAP ANT EXT VAP ANT.
 'Whenever he came, we rejoiced.'

Here, 'o-war- \emptyset -no is a complex of the Relative Completive Active, with the anteriority-marker; and min-mbel-mbel-t-ay-no is a complex of the General Incompletive Active, with an extension that involves reduplication of the root⁴ (mbel-), and with the anteriority-marker. Sentence 152.a. would be correct, ~~my~~ informants asserted, whether the person who used to come were dead or alive at the time of utterance; and the use of the completive rather than of the incompletive to express the habitual rejoicing would be unacceptable:

- 152.b. *Nde 'o-war- \emptyset -no fu, min-mbel-mbel-t-ii.

Comrie (1976: 5) tells us that 'Aspect is... concerned with the internal temporal constituency of ... one situation'. This statement is surely borne out by the internal temporal constituency of sentence 152.a.: for the habitual coming expressed in the first, relative, clause of the sentence is realised by a complex of Completive Aspect ('Past tense'), because the coming was completed on every occasion before the rejoicing started. The 'internal temporal constituency' of the coming in relation to the rejoicing thus determines the choice of conjugation. It is the use of the Anteriority-marker, no, that tells us that the habit of rejoicing (and indeed, of his coming) has ceased, and thus relates the actions to the 'zero-point of utterance' (cf. Lyons 1977: 682). (Concerning anteriority, see §3.5.2. below.)

The use of what I shall henceforth call completive aspect in the first clause of 152.a. tells us that the action depicted by the verbal complex, although habitual, was completed before the onset of the action depicted by the next complex. I should now like to give two further pieces of evidence for the fact that completive and incompletive are aspects rather than tenses.

Firstly, the completive is used to express an action that is completed in intention, though not in effect. If two people are bargaining, the seller says Mi-soor-ii-ngel naira gootel: 'I'll sell it for one naira', as he offers his 'last' (lowest) price for his

goods. The buyer may not accept, the deal may never come off, but the completive aspect (with -ii VAP-suffix) is used, rather than the incompletive aspect (with -ay VAP-suffix). Similarly, if a person decides to go for a walk, he may call as he goes Mi-dill-ii waag-ugo 'I'm going for a walk', using the completive, with -ii, rather than the incompletive with -ay.

Secondly, the completive aspect is used for performative verbs. Here are some examples:

153. Mi-ha^{bb}-ii-ma duubi tati.
 I tie you years three
 VAP
 'I (hereby) sentence you (sg) to three years'
 imprisonment.'
154. Mi-nodd-an-ii binngel ngel Ahmadu.
 I call for child this Ahmadu
 VAP
 'I (hereby) name this child Ahmadu.'
155. Mi-wii - ma ngad^f- \emptyset -aa kuugal ngal.
 (<wi'-ii)
 I say you do you work this
 VAP VAP
 'I (hereby) order you (sg) to do this work.'
156. Mi-wad^f-ii 'alkawal mi-hokk-it - ay ceede den.
 I make promise I give back money the
 VAP EXT VAP
 'I (hereby) promise to give back the money.'
157. Mi-yett - ii.
 I thank
 VAP
 'Thank you.'

As with the examples in the previous paragraph, the action in these sentences is completed in intention, and the completive aspect is therefore used: in fact, as the use of 'hereby' in the English glosses indicates, the intention is put into effect by the very utterance itself - hence the term 'performative verbs'.

It must be pointed out that the non-tense nature of the completive vs. incompletive distinction in Fulfulde was noticed as long ago as 1931 by Gaden:

Les formes du parfait ont pour caractère commun d'envisager le procès sous son aspect achevé, tandis que celles de l'imparfait l'envisagent sous son aspect inachevé. L'opposition n'est pas seulement dans le sens, elle est apparente dans les désinences, justifiant ainsi la classification adoptée. (Gaden 1931: xii.)

Arnott similarly characterises his 'general past' and the other 'past tenses' as indicating 'completed action, or a completed process'. He continues:

In dialogue it (the general past) very often refers to past time in relation to the time of utterance, but it also frequently refers to time that is past in relation to some other time implied in the context or indicated by a time-word, or to the time of some action indicated by other verbs. (Arnott 1970: 262)

Referring to his 'general future/habitual tense', Arnott says that it would be possible to assume its two main meanings 'under one generalised meaning of 'non-completeness'' (Arnott 1970: 270).

While Arnott continues to speak of 'past and future/habitual tenses', in spite of his above observations, Gaden on the other hand proceeds to speak of the 'parfait' and 'imparfait' as 'aspects'. Gaden also points out the patterns of inflections that can be seen within the two aspects: the characteristic i/ii/aa of the completive aspect, and the a/oo/ee of the incompletive, which I shall be discussing in the next chapter. It seems, then, that Gaden 'got there first'!

3.4.3. Positive and Negative Polarity

Positive and negative⁵ are properties in the category polarity. As was observed in the discussion of indicative and non-indicative above, negative is sometimes expressed within a verbal complex, by a VAP-suffix such as the -ataa of 148.a. and c.; but it is sometimes expressed by a sentence-initial particle, such as the to and taa of 149..

There can be little doubt, in fact, that positive polarity is morphologically unmarked, whereas negative polarity is marked: for in the absence of a negative marker, positive polarity is assumed.

This is evident not only in the fact that the VAP-suffixes for the negative conjugations are morphologically composite (see §4.2. of chapter 4 below); but also in the fact that, in the use of sentence-initial negative-markers, such as to and taa, negative polarity is 'imposed' on an otherwise positive sentence.

3.4.4. Relative and Non-Relative (General)

These properties do not fall into a neatly-named category. They refer to a syntactically-determined, morphologically-realised distinction that is found in African languages of several families: for example, Kanuri (of the Nilo-Saharan family) and Hausa (of Afro-Asiatic), as well as Fulfulde (of Niger-Congo).

In certain types of sentence, the property 'relative' is obligatorily realised. Such are: relative clauses (hence the term 'relative'); sentences with a focussed NP or adverb; wh- questions; and narrative sequences. The conjugations that express relative are the Relative Completive and Incompletive, and (in incompletive narrative sequences), the Subjunctive. In other types of sentence, the property non-relative is realised. The conjugations that express non-relative are the General Completive, the Stative, the General Incompletive and the Progressive. These facts will be illustrated in §3.6. - §3.7. below.

3.4.5. Emphatic and Non-Emphatic

The property emphatic is realised when completive aspect and verb-focus coincide: this will be further discussed in §3.7.1.2. below. Emphatic is expressed in the Emphatic Completive conjugation: other conjugations express non-emphatic by default.

3.4.6. Stative and Progressive

The properties stative and progressive are minimally distinguished in their morphological realisation; they occur in very similar syntactic contexts; and they are mutually exclusive, in the sense that they may not co-occur in the same verbal complex. Yet they cannot be claimed to be terms in a single category for they are not so much in contrast with each other, as with, rather, their own absence. Thus, stative contrasts with non-stative, when the properties completive and

non-relative co-occur. In terms of conjugations, the Stative conjugation contrasts with the General Completive (cf. 158.a. and b. respectively), and the Progressive conjugation contrasts with the General Incompletive (cf. 159.a. and b. respectively):

158.a. 'E-mo-ḡorn - ii. he dress VAP 'He is dressed/has got dressed.'	b. 'O-ḡorn - ake. he dress VAP 'He got dressed/dressed himself.'
159.a. 'E-mo-ḡorn - oo. he dress VAP 'He's getting dressed/ dressing himself.'	b. 'O-ḡorn - oto. he dress VAP 'He'll get dressed/he does get dressed.'

Stative is expressed in 158.a., but not in 158.b.; and progressive is expressed in 159.a., but not in 159.b..

These properties, and the conjugations that bear their names, will be further discussed in §3.6.1.1. and §3.6.2.1. below.

3.4.7. Imperative and Exhortative

The property imperative always co-incides with non-indicative mood, and may co-occur both with completive and incompletive aspect. The intersection of imperative and completive is expressed in the 'Ordinary Imperative' conjugation, used for what we can call 'ordinary' commands: whereas the intersection of imperative and incompletive is expressed in the 'Continuative Imperative' conjugation, which is used for commands to continue doing something. Whereas imperative always combines with a 2nd person subject, the property exhortative, which is expressed in the Exhortative conjugation, combines either with a 1st person plural (inclusive) subject or with 'Allah 'God'.

3.4.8. Subjunctive

The property subjunctive, and the conjugation that bears its name, have already been discussed in §3.4.1., with regard to their ambivalent position vis-à-vis indicative and non-indicative mood. They will be further discussed in §3.8.3. below.

3.4.9. Vague

This property sometimes co-incides with incomplete aspect, and is expressed in the Vague Incomplete conjugation. See §3.6.2.3. below.

3.5. Properties that do not distinguish one conjugation from another

In this section, I shall first consider properties of voice, one of which is necessarily expressed in every verbal complex of every conjugation (§3.5.1.). I shall then consider properties that are not crucially distinctive, and that do not necessarily occur in a complex: first, anteriority (§3.5.2.), and then the properties of person, number, and case (§3.5.3.).

3.5.1. Active, Middle and Passive Voices

Each conjugation has a different VAP-suffix for each voice: in fact, paradigms of complexes can be established within each conjugation, one paradigm for each voice. The Imperative conjugations (both 'Ordinary' and Continuative) and the Exhortative only occur in the active and middle, but all other conjugations occur in all three voices.

Verbal roots can be classified according to which voice or voices they occur in: some occur in all three; some in only two; and others in only one. Each voice has certain semantic connotations, not all of which are compatible with the semantics of every root. Essentially, the active voice is associated either with transitivity, where the action is performed by an agent (the subject) on another participant (the object), or with intransitivity; the middle voice is associated with reflexivity, and with borrowed verbal roots that would be semantically more compatible with active voice; and the passive voice is associated with actions performed on the subject, by an unspecified agent.

Let us now consider some data that illustrate the most typical uses of the three voices, and which also establish the integrity of the voice paradigms. Examples of voice in the various conjugations will be given incidentally in the ensuing discussion. However, here to begin with

are examples of the three voices of the General Completive conjugation, with the roots ronnd- 'put a head-load on' and suudf- 'hide':

- | | |
|--|---|
| <p>160.a. Mi-ronnd-<u>ii</u> - ma.
I load you
VAP
'I put a head-load on
you (sg).'</p> | <p>161.a. Mi-suudf-<u>ii</u>-ma.
I hide you
VAP
'I hid you (sg).'</p> |
| <p>b. 'A-ronnd-<u>ake</u>.
you load
VAP
'You (sg) put your head-
load on yourself.'</p> | <p>b. 'A-suudf-<u>ake</u>.
you hide
VAP
'You (sg) hid (yourself).'</p> |
| <p>c. 'A-ronnd-<u>aama</u>.
you load
VAP
'You (sg) have had your
head-load put on (yourself).'</p> | <p>c. 'A-suudf-<u>aama</u>.
you hide
VAP
'You (sg) have been
hidden.'</p> |

The a. sentences consist of a verbal complex that depicts an action performed by the subject on to the direct object. The b. sentences depict a similar action, but performed reflexively by the subject on to himself/herself. (Note that there are no reflexive pronouns in Fulfulde.) The c. sentences depict the result of such an action, with the direct object of the a. sentences 'promoted' to subject. It is the -ii, -ake and -aama VAP-suffixes that typically distinguish active, middle and passive voice respectively, in the General Completive conjugation.

3.5.1.1. Middle Voice: Reflexive and Ergative

While the active vs. middle voice distinction correlates to transitive vs. reflexive meaning with some verbal roots, with other roots, the relationship between active and middle voices is an ergative one: in other words, the object of an active complex (e.g. ceede maaje in 162.a. below) is the subject of the equivalent middle complex (as is ceede maaje in 162.b.),

162.a. 'E-min-don-beyd - a ceede maaje.
 we increase money their
 VAP

PROGRESSIVE ACTIVE

'We're increasing their price.'

b. Ceede maaje 'e-don-beyd - oo.
 money their increase
 VAP

PROGRESSIVE MIDDLE

'Their price is going up.'

c. Ceede maaje 'e-don-beyd - ee.
 money their increase
 VAP

PROGRESSIVE PASSIVE

'Their price is being increased.'

In the sentences of 162., we see the paradigm of active, middle and passive Voices of the Progressive conjugation, with the a/oo/ee VAP-suffixes. While the relationship between active and middle voice meaning is different here from that which we saw in sentences 160. - 161., the relationship of the passive to the active is exactly the same in all cases: the object of the transitive, active, complex is 'promoted' to become subject of the passive complex.

On the whole, the verbal roots which have reflexive meaning in the middle voice have an animate object in the active voice: cf. 160.a. and b., and 161.a. and b.; whereas the roots which have an ergative relationship between active and middle voices have an inanimate object in the active voice: cf. 162.a. and b.. Certain conjugations of the latter types of root have a slightly special meaning in the middle voice: namely, they can express potentiality or impossibility. The conjugations concerned are the General and Relative Incompletive, and the Negative Incompletive. For example, if we change the conjugation of 162.b. from the Progressive to the General Incompletive (whilst retaining middle voice) we get the following:

162.d. Cee

de maaje beyd - oto.
 money they increase
 VAP

'Their price increases/will increase.'/'Their prices can be increased.'

The negative equivalent of this sentence can express impossibility:

162.e. Ceede maaje ðeyd - ataako.
 money their increase not
 VAP

'Their price doesn't/won't increase.'/'Their
 price can't be increased.'

Certain types of verbs have two middle-voice equivalents to one active-voice sentence. This is true, for instance, of verbs which take two objects in the active voice, one of which is animate, and the other inanimate. With an animate subject, the middle voice has reflexive meaning, as in 163.b. and c. below; but with an inanimate subject, the middle voice has the potentiality or impossibility meaning, as in 163.d. and e. below:

163.a. 'O - ðorn-ay-ðe toggooje ðee.
 she dress them gowns these.
 VAP

'She dresses/will dress them in these gowns.'

b. Be - ðorn-oto toggooje ðee.
 they dress gowns these
 VAP

'They (will) dress in these gowns.'

c. Be - ðorn-ataako toggooje ðee.
 they dress not gowns these
 VAP

'They won't/don't dress in these gowns.'

d. Toggooje ðee ðorn-oto.
 gowns these dress
 VAP

'These gowns are wearable.'

e. Toggooje ðee ðorn-ataako.
 gowns these dress not
 VAP

'These gowns are unwearable.'

It may be that these two types of meaning associated with the middle voice would be better described in terms of the 'deep' cases of the participants involved with the verb, cf. Fillmore 1968 and 1971. In spite of subsequent revisions of his model, Fillmore's 1968 definitions

of the agentive, dative and objective 'deep' cases seem pertinent to the present discussion. Let us then first consider the 'deep' cases of the active voice, before we compare these with the cases of the middle voice.

It is reasonable to consider the surface-structure subject of the active verb (o in 163.a.) to be the instigator of the action, ie. Fillmore's agentive case. The animate object (be in 163.a.) is the patient, Fillmore's dative. And the inanimate object represents Fillmore's objective.

In the reflexive-middle sentences (163.b. and c.), the 'deep' agentive and dative are identical, and the latter has been deleted in the surface-structure. Otherwise, the same syntactic and semantic relations hold between the participants in the three sentences, 163.a. - c.. This is not so in what I shall call the 'ergative-middle' sentences, 163.d. and e.. Here, we see that the 'deep' objective has been promoted to surface-structure subject; and the other two cases are not, indeed cannot, be expressed at all. (Semantically, the 'ergative-middle' is very similar to a passive construction, but with the potentiality/impossibility idea added; and passive constructions in Fulfulde likewise cannot express an agentive 'deep' case, for there is no equivalent to the 'by ...' prepositional phrase in English.)

Before leaving this subject, here are a few more examples of the 'ergative-middle' construction:

164.a. Dum-wad-ataako.
it do not
VAP

'It can't be done.'

165.a. Wal-aa ko waq-otoo.
is not what do
VAP VAP

'There is nothing that can be done.'

166.a. Kolte d'ee loon-ataako.
clothes these wash not
VAP

'These cloths cannot be washed.'

It may be useful to compare these, both morphologically and semantically, with equivalent passive constructions:

164.b. Dum-wad-ataake.

it do

VAP

'It isn't/won't be done.'

165.b. Wal-aa ko wad-ete.

is not what do

VAP

VAP

'There is nothing being/going to be done.'

166.b. Kolte dee loon-ataake.

clothes these wash not

VAP

'These clothes aren't/won't be washed.'

3.5.1.2. Voice and Extensions

At the beginning of section §3.5.1., it was mentioned that verbal roots could be classified according to their 'voice-potential'. (As far as I am aware, no such classification has ever been undertaken.) Such a classification would have to take into account both extended and simple roots, for the voice-potential of an extended root is not necessarily the same as that of the simple root from which it is derived. For example, the 'causative extension', -in-, accompanies the introduction of a new participant role to the root, and always occurs with active or passive, never middle, voice; and the reflexive extension, -it-, always occurs with the middle voice. Since our concern here is voice, I shall simply give a few examples of how extensions may affect voice.

An intransitive root such as war- 'come' may take the dative extension, -an-:

167.a. Hassan war-aayi.

Hassan come not

VAP

'Hassan didn't come.'

167.b. Hassan war-an-aa-kam.
 Hassan come for not me.
 EXT VAP

'Hassan didn't come for me.'/'Hassan didn't come to
 fetch me.'/'Hassan didn't come on my behalf.'

Although the intransitive verbal complex in 167.a. cannot be passivised,
 the complex with the extended verbal root can. Thus, from 167.b.,
 we can derive 167.c.:

167.c. Mi-war-an-aaka.
 I come for not
 EXT VAP

'I haven't been fetched.'/'No one's come for me.'/'No
 one's called for me.'/'No one's come on my behalf.'

The suffixation of the -an- extension on to the essentially intransitive verbal root war- has thus affected the voice-potential of the root. This fact contrasts, for instance, with the -ilow- 'early/a long time ago' extension, which does not introduce a new participant role, and therefore does not allow an essentially intransitive verb to be passivised:

168.a. Be - baṅṅ-aayi.
 they move not
 VAP

'They didn't move (away).'

b. Be - baṅṅ-ilow - aayi.
 they move early not
 EXT VAP

'They didn't move (away) early.'

c. *Be - baṅṅ-ilow - aaka.
 they move early not
 VAP

The extension that has a reflexive effect on the verbal root has the form -t- or -it-, and is accompanied by the middle voice. Thus, from femmbugo 'to shave' (active voice), we have femmbitaago 'to shave oneself' (middle voice):

169.a. Penmboowo femmb-ii Muusa.
 barber shave Musa
 VAP

'The barber shaved Musa ('s head).'

- 169.b. Muusa femmb-it-ake.
 Musa shave
 EXT VAP
 'Musa shaved himself.'

Sentences 169.a. and b. are in fact part of a four-way distinction, based on active vs. middle voice, and presence or absence of a -t-/-it- extension; for femmbaago (middle voice, but without an extension) means 'to get shaved', and femmbitugo (active voice, with the homonymous repetitive extension) means 'to shave again':⁶

- 169.c. Muusa femmb-ake.
 Musa shave
 VAP
 'Musa got shaved.'
- d. Pemboowo femmb-it-ii Muusa.
 barber shave Musa
 EXT VAP
 'The barber shaved Musa again.'

From the sentences of 169., then, we see that the interaction of voice and of extensions with the verbal root are of paramount importance.

The simulative extension, -kin- occurs with the middle voice, although it has no obviously reflexive meaning. Could it conceivably have a 'deep' ergative-middle meaning? - the subject of the verb causing him/herself to appear to be something he/she is not? Here are two examples of the extension:

170. Naa 'o-wum- \emptyset , 'o-wum-kin- \emptyset .
 not he blind he blind
 VAP EXT VAP
 'It's not that he became blind, (it's that) he pretended to become blind.'
171. Naa 'o-maay-u, 'o-may-kin- \emptyset ⁷.
 not she die she die
 VAP EXT VAP
 'She didn't (really) die, she (simply) pretended to die.'

In this section, I have tried to show the extent to which the meaning of a verbal complex depends on which of the three voices is expressed in it. Let us now move on to other properties which, unlike those of voice, are not obligatorily realised in a verbal complex.

3.5.2. Anteriority

Anteriority is not a property of a category: it contrasts simply with its own absence. Its morphological realisation is usually no; and I shall therefore refer to it as no. However, its final vowel may be lengthened (resulting in noo) under certain conditions, as we shall see in the next chapter.

No has already arisen in the discussion of mood (§3.4.1.) and aspect (§3.4.2.). Essentially, it is a marker of past time. It can occur in verbless sentences, such as 172.b.; in participles, such as 173.b.; and, of course, in verbal complexes, such as 174.b.:

172.a. 'E mo dɔn⁸ to Zaariya.
he present in Zaria
'He's in Zaria.'

b. 'E mo dɔn no⁸ to Zaariya.
he present in Zaria
ANT
'He used to be in Zaria.'

173.a. Mi kokk-eteɛ-dɔ ceede.
I give money
VAP CL
'I will be given money.'/'I am to be given money.'

b. Mi kokk-ete-noo -dɔ ceede.
I give money
VAP ANT CL
'I was to receive money.'/'I was to be given money.'

174.a. 'E-mo - dɔn-war - a.
she come
VAP

'She's coming.'

b. 'E-mo - dɔn-war - ay - no, sey 'o - 'al - it - i.
she come then she leave
VAP ANT EXT VAP

'She was going to come, then gave up the idea/changed her mind.'

In all of the b. sentences above, we see that no not only imposes past time on the clause in which it occurs, but that it also indicates a change in the situation depicted in the equivalent a. sentences. These features were also noted in sentence 152.a. above, and in the ensuing discussion.

3.5.3. Properties of Person, Number and Case.

A verbal complex may or may not contain dependent pronouns (cf. §4.1. below). If it does, then properties of person, number and case will be realised in the complex. Even if it does not, however, such properties may be realised by other means: for example, the very fact that no subject pronoun occurs in a complex usually indicates that the subject is 3rd person;⁹ and the singular or plural number of the subject may be realised by the initial consonant of the root (cf. §1.2.1.). In this section, I shall mainly be concerned with the properties of these categories as they are realised in pronouns, and I shall explain why it is necessary to establish their existence for the purpose of adequately describing the morphology of the verbal conjugations.

3.5.3.1. 1st, 2nd and 3rd Person

On the semantic level, Fulfulde distinguishes between speaker (1st person), addressee (2nd person), and 3rd person. However, the morphological representation of those persons depends on a combination of factors, amongst which are number, case, and nominal class. Of these, the first two are to be discussed in the next two sections, and the last (which only concerns 3rd person) was discussed in §1.3.. A further factor will, however, be considered here. This is the combination of persons that may occur, resulting in a 1st person plural pronoun that explicitly includes the addressee, 'en', and a 1st person plural pronoun that explicitly excludes the addressee, min. As a result of these combinations, Fulfulde has a rather unusual 7-way distinction, which is illustrated by the subject pronouns (underlined) in the complexes of 175.. These complexes constitute part of the Relative Completive conjugation, active voice. Note that variation in the person of the subject correlates in this conjugation with variation in morph-order (VOSO, VSOO, SVOO), and variation in morph-shape (-moo- vs. -mo-, and -u- vs. -i-).

I do not follow Arnott's suggestion, for consistency would demand that if:

'on is considered: 2pl. excluding 1st person, and
'en is considered: 2pl. including 1st person,

then:

min should be considered: 3pl. including 1st person.

This would leave Fulfulde without a 1st person plural - and this would clearly be a misrepresentation of the facts, since the speaker, ie. 1st person, is semantically included in two of the plural pronouns. In fact, we have a more useful and consistent description of the pronouns if we take the addressee(s), ie. the second person, as the variable.

Thus:

min is best considered: 1pl. excluding 2nd person;
'en is best considered: 1pl. including 2nd person; and
'on is best considered: 2pl..

The similarities which Arnott wanted to capture can at least be partially covered by a statement such as 'VS order may occur in verbal complexes whose subject expresses 1st, or 2nd, or 1st and 2nd, person'.

Although the sentences of 175. exemplify the full range of persons in the subject, they all have third person objects (mo/moo and be). In fact, object pronouns of all persons can occur in the verbal complex. Here, then, are some sentences with an object pronoun of the 1st or 2nd person (underlined):

176.a. Ndee suuɗ-u-ɗaa-mi-be? b. Ndee suuɗ-u-ɗaa-min-be?
 when hide you me them when hide you us them
 V VAP S O O V VAP S O O
 'When did you hide them 'When did you hide them
 from me?' from us (excl)?'

c. Ndee 'o - suuɗ-i-'en-be?
 when she hide us them
 S V O O
 'When did she hide them from us?'

177.a. Ndee suuɗ-u-maa-mi-be? b. Ndee suuɗ-u-mi-'on-be?
 when hide you I them when hide I you them
 V O S O V S O O
 'When did I hide them from 'When did I hide them from
 you (sg)?' you (pl)?'

In 176.a., b. and c., the first object is 1sg. (-mi-), 1pl. excl. (-min-) and 1pl. incl. (-'en-) respectively. In 177.a. and b., the first object is 2sg. (-maa-) and 2pl. (-'on-) respectively. The second object in all of these sentences is consistently -be.

By way of conclusion to this discussion of person, it should be pointed out that all conjugations except the Imperatives and the Exhortative resemble the Relative Completive (which was illustrated in 175. and 176.) in that they may take a subject or object of any person. However, the Imperatives can only take a 2nd person subject (cf. 178.a. and b.), which is realised as zero unless the negative-marker, to, is present; and the Exhortative can only take either a 1st person plural inclusive subject (cf. 179.a.), or 'Allah 'God' (cf. 179.b.):

<p>178.a. <u>∅</u>-dakkit-a! move away S V VAP 'Move away (sg)!'</p>	<p>b. To <u>'on</u>-dakkit-ee! not you move away S V VAP 'Don't move away (pl)!'</p>
<p>179.a. <u>'En</u>-mballut-u - mo! we help him VAP 'Let's help him!'</p>	<p>b. <u>'Allah</u> wallut-u - 'en! Allah help us VAP 'May God help us (incl)!'</p>

3.5.3.2. Singular and Plural Number

Fulfulde distinguishes singular and plural: there is no dual, or other number distinction. Singular and plural are realised in dependent pronouns such as have just been discussed. They are sometimes also realised, though less consistently or obviously, by the initial consonant of a verbal root, if it is preceded by its subject (cf. §1.2.1.). In addition, singular and plural are always realised, perhaps rather surprisingly, in the VAP-suffix of Imperative complexes - surprisingly, because no other VAP-suffixes vary according to the number of the subject. Thus, -a in 180.a. expresses singular, -ee in 180.b. plural:

<p>180.a. Daan - <u>a</u>! sleep VAP 'Go to sleep (sg)!'</p>	<p>b. Daan - <u>ee</u>! sleep VAP 'Go to sleep (pl)!'</p>
--	--

The realisation of number will be discussed in greater detail in the chapter on exponence.

3.5.3.3. Subject and Object Case

Subject and object case are realised by both the morphology and the syntax of verbal complexes. Consider sentence 176.a. and 177.a. again:

176.a. Ndee suuɬ-u - d_{aa}-mi-ɓe?
 when hide you me them
 V VAP S O O
 'When did you hide them from me?'

177.a. Ndee suuɬ-u - m_{aa}-mi-ɓe?
 when hide you I them.
 V VAP O S O
 'When did I hide them from you (sg)?'

Here, we have a minimal pair of complexes, distinguished only by the initial consonant of the 2sg pronoun: d_{aa}- (of -d_{aa}-) in 176.a., and m_{aa}- (of -m_{aa}-) in 177.a.. Daa is subject, whereas maa is object: only their respective forms distinguish the one from the other.

Here, on the other hand, is a pair of sentences where the relative order of pronouns distinguishes subject from object:

181.a. Di - tokk - ii-'en.
 they follow us
 VAP
 'They (eg. sheep) followed us (incl).'

b. 'En-tokk - ii-ɕi.
 we follow them
 VAP
 'We (incl) followed them (eg. sheep).'

Whichever pronoun precedes the verbal root in the above sentences is interpreted as realising subject; and whichever follows the root is interpreted as realising object.

An indirect object is distinguished from the direct object by order: the former precedes the latter, whether both are within a verbal complex, or not.¹² Consider the sentences of 175. on p. 145.. In each, the first object pronoun is interpreted as the indirect object, and the second as direct object. In order to effect a different interpretation, the order of the object pronouns has to be switched.

For example, 182.a. and b. correspond to 175.c. and d. respectively:

182.a. Ndee 'o-suud^f-i-be - mo?
 when he hide them her
 S V VAP IO DO
 'When did he hide her from them?'

b. Ndee min-suud^f-i-be - mo?
 when we hide them her
 S V VAP IO DO
 'When did we (excl) hide her from them?'

The same principle of indirect object before direct object applies in complexes with VS (verb-subject) order as in SV complexes: witness sentences 175.a., b., e. and f.. However, such complexes are verging on the borderline of acceptability, or maybe we should say, interpretability, for they involve three pronouns in a row, whose case-roles have to be interpreted.

One further point concerning the properties of case in the verbal complex. Our examples thus far have had a maximum of two objects. When the complex contains one of certain extended verbal roots, three objects may co-occur in the complex, for example:

183. 'O-hokk-an-t-e - mo - dum.
 he give for you him it
 S V EXT VAP O O O
 'He'll give it to him on your behalf.'

Such a series of objects is not possible in VS complexes, where the subject pronoun, too, would be vying for interpretation.

These matters will be elaborated further in the next two chapters. Let us now turn to a consideration of the various conjugations.

3.6. Indicative Mood: Conjugations in Neutral Sentences

The above title of course begs the question: what is a neutral sentence? I shall in fact assume that a neutral sentence is a statement or yes/no question which is not within a relative clause, a focus construction, a wh-question, or a narrative sequence. These latter constructions will be dealt with under non-neutral sentences, in §3.7. below.

Five positive and two negative conjugations may occur in neutral sentences of indicative mood. They are:

General Completive	General Incompletive
Stative	Progressive
Negative Completive	Negative Incompletive
	Vague Incompletive.

I shall first discuss the conjugations in the left-hand column, all of which express Completive Aspect; and I shall then discuss those in the right-hand column, which express Incompletive Aspect.

3.6.1. Completive Aspect

3.6.1.1. The Stative and the General Completive

In order to establish the semantic distinction between these two conjugations, let us consider the following:

184.a. 'E-dum-he'y - i Muusa. it suffice Musa VAP 'It is ¹³ enough for Musa.'	b. Dum-he'y - ii-mo. it suffice him VAP 'It became/has become enough for Musa.'
185.a. 'E-mo-waaw - i Fulfulde. he be able Fulfulde VAP 'He can ¹³ speak Fulfulde.'	b. 'O-waaw - ii-nde. he be able it VAP 'He became/has become pro- ficient in it.'
186.a. 'E-mo - ronnd - ii. she put on headload VAP 'She is ¹³ carrying a headload.'	b. 'O - ronnd - ake. she put on headload VAP 'She (has) put her head- load on.'

The a. sentences above are of the Stative conjugation, whereas the b. sentences are of the General Completive. Those in 184. and 185. express active voice, whereas those of 186. express middle voice. As the translation of these sentences suggests, the General Completive depicts a completed process or action, the Stative a state.

Stativity is a property that is not compatible with every verbal root, and the number of roots that may occur in the Stative conjugation

is fairly limited. Certain roots in fact have a propensity to occur in the Stative, and occur in few other conjugations. Such is waaw- above, and others that express qualities, processes or states, for example wooj- 'be/become red', 'annɔ- 'know', and bur- 'exceed'. These all occur with active (rather than middle) voice; and they display a morphological quirk in their negative equivalents (cf. §3.6.1.2. below).

Stativity is particularly compatible with verbal roots that express a process enacted on the body, and that results in a state. Such is, for example, ronnd- in 186.. The middle voice of the Stative conjugation very often occurs with such roots, as exemplified in 186. above, and in the following:

187.a.	Bikkoyɲ	'e- <u>born</u> -ii.	188.a.	'E-mi-fad' - ii.
	children	dress		I wear
		VAP		shoes
		'(The) children are dressed.'		VAP
				'I'm wearing (my) shoes.'

In sentences such as these, it is not specified whether the action that led to the state was performed reflexively or not. However, the middle voice of the General Completive of such roots only has reflexive meaning:

187.b.	Bikkoyɲ	<u>born</u> -ake.	188.b.	Mi-fad' - ake.
	children	dress		I wear
		VAP		shoes
		'(The) children dressed themselves.'		VAP
				'I put on (my) shoes.'

Arnott (1970: ch.52) distinguishes two Stative conjugations, on both morphological and syntactic grounds. For Kaceccereere Fulfulde, there is not enough evidence to justify two such conjugations. True, complexes of the Stative may or may not contain ɗon, which is one of the morphological distinctions found in the Gombe dialect described by Arnott;¹⁴ however, the occurrence of ɗon in such complexes is explicable in terms of the emphasis and/or the locative implications that it lends to a complex. For example, in Kaceccereere Fulfulde, if a Stative complex is used in reply to a yes/no question, then ɗon is likely to occur in the complex, for it emphasises the affirmative nature of the reply:¹⁵

189.a. Loonde ndee 'e-heew-i na?
 pot this fill
 VAP QU

'Is this cooking-pot full?'

b. 'Ii, ie-nde-don-heew-i.
 yes it fill
 VAP

'Yes, it is full.'

?c. 'Ii, 'e-nde-heew-i.
 yes it fill

Sentence 189.c. is perfectly grammatical, but it is not 'strong' enough to be used in reply to the question in 189.a.. The locative implications of don are illustrated by the fact that a Stative complex with don, but not one without, may be used in reply to a question asking tokoye? 'where':¹⁶

190.a. Tokoye Asabe?
 where Asabe

'Where is Asabe?'

b. 'E-mo- don-jood-ii.
 she sit
 VAP

'She's seated.'/'She's around, seated.'

?c. 'E-mo - jood-ii.
 she sit
 VAP

Again, the c. sentence here is perfectly well-formed; but it is not suitable as a reply to 190.a.. (I have given a second, alternative, translation of 190.b., reflecting the locative meaning of don. The possible origin of such forms was mentioned in section §2.1.2.3., page 84, above, and is further discussed in McIntosh 1980.) From the above evidence, I believe that it would not be useful to establish two Stative conjugations in Kaceccereere Fulfulde; rather, it is better to regard the occurrence of don in Stative complexes as determined by discourse considerations.

The General Completive is possibly the most 'neutral' conjugation. It is the conjugation most often used for citation purposes, and it is

semantically compatible with the vast majority of verbal roots. Moreover, it is morphologically uncomplicated: unlike many other conjugations, it only has a single VAP-suffix for each voice, regardless of the other morphs which occur in the complex; it always has SV order; and unlike the Stative, for instance, it does not make use of periphrasis.¹⁷

The 'meaning' of the General Completive has already been discussed, both with regard to the establishment of the category of aspect (cf. §3.4.2.), and with regard to the way the Stative differs from it.

3.6.1.2. Negative Completive

The negative equivalent of the Stative and the General Completive is the Negative Completive:¹⁸ the semantic distinction between the two positive conjugations is thus neutralised under negation. The following are the negative counterparts of 184.a. and b. - 186.a. and b. (page 150 above):

- | | |
|---|--|
| <p>184.c. Dum-he'y - <u>aayi</u> Muusa.
it suffice not Musa
VAP</p> <p>'It isn't/hasn't become
enough for Musa.'</p> | <p>d. Dum-he'y - <u>aa</u>-mo.
it suffice not him
VAP</p> <p>'It isn't/hasn't become
enough for him.'</p> |
| <p>185.c. 'O-waaw - <u>aa</u> Fulfulde.
he be able not Fulfulde
VAP</p> <p>'He can't speak/hasn't be-
come proficient in Fulfulde.'</p> | <p>d. 'O-waaw - <u>aa</u>-nde.
he be able not it
VAP</p> <p>'He can't speak/hasn't be-
come proficient in it.'</p> |
| <p>186.c. 'O - ronnd - <u>aaki</u>.
she put on headload not
VAP</p> <p>'She isn't carrying/hasn't put
on her headload.'</p> | |

The complexes of 184.c.-d. and 185.c.-d. express active voice (as do their a. and b. counterparts), but that of 186.c. expresses middle voice. This voice distinction accounts for the occurrence of -aa and -aayi in 184. and 185. on the one hand, and -aaki in 186. on the other. However, how are we to account for the -aa/-aayi alternation in the active?

In Kaceccereere Fulfulde, -aayi generally occurs if the VAP-suffix is in complex-final position, and -aa occurs elsewhere. In 184.c., Muusa is an NP object (which is not part of the verbal complex); the VAP-suffix is complex-final, and it therefore has the form -aayi; but in 184.d., the object is a dependent pronoun, -mo (which is part of the complex), the VAP-suffix is not in final position, and it therefore has the form -aa. However, there are certain roots that have the -aa rather than -aayi suffix in all circumstances: these are the same roots as were mentioned on page 151 above, in other words, roots that express qualities, processes or states. Waaw- is one of these roots, and this fact accounts for the -aa (rather than -aayi) VAP-suffix in 185.c..

For the Gombe dialect, Arnott (1970: §53.13-17) establishes a separate 'Negative of Quality' conjugation, which occurs only in the active voice, has -aa VAP-suffix, and occurs with the same type of roots as have just been mentioned. However, since, in the Kaceccereere dialect, there is no evidence of a semantic and/or syntactic contrast between the -aa and -aayi VAP-suffixes, there is not enough justification for the establishment of a separate negative conjugation. Rather, it would seem more prudent simply to consider such roots as taking an exceptional, -aa, suffix instead of the more normal -aayi suffix.

3.6.2. Incompletive Aspect.

3.6.2.1. Progressive and General Incompletive

The semantic distinction between the Progressive and the General Incompletive is not as clear-cut as is that between the Stative and the General Completive. In principle, the General Incompletive is used for incompleting actions or processes, which are usually habits, or in the future; whereas the Progressive is used for actions or processes that are or were happening, and that are or were interrupted. In practice, the Progressive is also increasingly used for habits, as we shall see presently.

The sentences of 191. and 192. exemplify the distinction between the two conjugations we are considering here:

191.a. Di - njar - ay ndiyam to mbeela ton.
 they drink water at lake there
 VAP

'They (eg. cows) drink/will drink water at the
 lake over there.'

b. 'E-di - njar-a ndiyam to mbeela ton.
 they drink water at lake there
 VAP

'They (eg. cows) are drinking water at the lake
 over there.'

192.a. Yimbe dufbe mob - t - oto.
 people many gather
 EXT VAP

'Many people gather/will gather together.'

b. Yimbe dufbe 'e-mob - t - oo.
 people many gather
 EXT VAP

'Many people are gathering together.'

The a. sentences above contain a complex of the General Incomplete, whereas the b. sentences contain a complex of the Progressive. The complexes in 191. are of the active voice, whereas those of 192. are of the middle. The translations given are intended to cover the range of meanings that may be conveyed by these conjugations. Sentence 191.a. expresses a habit, which may have started in the past and still continue in the present. (However, if the habit has been discontinued, then the anteriority-marker, no will usually be needed in order to make this fact explicit, thus: Di-njar-ay-no ... 'They used to drink ...'.) It may also express an action that will begin in the future, whether as a habit or not. Sentence 191.b. depicts an action that has started and is still continuing at the moment of utterance, or that started and was interrupted in the past. The fact that the action ceased in the past will usually be made explicit by the use of no ('E-di-njar-ay-no ... 'They were drinking ...'), though contextual clues in the discourse-situation may be sufficient. Sometimes, younger speakers of Kaceccereere might use 191.b. to express a habit, in the place of 191.a.. It is probable that in this respect, they are copying the frequent use of the Hausa Continuative aspect for habits (see Kraft and Kirk-Greene 1973: 157, footnote 1).

The pattern of meaning between 192.a. and b. is parallel to that which holds between 191.a. and b.: the first expresses a habit or a future action; the second an action that is, or was, interrupted.

The Progressive conjugation expresses a point in the progress of an action or process, rather than the state reached at the end of a process. The contrast between the Progressive and the Stative may be usefully brought out by the a. and b. sentences of the following:

193.a. Dere 'e-wakk - ii sawru.
 Dere put across staff
 shoulders
 VAP

'Dere is carrying a staff across his shoulders.'

b. Dere 'e-wakk - oo sawru.
 Dere put across staff
 shoulders
 VAP

'Dere is putting a staff across his shoulders.'

The Stative complex in 193.a., 'e-wakk-ii', shows that the action of putting across the shoulders has been completed; and the resultant state is thus described. The Progressive complex in 193.b., 'e-wakk-oo', shows that the action of putting across the shoulders is continuing; and this continuing, or progressing, action is what is described.

Unlike the Stative, the Progressive is semantically compatible with the vast majority of verbal roots, and there is no body of roots that are 'inherently progressive' to parallel those that are 'inherently stative'.

The place of don in Progressive complexes is exactly parallel to its place in Stative complexes: don is used for emphasis, and has locative connotations. For example, the b. sentences below would be suitable as responses to the questions posed in the a. sentences; but the c. sentences would be unsuitable:

194.a. Musuuru 'e-don-fij - a na?
 cat play
 VAP QU

'Is the cat playing?'

b. 'Ii, 'e-ndu-don-fij-a.
 yes it play
 VAP

'Yes, it is playing.'

?c. 'Ii, 'e-ndu-fij-a.
 yes it play

195.a. Tokoye Faatu?
 where Fatu

'Where is Fatu?'

b. 'E-mo - don-def - a nyiiri.
 she cook food
 VAP

'She's cooking food.'

?c. 'E-mo-def - a nyiiri.
 she cook food

The Progressive without don, as in 194.c. and 195.c. is not 'strong' enough to act as a reply to a yes/no question, and does not have locative connotations that can serve as a reply to a locative question. Thus, for the same reasons as were explained with reference to the Stative, I do not establish two Progressive conjugations (see pp. 151-2).

3.6.2.2. Negative Incompletive

The negative counterpart of the General Incompletive and of the Progressive is the Negative Incompletive:¹⁹ the interrupted vs. uninterrupted distinction is thus neutralised under negation:

191.c. Di - njar - ataa ndiyam to mbeela ton.
 they drink not water at lake there
 VAP

'They (eg. cows) don't/won't drink water at the lake over there.'

'They (eg. cows) aren't drinking water at the lake over there.'

192.c. Yimbe dufbe mob - t - ataako.
 people many gather not
 EXT VAP

'Many people don't/won't gather together.'
 'Many people aren't gathering together.'

The complex in 191.c., with -ataa VAP-suffix, expresses Active Voice; whereas that in 192.c., with -ataako VAP-suffix, expresses Middle Voice.

3.6.2.3. Vague Incompletive

When a Kaceccereejo Fulani takes his leave, he will often say:

196.a. Kinn - an - \emptyset - aa - mi wuro.
 greet for you me home
 VAP

'Greet (the people at) home on my behalf.'

The standard, formulaic, response to this is:

196.b. Be - nan - ma.
 they hear
 VAP

'They hear/accept (your greetings).'

The latter, and its counterpart with a singular subject ('O-nan-ma 'He/she hears'), are the only forms of the Vague Incompletive that most Kaceccere'en know; and on such evidence, it would seem best to regard these as fossilised forms, and to consider the Vague Incompletive to be no longer in productive use in this dialect.

However, certain older speakers do use forms such as the following, also of the Vague Incompletive:

197.a. Ngel-yoor-uma doo.
 it dry here
 VAP

'It may dry here.'/'Maybe it will dry here.'

Younger speakers would more likely use the General Incompletive with wonngo 'maybe':

197.b. Wonngo ngel-yoor-ay doo.
 maybe it dry here
 VAP

'Maybe it will dry here.'/'It may dry here.'

Both of these sentences contrast with:

197.c. Ngel-yoor-ay doo.
 it dry here
 VAP

'It will dry here.'

Sentences 197.a. and b. differ from 197.c. in the degree of certainty that they express concerning the realisation of the action or process depicted by the verbal root. This fact casts some doubt on the suitability of the Vague Incompletive for inclusion in Indicative Mood, which is primarily concerned with statements. Given this uncertainty, and the rare use of the Vague Incompletive, I shall not include it in further discussions.

3.7. Indicative Mood: Conjugations in Non-neutral Sentences

At the beginning of section §3.6., I explicitly excluded certain constructions from consideration. These were: relative clauses, focus constructions, wh- questions, and narrative sequences. It is these that use the three conjugations of Indicative Mood that have not yet been discussed, namely:

Relative Completive	Relative Incompletive
Emphatic Completive	

Let us deal with these conjugations along aspectual lines: first, the Relative Completive and Emphatic Completive, and then the Relative Incompletive.

3.7.1. Completive Aspect

3.7.1.1. Relative Completive

The Relative Completive expresses Indicative Mood, Completive Aspect, and Positive Polarity, as do the General Completive and the Stative. However, it is distinct from the latter two conjugations in its syntactic distribution.

First, the Relative Completive is used in relative clauses, where the General Completive and the Stative may not occur. Thus, the c. sentence of 198. is correct, because it contains a Relative Completive

Thirdly, the Relative Completive is used in *wh*- questions, such as 200.c.. Again, the General Completive and the Stative (cf. 200.d. and e. respectively) are unacceptable:

- 200.a. De - loon-aama.
they wash
VAP
GEN COMPL PASS
'They (eg. clothes) have been washed.'
- b. 'E-de - don-loon-aa.
they wash
VAP
STATIVE PASSIVE
'They (eg. clothes) are washed.'
- c. Deye loon-aa?
which wash
VAP
REL COMPL PASS
'Which (eg. clothes) have been/are washed?'
- d. *Deye loon-aama?
which wash
- e. *Deye 'e-don-loon-aa?
which wash

Fourthly, the Relative Completive is used in a narrative sequence of verbal complexes expressing Completive Aspect. Such a sequence is particularly often found in folk-tales. The General Completive is unacceptable in such circumstances; and since we are dealing with a series of events, rather than states, the Stative conjugation would be semantically inappropriate. (Note that subsequent complexes in such a sequence are frequently introduced by *sey* 'and then', but the Relative Completive remains, with or without *sey*.) Here is an example of such a sequence:

201. 'Aa- yii, dowroori 'e gawri 'e 'alkama 'e tammaari,²⁰
you(<yi'-i) millet and guinea- and wheat and (a certain
see corn cereal)
VAP
sey be - nan - i goddo paanyo 'e-don, d'um bo'deejo coy,
then they hear certain youth around he light- very
VAP
REL COMPL ACT
skinned
sey be - 'umm-ii, be - njah-ay.
then they arise they go
VAP VAP
REL COMPL MID

'You see, millet, guinea-corn, wheat and 'tammaari', they heard that there was a certain very light-skinned young man around, so they got up, and were going to go.'

respectively) in a relative clause.

As regards sentences with a focussed NP or adverbial expression, consider 204.c., where to maayo is focussed, and a Relative Incomplete complex is used:

204.a. Na'i 'eer - ay to maayo.
cows wander to river
VAP
GEN INCOMPL
ACT

'(The) cows wander towards (the) river.'

b. Na'i 'e-don- 'eer - a to maayo.
cows wander to river
VAP
PROG ACT

'(The) cows are wandering towards (the) river.'

c. To maayo na'i 'eer - d - ata.²¹
to river cows wander
EXT VAP
REL INCOMPL ACT

'(The) cows wander/are wandering towards (the) river.'

d. *To maayo na'i 'eer - d - ay.
to river cows wander
EXT VAP

e. *To maayo na'i 'e-don- 'eer - d - a.
to river cows wander
EXT VAP

Sentences 204.d. and e. are unacceptable because they contain a focussed constituent together with a complex of the General Incomplete and the Progressive respectively.

In sentence 205.c., we see the occurrence of the Relative Incomplete in a wh- question:

205.a. Ngel-woy-ay.
it cry
VAP
GEN INCOMPL ACT

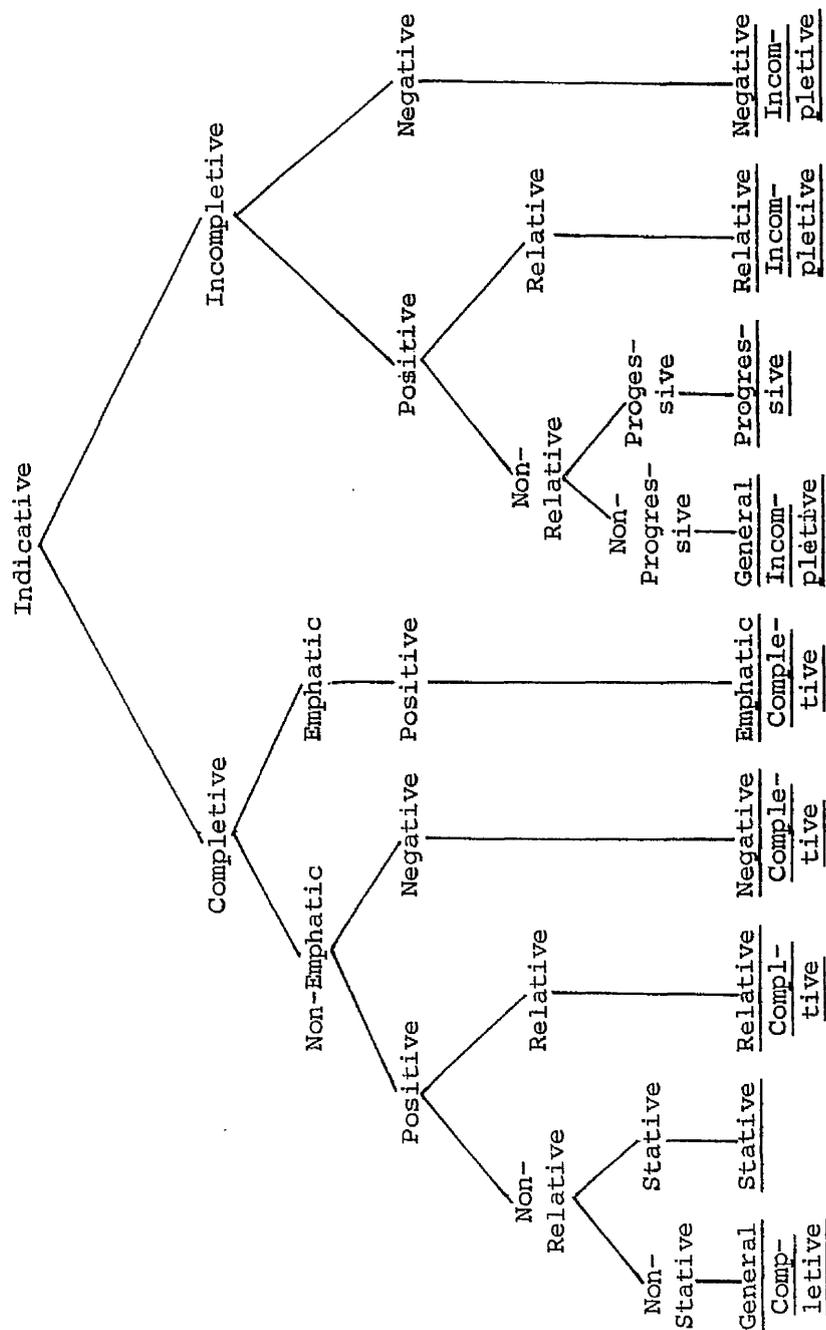
'It (eg. child) cries.'

b. 'E-ngel-woy-a.
it cry
VAP
PROG ACT

'It (eg. child) is crying.'

stative distinction (in completive aspect), and the progressive vs. non-progressive distinction (in incomplete aspect).

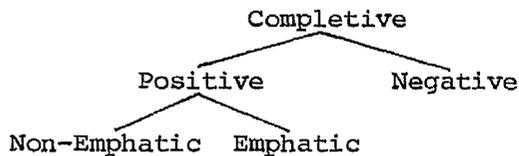
Properties and Conjugations of Indicative Mood



I have labelled the properties in the above tree according to the terminology established in sections §3.4. - §3.5. above. However, an alternative terminology could have been adopted, whereby each non-final node in the tree would divide into '+' (plus) or '-' (minus) one of the properties in a category. For example, indicative could have divided

into +completive and -completive, non-emphatic could have divided into +positive and -positive, and so on. However, since the properties of some categories have well established names, such as completive and incompletive, positive and negative, I have used those names where they exist. Where no such name exists, the terminology I use is essentially a \pm (plus-or-minus) system: emphatic and non-emphatic, stative and non-stative, and so on.

Although the tree neatly captures certain characteristics of Fulfulde conjugations, it is deficient in a least two respects. First, the repetition of positive under non-emphatic and under emphatic is descriptively uneconomical. However, a more economical version of this part of the tree, such as:



would be inaccurate, since the negative completive is not the negative counterpart of the emphatic completive. (A sentence with a complex of the latter conjugation is negated by means of a sentence-initial 'particle', naa: compare example 202.a.) Secondly, there is some evidence for inclusion of the Subjunctive within indicative mood. (If this idea seems like a contradiction, then either two morphologically identical conjugations would have to be established, one in indicative mood, the other in non-indicative - and this would be descriptively uneconomical; or, it may be that the definition of mood needs revision.) The evidence concerning the Subjunctive will be discussed below, in §3.8.3. - it involves the use of the Subjunctive in narrative sequences expressing Incompletive Aspect.

Let us now proceed to the discussion of the conjugations that express non-indicative mood.

3.8. Non-indicative Mood

3.8.1. The Imperatives

The two Imperative conjugations express commands with a 2nd person subject (which is often realised as zero).²³ There is what we may

call an aspectual difference between them, for the 'ordinary' Imperative expresses a peremptory command to perform an action that may not have started yet, and is to be completed; whereas the Continuative Imperative expresses a command to continue an action (or indeed a state: see below) that has already started, and may never be completed. The complexes in 206.a. and 207.a. exemplify the 'ordinary' Imperative, and those in 206.b. and 207.b. exemplify the Continuative Imperative:

206.a.	War- \emptyset ! come VAP 'Come (sg)!'	b.	War-atay! come VAP 'Keep on coming (sg)!'
207.a.	Njood ^f -ee! sit VAP 'Sit down (pl)!'	b.	Njood ^f -etee! sit VAP 'Stay seated (pl)!'

Because the ordinary Imperative anticipates the completion of an action, it may be described as expressing completive aspect; and similarly, because the Continuative Imperative anticipates the continuation of an action, it may be described as expressing incompletive aspect. There is also morphological evidence for treating the distinction between the two Imperative conjugations as aspectual, for the t found in the Continuative Imperative (cf. the b. complexes above) is characteristic of many Incompletive conjugations, as we shall see in the next chapter.

Through its two Imperative conjugations, Fulfulde has an inflectional means of establishing aspectual distinctions that are expressed periphrastically in the more familiar Indo-European languages: cf. the use of 'keep on ..' and of 'stay ..' in 206.b. and 207.b. above. Moreover, the Continuative Imperative may be used not only to express the continuation of an action or a process, as in 206.b. (which may mean 'Keep on coming (many times)!', or 'Continue on your way here (once)!'); but also to express the continuation of a state as in 207.b..²⁴ It has been argued (cf. Lakoff 1970: 104) that the Imperative is incompatible with the notion of stativity; but this idea is not borne out by the Fulfulde facts.

3.8.2. The Exhortative

The status of the Exhortative as a conjugation needs discussion. It is complementary to the 'ordinary' Imperative, inasmuch as the latter occurs only with a 2nd person subject, and the Exhortative occurs only with 'Allah ('Allah, God') or 'en (lpl incl) as subject. Given the semantic similarity between commands and exhortations, it is arguable that the Exhortative is a 1st and 3rd person Imperative. Here are some examples of its use: sentence 208.a. may be compared with the equivalent Imperative complexes for the same root, jooɖ- 'sit'.

<p>208.a. 'En-njooɖ-oɔ! we sit VAP 'Let's sit down!'</p>	<p>209. 'En-njah-u! we go VAP 'Let's go!'</p>
<p>210. 'Allah reen - ø - e! Allah protect you VAP 'May God protect you!'</p>	

The contrast between the -oo, -u and ø VAP-suffixes in the above complexes is a matter of voice: oo is used for the middle voice, ø or -u for the active voice.

Despite the similarities, the Exhortative differs morphologically from the 'ordinary' Imperative in certain crucial ways: unlike the Imperative, its VAP-suffix is not sensitive to the number of its subject (cf. the -ø and -ee of 206.a. and 207.a.); unlike the Imperative, the subject of an Exhortative complex is never realised as zero (cf. all the complexes of 206. and 207.); and the Exhortative VAP-suffixes, although they bear comparison with the 'ordinary' Imperative ones, are not the same. Given these facts, it seems advisable to maintain the Exhortative as a separate conjugation.

3.8.3. The Subjunctive

The Subjunctive may express indirect (reported) commands and exhortations, as in 206.c. and 208.b., which are comparable to 206.a. and 208.a.:

- 206.c. 'O-wii ngar-∅-aa.²⁵
 (wi'-ii)
 he say come you
 VAP VAP
 'He said you (sg) should come.'

- 208.b. Be - mbii njood'-oo-'en.
 (mbi'-ii)
 they say sit we
 VAP VAP
 'They said we (incl) should sit down.'

Here, njar-∅-aa is a Subjunctive Active complex, njood'-oo-'en a Subjunctive Middle complex. The Subjunctive may also express purpose (as in 211.), permission, or the request for permission (as in 212.), and it may combine with sentence-initial 'particles' (cf. §2.1.2.4.) to express obligation or necessity (as in 213. and 214.):

211. Be - ndill-ii to be - ngi'-ee.
 they leave lest they see
 VAP VAP
 'They left, lest they be seen.'
212. Mi-wolw-a?
 I speak
 VAP
 'May I speak?'
213. Haani d'am-d'aan-in-ee.
 ought it sleep
 EXT VAP
 'It (milk) ought to be left overnight (to sour).'
214. 'Igga mi-winn-d-an-a-mo.
 better I write to her
 VAP
 'I had better write to her.'

Although the above uses of the Subjunctive clearly express Non-Indicative mood, the Subjunctive in fact straddles the two moods, for it is used for a narrative sequence of actions that depict habits - a usage that is comparable to that of the Relative Com-
 etive for a sequence of actions that are completed. Dam-war-t-a in the following exemplifies this use of the Subjunctive.

215. Daga biraad̄am, dam-war-t-a torde; daga torde
 from fresh milk it come butter-milk from butter-
 milk

EXT VAP

dam-war-t-a daaniidam.
 it come sour-milk

EXT VAP

'From (being) fresh milk, it becomes butter-milk;
 from butt̄er-milk, it becomes sour-milk.'

In the above usage, the Subjunctive expresses non-factive modality (cf. Givón 1973); but inasmuch as it expresses a statement of habitual actions, rather than commands, obligations, or other sorts of 'mands' (cf. Lyons 1977: 745), it surely expresses indicative, not non-indicative, mood. Moreover, the Subjunctive VAP-suffixes are most conveniently described under indicative mood, as we shall see in the next chapter, for they are very characteristic of incomplete aspect. It seems, then, that the category of mood may be unsuitable for an analysis of the Fulfulde verbal system. It is to be hoped that further research will solve some of the problems posed by the Subjunctive.

3.9. Verbal Conjugations: Conclusions

The purpose of this chapter has been to establish the essential semantic and syntactic features that characterise the various conjugations in Kaceccereere Fulfulde. Considerations of space have not permitted a detailed description of the use of all the conjugations: for example, I have not mentioned the use of the Stative and Progressive in dependent clauses (Mi-yii-mo 'e-mo-jood̄-ii 'I saw her seated'). However, I hope to have given enough details in order to establish the identity of each conjugation on the syntactic and semantic levels. We shall now see that they are also morphologically distinct from one another.

Chapter 3: Footnotes

1. This short-vowelled suffix is of the Relative Completive Active (necessitated by ngim dume?), whereas the long-vowelled suffix in 140. is of the General Completive Active.
2. 'Morphosyntactic properties' is the term used by Matthews (1972), in his discussion of Latin inflectional morphology. Since this discussion is solely concerned with such properties in verbal forms, I call them 'verbal properties'.
3. The VAP-suffix for the General Completive Passive is exceptional, in that it may be interrupted by no: see §4.1.1. below.
4. Such extensions are not discussed in this study. See Arnott (1970: chs. 57-59).
5. I use 'negative' rather than 'negation', because the latter implies a process of negating that only sometimes takes place in Fulfulde. Moreover, 'negative' and 'positive' are more exactly equivalent to each other than 'negation' and 'positive'.
6. In Kaceccereere Fulfulde, it is possible for two -it- extensions to co-occur, the one with reflexive meaning, the other with iterative meaning, thus: Muusa femmb-it-it-ake 'Musa shaved himself again'. See also Arnott (1970: §59.2.).
7. The vowel of maay- is shortened because of -kin-. See §1.1.3.1. above.
8. See §2.1.2.3. concerning the problematic morph-syntactic status of 'e' and don in non-verbal sentences. The same problems arise with no.
9. However, a focussed 1st and/or 2nd person subject is realised by an independent pronoun outside the verbal complex (cf. p. 111).
10. Be here represents all 3rd person plural dependent pronouns.
11. Concerning SV and VS order, see §4.1..
12. This rule means that an unfocussed pronominal object necessarily precedes an unfocussed nominal object (since the former is in the verbal complex), and can only be interpreted as indirect, not direct, object.
13. The Stative may refer to a past or future state, as well as to a present state. Without contextual clues as to time-reference (such as time adverbials), and without the Anteriority-marker, no, present time will be understood, as indicated by the translation of 184.a. - 186.a.
14. The other morphological distinction which Arnott mentions is the presence or absence of 'e'. In Kaceccereere Fulfulde, the distribution of 'e' in Stative (and in Progressive) complexes is as described in §2.2.2.4., page 98, above.

Chapter 3: Footnotes (continued)

15. The emphasis described here is not the same as 'focus' (see chapter 6). Focus refers to the contrast between different items that might fill the same slot in the syntagm: for example, Buuba ngii-mi 'It's Buba I saw', where Buuba is contrasted with another person, or other people. The emphasis effected by don in 189.b. is more a matter of the contrast between affirmative (positive) and negative: don emphasises the affirmative nature of 189.b.. Focus correlates semantically with wh- questions, emphasis with yes/no questions.
16. I am grateful to Isa Pashi for drawing my attention to this use of don.
17. By 'periphrasis', I mean the use of 'e and/or don. Concerning the VAP-suffix for the General Completive Active, see footnote 8 on page 224 below.
18. The Negative Completive is also the negative counterpart of the Relative Completive: see example 360.b., page 268.
19. The Negative Incompletive is also the negative counterpart of the Relative Incompletive: see example 361.b., page 268.
20. Tambaari is borrowed from Hausa tamba, which refers to the cereal, Eleusine corocana. The 'pure' Fulfulde term is cargaari.
21. The -d- extension is necessitated by the preceding focussed adverbial expression, to maayo.
22. I use the term 'choice' advisedly. The tree is intended as a convenient way of representing the relationship between conjugations and properties, and I do not want to commit myself to the idea that it has any psychological reality.
23. The subject is realised in surface-structure only if the Imperative complex is preceded by the negating particle, to.
24. As well as expressing a command to remain seated, 207.b. may also express a command to repeat the action of sitting down.
25. In indirect commands, it is not possible to express a command to continue an action, state or process. In other words, the Subjunctive is equivalent to the 'ordinary' Imperative, but not to the Continuative Imperative.

Chapter 4

Paradigms of Verbal Inflections:

Morphology

4.0. Introduction

This chapter is concerned with the morphology of the paradigms that were established on syntactic and semantic grounds in the last chapter: namely, the fourteen verbal conjugations, or 'tenses', each expressing a particular set of verbal properties.

The morphology of the conjugations is complicated, as may be confirmed by reference to Appendix A (pp. 285 - 297 below), or to Arnott (1970: Part V). Let us take the Relative Incompletive as an example. This conjugation (or more precisely, verbal complexes of this conjugation) expresses the properties relative, positive, incompletive and indicative (cf. §3.2.1., and the tree on page 166 above). If these, plus active, middle or passive, are the only properties to be expressed in a complex, then the complex consists quite simply of a verbal root plus VAP-suffix, such as jog- and -otoo in 215 a.. -Otoo is characteristic of the middle voice of this particular conjugation. (In this and the following examples the subject, verbal root and object are marked 'S', 'V' and 'O' respectively.)

215 .a. Ngim dume Muusa jog-otoo leggal?
 for what Musa hold stick
 S V VAP O

'Why is Musa holding a stick?'

In this sentence, both the subject, Muusa, and the object, leggal, are NP's, and they are therefore not part of the verbal complex (cf. the discussion in chapter 2). However, any unfocussed anaphoric pronouns in the sentence are appended to the verbal root, and are therefore part of the complex. Thus, by virtue of the pronouns 'o- and -ngal in 215 .b., the verbal complex 'o-jog-otoo-ngal expresses 3rd person, Singular, Subject and Object, as well as the properties mentioned above:¹

215.b. Ngim dume 'o-jog-otoo-ngal?
 for what he hold it
 S V VAP O

'Why is he holding it (eg. stick)?'

'O is of the 'O nominal class, ngal of the Ngal class. However, pronouns of other classes, such as ndu and ngel in 215.c. and d., may also occur in verbal complexes, if their referents are semantically suitable to be subject or object of the root in the complex.² (The root jog-, for example, is unlikely to have a subject of a class with inanimate connotations.)

215.c. Ngim dume ndu-jog-otoo-ngal? d. Ngim dume ndu-jog-otoo-ngel?
 for what it hold it for what it hold it
 S V VAP O S V VAP O

'Why is it (eg. dog) holding
 it (eg. stick)?'

'Why is it (eg. dog) hold-
 ing it (dim.)?'

In fact, the number of verbal complexes of a single conjugation based on a particular verbal root may be as many as several hundred: the total will depend on factors such as the semantic compatibility of class-pronouns with the root, whether or not the root is transitive (and thus whether the complex may contain object pronoun(s) as well as a subject pronoun), and whether the root combines with active, middle and passive voices or only with one or two of these.

Verbal complexes containing a 3rd person pronominal subject and object are fairly easy to describe: SVO (subject-verb-object) order always occurs (as in all the above examples), and the VAP-suffix has a standard shape, in this instance -otoo. This order is also characteristic of complexes with NP subject and object. Complexes involving a subject that expresses 1st and/or 2nd person, or involving the Anteriority-Marker, however, are considerably more difficult to describe, for SVO, VSO or VOS order may be found, and the shape of the VAP-suffix may be different. Consider the following, for example, which are of the Relative Incomplete conjugation, middle voice, just as are 215.a. - d.:

215.e. Ngim dume njog-oto-daa-ngal?
 for what hold you it
 V VAP S O

'Why are you (sg) holding it (eg. a stick)?'

215.f. Ngim dume njog-oto-maa-mi?
 for what hold you I
 V VAP O S
 'Why am I holding you (sg)?'

215.g. Ngim dume 'o-jog-oto-noo-ngal?
 for what he hold it
 S V VAP ANT O
 'Why was he going to hold it?'

Unlike in the earlier examples, the VAP-suffix in 215.e.-f. is -oto. Moreover, although 215.g. has SVO order, 215.e. and f. have VSO and VOS order respectively.

The first aim of this chapter will be to establish the morphological integrity of each conjugation. In order to do this, I shall show which VAP-suffixes are peculiar to each conjugation, and account for the types of variation in morph-shape and morph-order that have been exemplified in the complexes of 215.. Once these crucial features have been explained, I shall then point out various morphological, morpho-phonological and morpho-syntactic patterns that characterise either all complexes, or particular types of complex.

Section §4.1. will consider the morphological composition of verbal complexes, paying particular attention to the order of morphs within the complex. Section §4.2. describes VAP-suffixes in complex-final position, and morphological variation that is conditioned by the verbal root. Section §4.3. then describes VAP-suffixes in non-final position, and the principles that control the shape of the pronominal and other morphs that follow the root in a complex. Section §4.4. is concerned with some of the finer points of the morphology of verbal complexes. Finally, in section §4.5., a classification of conjugations is presented, taking into account the various patterns that have been brought to light in the rest of the chapter.

4.1. The Morphological Composition of Verbal Complexes

In this section, I shall give a general outline of the morphology of verbal complexes. Some more complicated issues arising from this

outline will be deferred until after the discussion of the various conjugations, ie. until section §4.4. below.

The verbal complex is essentially a syntactic structure, whose core is the verbal root plus VAP-suffix. This core may constitute a sentence in itself (as is Ngar-ee in 216.a.), or it may occur as part of a sentence (as does rim-ii in 217.a.):

216.a. Ngar-ee! come V VAP 'Come (pl)!'	217.a. Nagge rim-ii. cow give birth S V VAP 'The/a cow gave birth.'
--	---

The verbal root may be extended (as is ngar-t- in 216.b.), and the VAP-suffix may be zero (as in 217.b.):

216.b. Ngar-t - ee! come V EXT VAP 'Come back (pl)!'	217.b. Nagge rim - <u>∅</u> ! cow give birth S V VAP 'The/a cow <u>gave birth!</u> '
---	--

As we have already seen, the verbal complex often, however, contains more than the root plus VAP-suffix: it may contain unfocussed, dependent pronouns (such as 'on- in 216.c. and nge- in 217.c.); it may contain the Anteriority Marker, no (as in 216.d.); and it may contain 'e and/or d'on (as in 217.d.):

216.c. To <u>'on</u> -ngar-ee! you come NEG S V VAP 'Don't come (pl)!'	217.c. <u>Nge</u> -rim-ii. give birth S V VAP 'It (cow) gave birth.'
216.d. 'On-ngar-ii - <u>no</u> . you come S V VAP ANT 'You (pl) had come.'	217.d. ' <u>E</u> -nge- <u>d'on</u> -rim - a. it give birth S V VAP 'It (cow) is giving birth.'

Most of the examples given so far have SV order: in other words, the subject, whether pronominal or not, precedes the verbal root. This

is in fact the order found in neutral sentences. I shall therefore first consider complexes where the subject precedes the root (see section §4.1.1.), and then proceed to consider complexes where the subject follows the root (see section §4.1.2.).

4.1.1. SV Order

Not only do all neutral sentences have SV order (cf. 218.a. and b.): non-neutral sentences with a 3rd person subject also always have SV order (cf. 219.a. and b., which contain a focussed NP and a question-word respectively):

- | | |
|--|---|
| <p>218.a. Hassan weetor - ay.
Hassan arise late
S V VAP
'Hassan gets up late.'</p> | <p>218.b. 'O-weetor - ay.
he arise late
S V VAP
'He gets up late.'</p> |
| <p>219.a. Wunngere be - must-ata.
fruit of they suck
deleb-palm
O S V VAP
'(It's) the fruit of deleb-palm (that) they're sucking.'</p> | <p>b. Dume be - must-ata?
what they suck
O S V VAP
'What are they sucking?'</p> |

Non-neutral sentences with min 'I and he/she/they' as subject also always have SV order:

- 219.c. Wunngere min-must-ata.
fruit of we suck
deleb-palm
O S V VAP
'It's the fruit of deleb-palm that we're sucking.'

However, non-neutral sentences with a 1st or 2nd person subject (including en 'I and you') often have VS order: this will be exemplified and explained in §4.1.2. below.

With SV order, the object always follows the verbal root plus VAP-suffix, unless it is focussed (as in 219.a.), or a question-word (as in 219.b.). This is true regardless of whether the object is a dependent pronoun within the verbal complex (as in 220.b.) or an NP outside the complex (as in 220.a.):

220.a. Sey goddo wes - a dowroori.
 then one riddle millet
 S V VAP O
 'Then one must riddle millet.'

b. Sey goddo wes - a - ndi.
 then one riddle it
 S V VAP O
 'Then one must riddle it.'

If there are two objects, the indirect object (marked 'IO' in 221.)
 always precedes the direct object (marked 'DO' in 221.):

221.a. Mi-hokk-ii binngel 'am del ko mo yid-i.
 I give child my girl what she like
 S V VAP IO DO
 'I gave my daughter what she liked.'

b. Mi-hokk-ii- mo - dum.
 I give her it
 S V VAP IO DO
 'I gave it to her.'

The Anteriority-Marker generally follows the VAP-suffix, but
 precedes any object pronouns or NP's:

222.a. Ndee min-njab - ay - no ceede?
 when we receive money
 S V VAP ANT O
 'When were we going to receive (the) money?'

b. Ndee min-njab - ay - no - de?
 when we receive it
 S V VAP ANT O
 'When were we going to receive it?'

However, the Anteriority-Marker follows, rather than precedes, the
 suffix-pronouns -am ('me') and -e ('you (sg)'), as can be seen by
 the order -am-no and -e-no in 223. and 224.. (The use of these
 pronouns, and their suffixal status, will be discussed in §4.3.2. and
 4.3.2.1. below).

223. 'O-hoos-an - \emptyset - am-no -nde.
 he take from me it
 S V EXT VAP IO ANT DO
 'He had taken it (eg. book) from me.'

224. Mi-'ard - in - t - e - no.
 I precede you
 S V EXT VAP O ANT
 'I was going to guide you (sg).'

Moreover, the Anteriority-Marker does not follow the -aama VAP-suffix for the General Completive conjugation, passive voice; rather, it intervenes between the -aa and the -ma of this suffix, as can be seen in 225.:

225. Gawri facc-it - aa - no - ma
 corn spill
 S V EXT VAP ANT VAP
 'Corn had been spilt.'

Arnott (1970: 218, footnote 4) observes that this 'intrusion' of no into the VAP-suffix happens with other conjugations in certain dialects. However, in Kaceccereere, it only happens with the General Completive.

The position of 'e and d'on was first mentioned in §2.2.2.4.. Quite simply, 'e is always the first morph in a complex; and d'on always immediately precedes the verbal root:

- | | |
|--|---|
| <p>226.a. Penndo <u>'e-d'on</u>-das-oo.
 Penndo drag
 S V VAP
 'Penndo drags herself
 along/crawls.'</p> | <p>b. <u>'E-mo -d'on</u>-das-oo.
 she drag
 S V VAP
 'She drags herself
 along/crawls.'</p> |
|--|---|

Thus, 'e follows an NP subject (as in 226.a.), but precedes a pronominal subject (as in 226.b.). The position and status of 'e and d'on in complexes will be further considered in section §4.4. below.

Sometimes, the subject of a sentence with SV order is realised as zero. The presence of the subject in deep-structure, and its position before the verbal root, can be deduced from the fact that the initial consonant of the root, if it is an alternating one, will vary between

its continuant and prenasalised forms (cf. §1.2.1.). For example, there is no overt subject in the complexes of 216.a. and b., but the plural nature of that subject is evident from the fact that the initial consonant is prenasalised. If the deep-structure subject is singular, then the initial consonant is a continuant, as in 227.:

- | | |
|--|--|
| <p>216.a. \emptyset-<u>Ngar</u>-ee!
 come
 S V VAP
 'Come (pl)!'</p> | <p>b. \emptyset-<u>Ngar</u>-t - ee!
 come
 S V EXT VAP
 'Come back (pl)!'</p> |
| <p>227.a. \emptyset-<u>War</u>-\emptyset!³
 come
 S V VAP
 'Come (sg)!'</p> | <p>b. \emptyset-<u>War</u>-t - u!³
 come
 S V EXT VAP
 'Come back (sg)!'</p> |

Zero subject is also found in sentences with a topic NP, where the topic is co-referential with the deep-structure subject. Again, the presence and the position of the subject are evident from the initial consonant of the root, if it is of the alternating variety: thus, 228.a. has a preceding singular subject, but 228.b. has a preceding plural subject - though neither appears in surface-structure:

- | | |
|--|--|
| <p>228.a. Muusa, sey \emptyset-'umm-ii, \emptyset-<u>wurt</u> - ii, \emptyset-<u>yah</u>-i⁴ luumo.
 Musa then arise go out go market
 TOPIC S V VAP S V VAP S V VAP
 'Muusa then arose, went out, and went to market.'</p> | <p>b. Biðbe, sey \emptyset-'umm-ii, \emptyset-<u>mburt</u>- ii, \emptyset-<u>njah</u>-i⁴ luumo.
 children then arise go out go market
 TOPIC S V VAP S V VAP S V VAP
 'The children then arose, went out, and went to market.'</p> |
|--|--|

I have marked zero subject in these three pairs of examples (216., 227. and 228.), but I shall not normally do so, unless it is necessary for the discussion at hand.

4.1.2. VS Order

VS order never occurs with a 3rd person subject, or with 1st person (excl) subject. However it regularly occurs in complexes of the

Relative Completive and Incompletive conjugations if they have a 1st person singular, 1st person (incl), or 2nd person subject;⁵ and in complexes of the Subjunctive, if they have a 1st person plural (inclusive), or a 2nd person subject. These are exemplified in 229. - 231.:

- 229.a. Kanko kinn - u -mi.
 him greet I
 O V VAP S
 'It's him I greeted.'
- b. Doo njipp-ii-'en.
 here alight we
 V VAP S
 'It's here we (incl) alighted.'
- c. Rowaani te' - u - daa.
 last year marry you
 V VAP S
 'It's last year you (sg) got married.'
- d. Ndee ngar-∅ - 'on?
 when come you
 V VAP S
 'When did you (pl) come?'
- 230.a. Maawuri sub - ay-mi-nga.
 next year choose I it
 V VAP S O
 'It's next year I'll choose it (eg. car).'
- b. Ngele njab - et - en?
 which accept we
 O V VAP S
 'Which shall we (incl) accept?'
- c. Moye njannng-in - t - aa?
 whom read you
 O V EXT VAP S
 'Whom do you (sg) teach?'
- d. Dume ngad-ot - on?
 what do you
 O V VAP S
 'What will you (pl) do?'
- 231.a. 'Igga luggid-in-∅ - en Inglisiire meeden.
 better deep we English our
 V EXT VAP S O
 'We had better 'deepen'/improve our English.'
- b. Sey muny-∅ - aa sedda.
 must wait you a little
 V VAP S
 'You (sg) must wait a little.'/'You have to be a little patient.'
- c. Haani njah-∅ - on.
 ought go you
 V VAP S
 'You (pl) ought to go.'

The complexes in 229. are all of the Relative Completive conjugation, those in 230. are of the Relative Incompletive, and those in 231. are of the Subjunctive. Note that a Subjunctive complex with 1st person singular subject has SV order, unlike the other two conjugations; thus, 231.d. below may be contrasted with 229.a. and 230.a.:

231.d. Haa mi-num - a to.
 must I think yet
 S V VAP
 'I must think a while.'/'Let me think.'

One of the characteristics of pronouns that express 1st and/or⁵ 2nd person subject is the fact that they may not be deleted - the only exception is in Imperative complexes (cf. 216. and 227. on page 181 above). Thus, since VS complexes only occur with 1st and/or 2nd person subject, zero subject never occurs in such complexes. For example, a sentence with a 1st and/or 2nd person topic NP (such as minn and 'aan in 232.a. and b.) that is coreferential with the subject of a following clause or clauses will not have zero subject; and the occurrence of -mi in 232.a. and of -daa in 232.b. may be contrasted with the occurrence of \emptyset in 228. on page 181:

232.a. Minn, sey sipp-u - mi kosam, sey soor-id- \emptyset -mi-dam.
 me then hawk I milk then sell I it
 TOPIC V VAP S O V EXT VAP S O
 '(As for) me, then I hawked milk and sold it all.'

b. 'Aan, sey ngujj-u-daa geroogal, sey ndogg-u-daa.
 you then steal you chicken then run you
 TOPIC V VAP S O V VAP S
 '(As for) you (sg), you then stole a chicken and ran away.'

Normally, the object of a VS complex follows the subject. If it is pronominal (such as -dam in 232.a.), it is the last morph in the complex; if it is an NP (such as kosam in 232.a.), it immediately follows the complex. Here are some further examples.

233.a. Keenya mball-u-mi- be.
 yesterday help I them
 V VAP S O
 'It's yesterday I helped them.'

233.b. Keenya mball-u - mi paanyo maada.
 yesterday help I young man your
 V VAP S O

'It's yesterday I helped your boyfriend.'

As with SV order, if there are two objects, the indirect object ('IO' below) precedes the direct object ('DO' below):

234.a. Sey nyett-an - Ø - mi-'on kosam sisi.
 then scoop for I you milk 5 kobos
 V EXT VAP S IO DO

'Then I scooped up 5 kobos' worth of milk for you (pl).'

b. Sey nyett-an - Ø - mi-'on-dam.
 then scoop for I you it
 V EXT VAP S IO DO

'Then I scooped it up for you.'

However, if a complex of the Relative Completive or Relative Incompletive has a 1st person singular subject together with an object that is either 2nd person singular or 3rd person singular (personal class), then, exceptionally, VOS order occurs.⁶ This may be seen in the complexes of 233.c. and 234.c.:

233.c. Keenya mball-u - moo-mi.
 yesterday help him I
 V VAP O S

'It's yesterday I helped him.'

234.c. Sey nyett-an - Ø - maa-mi kosam sisi
 then scoop for you I milk 5 kobos
 V EXT VAP IO S DO

'Then I scooped up 5 kobos' worth of milk for you (sg).'

The VOS order in these complexes contrasts with the more normal VSO order found in 233. and 234.a. and b..

4.1.3. The Morphological Composition of Verbal Complexes: Conclusions

We have seen in this section that verbal complexes are syntactic structures, and that around the core of a complex a cluster of pronouns and other morphs may be found, whose order is determined by the internal syntax

of the complex. We shall return to these matters in §4.4 below. Let us now turn to a consideration of the issues that determine the form of the morphs within a complex.

4.2. VAP-Suffixes in Complex-final Position

Each voice of each conjugation has a characteristic VAP-suffix. However, the form of the suffix is in many instances not completely stable, for it may be influenced by the verbal root, and also by the morphs that follow it in the complex. In this section, I shall give an account of the basic, or full, forms of VAP-suffixes, and show such variation as is due to 'sensitivity' to the verbal root. In the following section (§4.3.), I shall consider the forms of VAP-suffixes that are not in complex-final position, and that may therefore be 'sensitive' to following morphs.⁷

The VAP-suffixes of the various conjugations are presented in table XXI. The suffixes have been arranged in such a way as to highlight the patterns of similarities between conjugations. Thus, the staggering of the suffixes in the column under Completive Aspect, Active Voice, brings out the fact that most of these suffixes share the feature i, which is sometimes preceded by aa, and sometimes lengthened to ii or yi. Similarly, the staggering of the suffixes in the column under Incompletive Aspect, Passive Voice, brings out the fact that these suffixes share the feature ee. These patterns will be further discussed after the table. It should also be noted that since the two Imperative conjugations have different VAP-suffixes for singular and plural subject, they are presented separately. This is not necessary for other conjugations, where the basic VAP-suffix is the same, regardless of the number of the subject.

Table XXI

VAP-Suffixes in Complex-final Position

<u>Completive Aspect</u>			<u>Incompletive Aspect</u>				
	<u>Act</u>	<u>Mid</u>	<u>Pass</u>		<u>Act</u>	<u>Mid</u>	<u>Pass</u>
Emphatic	(u)	i	a	Subjunctive	a	oo	ee
Stative	i	ii	aa	Progressive	a	oo	ee
Relative	i	ii	aa	Relative	(a)ta	(o)too	(e)tee
Negative	aayi	aaki	aaka	Negative	(a)taa	(a)taako	(a)taake
General	ii	ake	aama	General	ay	(o)to	(e)te
Exhortative	(u)	oo	-	Vague	(u)ma	ooma	eema
'Ordinary'	}			Continuative			
Imperative				Imperative			
Singular	(u)	a	-	Singular	(a)tay	(a)tay	-
Plural	ee	ee	-	Plural	(e)tee	(e)tee	-

Several points need to be made concerning table XXI. First, the occurrence of the vowels in brackets will be explained in sections §4.2.1. and §4.2.2. below. Secondly, the placing of the Exhortative under Completive Aspect is not entirely satisfactory: the -oo suffix of Exhortative Middle is particularly anomalous, for it belongs, morphologically, with the Middle VAP-suffixes for Incompletive Aspect. However, the Exhortative expresses a peremptory exhortation much like the 'Ordinary' Imperative expresses a peremptory command (cf. §3.8.1.), and there are therefore no semantic or syntactic reasons for placing it under Incompletive Aspect. Thirdly, I have placed the Subjunctive under Incompletive Aspect because of its use in narrative sequences (cf. §3.8.3.): morphologically, it also fits well into Incompletive Aspect. Fourthly, where there is a small dash ('-') in the table, this indicates that the conjugation concerned does not occur in the passive. Fifthly, although I have shown a -(e)te suffix for the General Incompletive Passive, this form is in fact rarely used, probably because it is homophonous with the VAP-suffix for the General Incompletive Active (-(e)t) when it is followed by a 2sg pronoun (-e): see example 114.a. on page 103, and table XXIII on page 197 below. This matter will be further discussed in §5.5.2..

Let us now consider the morphological patterns that emerge from table XXI. Within Completive Aspect, I shall consider the top five rows of suffixes, since the place of the Exhortative is questionable, and since the Imperative suffixes (with the exception of (u)) do not bear much comparison with the other suffixes of Completive Aspect. Within these top five rows, the suffixes are mostly 'variations on a theme' of i, ii and aa for active, middle and passive voices respectively. For example, the suffixes for the Emphatic Completive can be derived from those for the Stative and Relative Completive by means of a vowel-shortening rule (which in the active results in \emptyset or an anaptyctic u - see section §4.2.1. below); and those for the Negative Completive can be phonologically derived from i, ii, aa by means of a preceding negative marker, aa, and by replacing the first element of the long vowels ii and aa by k - thus *aa-ii and *aa-aa give aa-ki and aa-ka respectively. The only suffix that is not relatable to this i, ii, aa theme is the -ake suffix of the General Completive, middle voice.

Within Incompletive Aspect, the suffixal patterns are slightly more complicated. The suffixes can be described as 'variations on a theme' of a, oo and ee for active, middle and passive, but in addition, there is a recurring t, which is replaced by y in final position (compare the suffix for the General Incompletive, active voice). The t/y precedes the a, oo, ee 'theme' in the Relative and Negative Incompletive suffixes; and in the latter, we again see an aa negative marker, with a following k and a short vowel, as was observed for Completive Aspect. The only suffixes in Incompletive that do not conform to the a, oo, ee pattern are the (u)ma suffix for the Vague Incompletive, active voice, where one might have expected (a)ma; and the (a)tay and (e)tee suffixes for the Continuative Imperative.

In spite of the exceptions mentioned in the last paragraphs, I believe that table XXI offers interesting and useful corroboration of the classification of conjugations that was established in the last chapter. In particular, the morphological evidence of table XXI

confirms the Completive vs. Incompletive distinction. Thus, all the conjugations under Completive Aspect in the tree on page 166 have the i, ii, aa theme; and all the conjugations under Incompletive Aspect have the a, oo, ee theme.

Let us now turn to the issue that was mentioned in the first point after table XXI, namely the distribution of the vowels shown in brackets in the table. The occurrence of these vowels depends on the phonology and/or the morphology of the root to which the VAP-suffix is appended.

4.2.1. Anaptyctic u.

The '(u)' shown at various points in table XXI represents an alternation between u and zero. In these circumstances, it is convenient to regard zero as basic, and u as an anaptyctic vowel that occurs in order to prevent the formation of an unacceptable syllable. Exceptionally, u also occurs in slow, deliberate speech, even though it is not strictly necessary. Two types of unacceptable syllable are in danger of arising in these circumstances: either a syllable with CVVC or CVCC structure (cf. §1.1.3.1.), or a syllable ending in a consonant that cannot be in syllable-final position. Let us consider these matters in turn.

It was pointed out in §1.1.3.1. that regular syllable structure in this dialect of Fulfulde is CVC, CVV or CV. If the juxtaposition of a root and VAP-suffix would result in a syllable of any other structure, then the anaptyctic u occurs obligatorily. For example, the b. sentences below are unacceptable because of the syllable structure of the complex; whereas the a. sentences are acceptable, because of the presence of u:

235.a.	'O - ðorn - <u>u</u>	ðiiko.	'o+ðor+nu
	she dress	her child	CV CVC CV
		VAP	

'She dressed her child (in a gown).'

- 239.a. *Taya fus - \emptyset nii.
 tyre burst simply
 VAP
- b. Taya fus - u nii!
 tyre burst simply
 VAP
 'The tyre simply burst!'
- 240.a. *Fib - \emptyset boggol ngol.
 tie rope the
 VAP
- b. Fib - u boggol ngol!
 tie rope the
 VAP
 'Tie (sg) the rope!'

4.2.2. Vowel Harmony

Where a vowel other than u is shown in brackets in table XXI, this indicates that that vowel alternates with zero in suffix-initial position. Since the vowel concerned is always identical to the next vowel in the suffix, we can say that a type of 'vowel harmony' is operating. In the following discussion, I term this vowel the 'harmonizing vowel'.

The harmonizing vowel, which only in fact occurs before the t that characterises many Incompletive VAP-suffixes, necessarily occurs unless the verbal root is an extended root that ends in a voiced continuant. For example, it occurs in the complexes of the a. sentences below, but not of the b. sentences (I have underlined the root-final consonant and the harmonizing vowel):

242. Ndee di - tuf - etee?
 when they vaccinate
 VAP

'When will they (eg. cows) be vaccinated?'

Since the distribution of the harmonizing vowels is sensitive to the morphological structure of the verbal root, we are faced here with morpho-phonological conditioning, and not simply phonological conditioning as was the case with anaptyctic u.

Now that the various suffixes shown in table XXI on page 186 have been explained, let us turn to VAP-suffixes that are not in complex-final position.

4.3. VAP-Suffixes in Non-final Position

The forms shown in table XXI can be considered to be the 'basic' forms of these suffixes. However, some of them are sensitive to verbal properties that are realised more peripherally in the same verbal complex. In other words, they display what could be called 'forwards sensitivity', since their shape may be modified, or influenced, by following appendages in the same complex. In this section, I shall first present an outline of the suffix-alternants that are found (cf. table XXII), and I shall then discuss the factors that affect the choice of a particular alternant for a particular verbal complex. This discussion will raise two important issues: the division of 'appendages' into clitics and suffixes (see §4.3.2.), and the suffixal precedence hierarchy, which determines the shape of certain suffixes when they co-occur (see §4.3.3.).

Table XXII below shows the full range of VAP-suffix alternants. Those on the left of the Active, Middle and Passive columns are the 'basic' or 'full' suffixes that were shown in table XXI; and those on the right are the 'modified' or 'reduced' suffixes that occur when particular pronominal or other appendages follow the VAP-suffix in the same complex. (Although 'full' and 'reduced' might seem the most suitable terms for these sets of suffixes, I hesitate to use them because the 'reduced' form of the Progressive VAP-suffixes is sometimes longer than the 'full' form. Henceforth, I shall therefore use the terms 'basic' and 'modified'.)

Table XXII

VAP-Suffixes

	<u>Active</u>		<u>Middle</u>		<u>Passive</u>	
	<u>Basic</u>	<u>Modi- fied</u>	<u>Basic</u>	<u>Modi- fied</u>	<u>Basic</u>	<u>Modi- fied</u>
<u>Completive Aspect</u>						
Emphatic	(u)		i	∅	a	-
Stative	i	(u)	ii	i	aa	a
Relative	i	(u)	ii	i	aa	a
Negative	aayi	aa	aaki	-	aaka	-
General	ii	-	ake	-	aama	-
Exhortative	(u)	-	oo	o	-	-
'Ordinary' Imperative }:						
Singular	(u)	-	a	∅	-	-
Plural	ee	-	ee	-	-	-
<u>Incompletive Aspect</u>						
Subjunctive	a	(u)	oo	o	ee	e
Progressive	a	(u)	oo	o	ee	e
Relative	(a)ta	ay (a)t (e)t (o)t ay	(o)too	(o)to	(e)tee	(e)te
Negative	(a)taa	-	(a)taako	-	(a)taake	-
General	ay	(a)t (e)t	(o)to	-	(e)te	-
Vague	(u)ma	-	ooma	-	eema	-
Continuative }:						
Singular	(a)tay	(a)t	(a)tay	(a)t	-	-
Plural	(e)tee	-	(e)tee	-	-	-

Certain points concerning the presentation of table XXII need to be explained. First, the forms found under the 'basic' columns are the same as those presented in table XXI, page 186. Second, the use of brackets around a vowel in the 'modified' columns has the same significance as their use in table XXI and in the 'basic' columns here. Third, the use of '-' means either that no form exists for that particular combination of properties (e.g. passive and imperative), or that there is no modified alternant to the basic suffix (as is true of the VAP-suffix for the General Completive, for example⁸).

Let us now turn to the factors that determine the occurrence of the basic and modified suffixes.

4.3.1. VAP-Suffixes for the Negative Completive Active

If the reader refers to §3.6.1.2. (pp. 153-154 above), and to table XXI, he will notice that -aayi is the VAP-suffix for the Negative Completive Active when the VAP-suffix is in complex-final position. However, when a dependent pronoun or the Anteriority-Marker occurs in the complex, the VAP-suffix generally has the form -aa. For example:

- | | |
|---|--|
| <p>243.a. Nde-dad' - <u>aayi</u>.
 it escape not
 VAP</p> <p>'It (eg. hare) didn't escape.'</p> | <p>b. Nde-dad' - <u>aa-no</u>.
 it escape not
 VAP ANT</p> <p>'It hadn't escaped.'</p> |
| <p>244.a. 'A - layb-<u>aayi</u> wowru.
 you wipe not mortar
 VAP</p> <p>'You didn't wipe the mortar.'</p> | <p>b. 'A - layb-<u>aa</u>- ndu.
 you wipe not it
 VAP</p> <p>'You didn't wipe it.'</p> |

In the a. sentences of 243. and 244., the VAP-suffix is in complex-final position, and has the form -aayi. In 243.b. it is followed by the Anteriority-Marker, and in 244.b. by the pronoun -ndu; and in each of these, the VAP-suffix has the form -aa rather than -aayi.⁹

4.3.2. The Clitic/Suffix Distinction

The terms 'clitic' and 'affix' and their variants (proclitic, enclitic, prefix, infix and suffix) are well established in linguistic literature: see Matthews (1974: 124 ff and 168 ff), for example. However, there is a certain amount of confusion surrounding the usefulness of the distinction, and the exact boundary between the two concepts. One point that is agreed on is that clitics are more independent, more word-like, than affixes. Indeed, clitics are often considered to be phonologically-reduced forms of 'words': for example, t' and m' in French are reduced from te and me. Clitics are more positionally mobile than affixes: for example, Latin -que 'and' may be appended to any syntactically-appropriate constituent. Affixes, on the other hand, in no sense constitute a word, for they are not positionally mobile, and they are usually bound to a particular type of stem or root:

for example, the tense-suffixes in Latin can only be appended to verbal roots.

Now, while the extreme instances of clitics and affixes are clearly identifiable, there are large grey areas: one of these has recently been exposed in Harris (1980), which concerns the status of Romance dependent pronouns. In the Fulfulde verbal system, there is a certain grey area of items that straddle the clitic/suffix border; but on either side, a distinct type of appendage may be identified, one of which can usefully be labelled a clitic, and the other a suffix. (I shall henceforth dispense with the term 'affix', since Fulfulde has no infixes or prefixes. However, I shall continue to use 'clitic', since Fulfulde has both proclitics and enclitics.)¹⁰

Two questions may now be posed. Of the appendages that occur in a Fulfulde verbal complex, which are suffixes and which are clitics? And how does the clitic/suffix distinction help the description of Fulfulde verbal morphology? The answer to the latter question will in fact emerge during the discussion of the former.

The status of VAP-suffixes has been anticipated from the start: they are bound to a verbal root, and cannot be appended to a nominal stem (cf. §2.2.1.). They thus have no existence independent of the verbal root, and cannot be considered clitics. As regards 'e and don, they also occur in non-verbal sentences (cf. §2.1.2.3.), without a verbal root, and thus cannot be considered to be prefixed to the root; and there can therefore be little doubt but that they are clitics.

The two other types of appendage within the verbal complex are more problematic. I shall deal first with pronouns, and then with the Anteriority-Marker.

4.3.2.1. Pronouns

Certain pronouns that occur in the verbal complex also occur in other syntactic environments: for example, in non-verbal sentences (cf. 246.a. below), and as head of an NP containing a genitival modifier or a relative clause (cf. examples 133. - 136. on pp. 113 - 114 above).

Table XXIII

Clitic and Suffix Pronouns

<u>Subject</u>		<u>Person/ Number</u>	<u>Object</u>	
<u>Clitics</u>	<u>Suffixes</u>		<u>Clitics</u>	<u>Suffixes</u>
mi	-	1 sg	'am/yam	kam mmi am
'a	dāa aa	2 sg	ma	maa e
'o, ngel etc	-	3 sg	mo, ngel, etc.	moo
'en	en	1 pl incl	'en	en
min	-	1 pl excl	min	-
'on	on	2 pl	'on	on
be etc	-	3 pl	be, etc.	-

It should be noted that 'etc.' under 3sg and 3pl indicates that the other dependent pronouns referring to other nominal classes are clitic pronouns, just as ngel and be are: space does not allow them all to be shown here. (In fact, the only class pronoun that is a suffix is moo.) It should also be noted that the 'am/yam alternative shown as the 1 sg object clitic pronoun indicates that 'am and yam are virtually in free variation. The only occasion when there is preference for one over the other is if the preceding VAP-suffix in the same complex ends in -i: in such circumstances, yam rather than 'am invariably occurs.

The most obvious issue that arises from table XXIII concerns the distribution of the various pronouns in table XXIII where more than one is shown for the same combination of properties of person, number and case. However, discussion of this issue will be deferred until the next chapter (see in particular table XXVIII on pages 231 - 233).

The clitic/suffix distinction in pronouns is important because suffix pronouns interact morpho-phonologically with the VAP-suffix of the verbal complex, whereas clitic pronouns do not. The presence of one of the suffix pronouns shown in table XXIII can, for example, influence the shape of the VAP-suffix, and thus account for the distribution of

- | | | | |
|--------|---|----|--|
| 249.a. | Dume ta'y-at-aa?
what cut you
VAP | b. | Dume ta'y-ay-no -ɖaa?
what cut you
VAP ANT |
| | 'What are you (sg) cutting?' | | 'What were you (sg) going
to cut?' |

The verbal complex in 249.a. consists of a root ta'y- followed by a VAP-suffix -at, and the suffixed subject -aa. The complex in 249.b. is of the same conjugation (Relative Incomplete, Active voice), but in addition, the Anteriority-Marker is present. However, the shape of the verbal complex in 249.b. is very different from that in 249.a.. In 249.b., we find -ay instead of -at, -ɖaa instead of -aa, and no intrudes between the VAP-suffix and the subject. The presence of the Anteriority-Marker thus correlates with changes in the shape of other appendages in the complex. It might even be argued that these changes in the other appendages are secondary exponents of anteriority.

Since suffixes are integral parts of the word to which they are appended, whereas clitics have a measure of independence, we would not expect to find a suffix in a more peripheral position than a clitic; and since ɖaa in 249.b. is a suffix rather than a clitic (cf. table XXIII), we must conclude that no in 249.b. is also a suffix. Yet we have just established the fact that no in non-verbal sentences is a clitic rather than a suffix. It seems, then, that no straddles the clitic/suffix distinction, and is part of the 'grey area' mentioned above.

It is now time to show why it is useful to consider no and certain pronouns as suffixes within a verbal complex.

4.3.2.3. The Usefulness of the Clitic/Suffix Distinction

In the verbal complexes of 249., we witnessed the fact that the realisation of certain verbal properties is 'sensitive' to the presence of other properties in the same complex; for in this way, we can account for the at/ay and aa/ɖaa alternations in those complexes. In fact, the realisation of all verbal properties (such as active voice, 1st person, etc.) is sensitive to the presence of other properties in the same complex, since there is no way of knowing exactly how one property will be morphologically realised without knowing which other properties are to be concurrently realised. (The subject of types of realisation is broached in chapter 5.) Now, two types of variable are subsumed under sensitive realisation: morph-shape and morph-order.

Some morphs are variable in shape, whereas others are not. The invariable ones are the verbal root, don, and all the morphs for which only one form is shown in tables XXII and XXIII (pages 193 and 197). 'E is also invariable, except when it coalesces with a 2sg subject to form 'aa. The variable morphs are the Anteriority-Marker, and all those for which more than one form is shown in tables XXII and XXIII. Note that not all morphs that vary in shape also vary in form, or vice-versa: for example, although the VAP-suffix is constant in position, it is variable in shape; and although the 1pl (excl) morph is constant in shape, it is variable in position.

Variation in morph-shape is explicable by reference to morph-order, and to the 'suffixal precedence hierarchy'. The latter will be discussed in greater detail in §4.3.3. below. In this discussion, I shall be principally concerned with morph-shape as determined by morph-order, and how this relates to the clitic/suffix distinction: or in other words, I shall be concerned with how the internal syntax of a complex determines its morphology.

As an example of the influence of morph-order on morph-shape, let us consider the realisation of the properties 1st person, singular and object in a complex of the Negative Completive Active. Here, we find that this morph is realised as kam if it is the first pronoun after the root (as in 250.a. and 251.b.), but that it is realised as 'am if it is not the first (as in 250.b.). These facts contrast with the properties 3rd person (personal class), plural and object, which are consistently realised as be in 250. and 251., regardless of position.

- | | | | |
|--------|--|----|---|
| 250.a. | 'On-mball-aa - <u>kam</u> .
you help not me
VAP

'You (pl) didn't help me.' | b. | 'On-mball-an - aa - <u>be</u> - 'am.
you help for not them me
EXT VAP

'You (pl) didn't help me on
their behalf.' |
| 251.a. | 'On-mball-aa - <u>be</u> .
you help not them
VAP

'You (pl) didn't help them.' | b. | 'On-mball-an - aa - <u>kam</u> - <u>be</u> .
you help for not me them
EXT VAP

'You (pl) didn't help them
on my behalf.' |

An indirect object precedes a direct object (cf. §4.1.1.), which accounts for the order of object pronouns in 250.b. and 251.b.. What is significant about these sentences is the fact that the 1sg object has the form kam if

it is the first object pronoun, regardless of whether it is a direct object (as in 250.a.) or an indirect object (as in 251.b.). However, when the 1sg object is the second object pronoun (as in 250.b.), it has the form 'am. It is thus morph-order, rather than direct or indirect object case, that determines the shape of a morph.

Where there is a choice of pronouns for the same set of properties (see table XXIII), a suffix is more likely to occur as first rather than as second pronominal morph after the root. This does not preclude the occurrence of a clitic pronoun in first position - witness be in 250.b. and 251.b.. What it does mean is that a pronominal morph in this position may be sensitive to other properties realised more 'centrally' in the complex, namely the 'conjugational properties' realised in the VAP-suffix, and the Anteriority-Marker. It is now appropriate to describe the nature of this morpho-phonological interaction between suffixes that co-occur in the same verbal complex.

4.3.3. The Suffixal Precedence Hierarchy.

In Kaceccereere Fulfulde, the Suffixal Precedence Hierarchy (or SP hierarchy for short) operates in complexes of the following conjugations:

Relative Completive
Relative Incompletive
Stative
Progressive
Subjunctive

I shall initially illustrate the operation of the hierarchy by reference to middle and passive complexes of the above conjugations. Its operation in active complexes of these conjugations will be dealt with in §4.3.4..

In middle and passive complexes of the above conjugations, either one long vowel or one geminate consonant may follow the verbal root. This rule holds regardless of the phonological or morphological structure of the verbal root. Since both these features involve length, either of a consonant or of a vowel, I shall henceforth refer to the 'feature of length' occurring in verbal complexes.

By way of example, consider the verbal complexes in 252. and 253.. The a. and b. sentences are well-formed, for they involve one feature

features of length occurs. From the sentences of 252., it is already apparent that the 2sg subject d̄aa wins out over the VAP-suffix: a complex such as *njog-ii-d̄a-mo does not occur. From the sentences of 253., it is apparent that the Anteriority-Marker wins out over a VAP-suffix: a complex such as *'o-hokk-ete-no-d̄e does not occur. Thus far we know, then, that VAP-suffixes are lower than a 2sg suffixed subject and the Anteriority-Marker in the SP hierarchy. Furthermore, from 254., we can establish the fact that the 2sg pronoun is above the Anteriority-Marker in the hierarchy:

254.a. Doo njog-i - no - d̄aa-mo.
 here hold you him
 VAP ANT
 'It's here you (sg) had held him.'

b. *Doo njog-i - noo-d̄a - mo.
 here hold you him
 VAP ANT

We can therefore set up a preliminary version of the hierarchy as follows:

Table XXIV

The Suffixal Precedence Hierarchy - 1

- (i) 2sg suffixed subject pronoun
- (ii) Anteriority-Marker
- (iii) VAP-suffix

By using the same criterion of which suffix cedes its feature of length in the presence of another, we can establish the full version of the hierarchy. In doing this, it must be remembered that certain suffixes are mutually exclusive. For example, only one VAP-suffix may occur per complex; and only one 2nd person pronoun may occur per complex. (There are no reflexive pronouns in Fulfulde.) Certain suffixes therefore occur at the same level in the hierarchy. It must also be remembered that clitic pronouns do not participate in the hierarchy, and that we are therefore only concerned with the pronouns marked in the 'Suffixes' columns of table XXIII.

Table XXVSuffixal Precedence Hierarchy - 2

(i)	Suffixed 2sg pronoun:	<u>maa</u> , <u>d^haa</u> , <u>aa</u>
(ii)	Suffixed 3sg pronoun:	<u>moo</u>
(iii)	Anteriority-Marker:	<u>noo</u>
(iv)	VAP-suffix:	<u>i</u> , <u>ii</u> , <u>aa</u> , <u>a</u> , <u>oo</u> , <u>ee</u> , <u>(o)too</u> , <u>(e)tee</u>
(v)	Suffixed 1sg object pronoun:	<u>mmi</u>

For the sake of completeness, VAP-suffixes expressing active voice have been included in the above, although they will not be discussed until the next section.

All the suffixes in table XXV have been cited in their basic forms. The modified forms of the VAP-suffixes have already been given on the right hand side of each column in table XXII (page 193), but are repeated in table XXVI below for convenience. The 2sg pronouns shown above do not have modified forms, since they never cede their length to another suffix; and it is debatable whether moo has a modified form.¹¹ Table XXVI, then, displays the basic and modified forms of all suffixes that participate in the suffixal precedence hierarchy.

Table XXVI

Variable Suffixes participating in the
Suffixal Precedence Hierarchy

	<u>Basic Forms</u>	<u>Modified Forms</u>	
(i)	2sg pronoun	maa, aa, d ^h aa	-
(ii)	3sg pronoun	moo ¹¹	mo ¹¹
(iii)	Anteriority-Marker	noo	no
(iv)	VAP-Suffixes	i	(u) ¹²
		ii	i ¹²
		a	(u) ¹²
		aa	a
		oo	o
		ee	e
		(o)too	(o)to
		(e)tee	(e)te
(v)	1sg pronoun	mmi	mi

Before we go on to consider the operation of the SP hierarchy with basically short-vowelled VAP-suffixes, here are some further examples of the way it operates in middle and passive complexes of the conjugations mentioned at the beginning of this section. The b. sentences below are unacceptable because the SP hierarchy has been violated.

- 255.a. Keenya ndams-i-moo-mi ceede.
yesterday lend her I money
VAP
REL COMPL MID
'It's yesterday I lent her money.'
- b. *Keenya ndams-ii-mo-mi ceede.
yesterday lend her I money
VAP
- 256.a. Tummbude 'e-don-hipp-i-noo.
calabash invert
VAP ANT
STATIVE MIDDLE
'The calabash was inverted/upside down.'
- b. *Tummbude 'e-don-hipp-ii-no.
calabash invert
VAP ANT
- 257.a. 'E-be - don-suud-ee-mi.
they hide
VAP
PROGRESSIVE PASSIVE
'They are (in the process of) being hidden from me.'
- b. *'E-be - don-suud-e-mmi.
they hide me
VAP
- 258.a. Ton njawd-oto-daa.
there hasten you
VAP
REL INCOMPL MID
'It's over there that you (sg) will go fast.'
- b. *Ton njawd-otoo-da.
there hasten you
VAP

259.a. Dakkit - a, ngim to ngi'-e - daa!
 get away so that not see you
 VAP VAP
 SUBJ PASS

'Get away (from here), lest you (sg) be seen!'

b. *Dakkit - a, ngim to ngi'-ee-daa!
 get away so that not see you
 VAP VAP

The VAP-suffix in all the a. sentences except 257.a. is short-vowelled, because moo, noo and daa are higher in the hierarchy. In 257.a., however, the VAP-suffix has not ceded its long vowel, because mmi is lower in the hierarchy. (See table XXVI).

4.3.4. Alternation between short-vowelled VAP-suffix and Zero VAP-suffix

In active complexes of the following conjugations, the SP hierarchy operates in a slightly different manner from that just described for middle and passive voices:

Subjunctive
 Relative Completive
 Stative
 Progressive.

The 'basic' VAP-suffix for active complexes of these conjugations is a short vowel (-i or -a: see table XXII on page 193); and when that suffix is followed by a suffix that is higher in the hierarchy, then the former is reduced to \emptyset , despite the fact that there is no danger of two 'features of length' co-occurring. The alternation between the short-vowelled VAP-suffix and \emptyset is exemplified in the a. and b. sentences of 260. - 262. below. In the b. sentences, \emptyset occurs because of a following 2sg pronoun or the Anteriority-Marker.

<p>260.a. 'Igga 'o-wi'-<u>a</u> - <u>mmi</u>. better he tell me VAP SUBJ ACT 'He had better tell me.'</p>	<p>b. 'Igga 'o-wii-\emptyset - <u>maa</u>. better he tell you VAP SUBJ ACT 'He had better tell you (sg).'</p>
<p>261.a. 'E-koyŋ-mbel - <u>a</u> - <u>mmi</u>. they sweet me VAP PROGRESSIVE ACTIVE 'They taste sweet to me.'</p>	<p>b. 'E-koyŋ-mbel - \emptyset - <u>maa</u>. they sweet you VAP PROGRESSIVE ACTIVE 'They taste sweet to you (sg).'</p>

necessarily occurs:

- | | |
|--|--|
| <p>267.a. 'E-mo-'annd-<u>u</u> - maa.
 he know you
 VAP
 STATIVE ACTIVE
 'He knows you (sg).'</p> | <p>b. *'E-mo-'annd-<u>∅</u> - maa.
 he know you
 VAP</p> |
| <p>268.a. Ndee koot - <u>u</u> - 'on?
 when go home you
 VAP
 REL COMPL ACT
 'When did you (pl) go home?'</p> | <p>b. *Ndee koot - <u>∅</u> - 'on.
 when go home you
 VAP</p> |

The b. sentences of 267. and 268. are unacceptable, because the presence of a zero VAP-suffix causes an unacceptable CVCC or CVVC syllable ('annd and koot respectively).

Two other conjugations display an alternation between a short-vowelled basic VAP-suffix and zero, but in the middle rather than the active voice. These are the Ordinary Imperative (singular only) and the Emphatic Completive, where the short-vowelled suffix is -a and -i respectively. In these conjugations, although the alternation bears comparison with that just described (hence its inclusion here), it is not in fact conditioned by the SP hierarchy. Rather, it is a matter of phonology. If the VAP-suffix is to be followed by a vowel-initial pronominal suffix, such as -am 'me' or -e 'you' (sg), then zero always occurs, as in the b. sentences below; otherwise, -a or -i occurs, as in the a. sentences.

- | | |
|---|---|
| <p>269.a. Yaaf - <u>a</u> - <u>be</u>!
 forgive them
 VAP
 ORD IMPER MID
 'Forgive (sg) them!'</p> | <p>b. Yaaf - <u>∅</u> - <u>am</u>!
 forgive me
 VAP
 ORD IMPER MID
 'Fogive (sg) me!'</p> |
| <p>270.a. Naa 'o - jog - an-<u>i</u> - '<u>on</u>-mo?
 not she hold for you him
 VAP
 EMPH COMPL MID
 'Did she not <u>hold</u> him for you (pl)?'</p> | <p>b. Naa 'o - jog - an-<u>∅</u> - <u>e</u> - mo?
 not she hold for you him
 VAP
 EMPH COMPL MID
 'Did she not <u>hold</u> him for you (sg)?'</p> |

271.b. Sukaabe ngeew-et - e.
 children miss you
 VAP
 'You (sg) will miss (the) children.'

272.b. Be - nyaam-at - am.
 they eat me
 VAP
 'They will eat me.'

In fact, the only vowel-initial suffixes that occur in this conjugation are the -e and -am seen in 271.b. and 272.b..

The same principle operates in the Continuative Imperative Singular. Here the only vowel-initial suffix that occurs is -am 'me' - a second person object cannot occur in an Imperative complex. Thus, we see the basic (a)tay VAP-suffix in the a. sentences below, but the modified (a)t one in the b. sentences:

273.a. Raar-atay-min!
 look us
 VAP
 'Keep on looking (sg) at us (excl)!'

b. Raar-at - am!
 look me
 VAP
 'Keep on looking (sg) at me!'

274.a. Jog-atay biyam!
 hold my child
 VAP
 'Keep on holding (sg) my child!'

b. Jog-at - am!
 hold me
 VAP
 'Keep on holding (sg) me!'

The distribution of the VAP-suffix alternants for the Relative Incompletive Active depends on whether the complex is an SV or VS one (cf. §4.1.1. and §4.1.2.). In SV complexes with the Anteriority-Marker, the VAP-suffix is -ay; otherwise it is -(a)ta.

- 275.a. Raa no min-ndef-ir-ay-noo-ndi.
 see how we cook it
 S V EXT VAP ANT
 'See how we (excl) used to cook it (eg. rice).'

- 276.a. Walaa to di - ndur-ata.
 is not where they graze
 S V VAP
 'There is nowhere for them (eg. sheep) to graze.'

In VS complexes, the same principle operates as has just been described for the General Incompletive Active: y occurs in syllable-final position, but t (with or without the harmonizing vowel) occurs in syllable-initial position. Thus:

- 275.b. Raa no ndef-ir-ay-mi-ndi.
 see how cook I it
 V EXT VAP S
 'See how I cook it (eg. rice).'

- 276.b. Walaa to ndur-ot-on-di.
 is not where graze you them
 V VAP S
 'There is nowhere for you (pl) to graze them
 (eg. sheep).'

In 275.b., the VAP-suffix is followed by the consonant-initial -mi, and -ay therefore occurs; whereas in 276.b., the vowel-initial -on follows the VAP-suffix, and -ot therefore occurs. (The o of -ot 'harmonizes with' the o of -on.)

As mentioned in §4.3.3. above, the SP hierarchy operates in complexes of the Progressive. This accounts for the alternation between a and (u) in the active, oo and o in the middle, and ee and e in the passive (cf. the complexes in 257. and 261. on pages 205 and 206 above, for example). However, the SP hierarchy cannot account for the occurrence of the other type of modified VAP-suffix found in Progressive complexes, namely -ay, -(o)to and (e)te (cf. table XXII on page 193). The latter three VAP-suffixes in fact occur in active, middle and passive complexes of the Progressive if the Anteriority-Marker is also present. Thus the basic VAP-suffix occurs in the a. sentences below, but the second type of modified VAP-suffix occurs in the b. sentences:

282.a. ?*Ngim dume suud-an - ay-maa-mi-mo - de?
 because+ what hide for you I her them
 of

V EXT VAP O S O O

'Why was I going to hide them from her on your (sg)
 behalf?'

283.a. ?*Ndee ngar-t - id - an - ay - noo- 'on Muusa 'e maakoyŋ?
 when come back with for you Musa with them
 V EXT EXT EXT VAP ANT S

'When were you (pl) going to come back with them for
 Musa?'

When a Fulfulde-speaker 'senses' that an unacceptable complex may occur, two types of solution present themselves. Firstly, he may use a prepositional phrase in the place of an indirect object (cf. 282.b.), or in the place of an extension plus indirect object (cf. 283.b.):

282.b. Ngim dume suud-an - ay - maa-mi-de daga to maako?
 because+ what hide for you I them from at her
 of

V EXT VAP O S O

'Why was I going to hide them from her on your (sg)
 behalf?'

283.b. Ndee ngar-t - id - ay - noo- 'on 'e maakoyŋ ngim Muusa?
 when come back with you with them for Musa
 V EXT EXT VAP ANT S

'When were you (pl) going to come back with them for
 Musa?'

In 282.b., daga to maako has replaced the indirect object, mo; and in 283.b., ngim Muusa has replaced the extension -an plus its object, Muusa (- compare 282.a. and 283.a. respectively). Such prepositional phrases may well be used with SV complexes as well as with VS complexes; for example, 280.b. and 281.b. are possible variants of 280.a. and 281.a.:

280.b. Ngim dume danyooŋe maafa suud-an - ta - maa-de daga to maako?
 for what parents your hide for you them from at her
 S V EXT VAP O O

'Why will your (sg) parents hide them from her on your
 behalf?'

281.b. Ndee min-ngar-t - id - ay - noo 'e maakoyŋ ngim Muusa?
 when we come back with with them for Musa
 S V EXT EXT VAP ANT

'When were we (excl) going to come back with them for
 Musa?'

However, while the difference between the a. and b. sentences of 282. and 283. is one of interpretability (and therefore acceptability), the difference between the a. and b. sentences of 280. and 281. is one of style and idiolectal preference.

Secondly, where there is 'danger' of an uninterpretable VS complex, the Fulfulde speaker may choose to use an SV complex instead. Thus, 282.c. and 283.c. are variants of 282.b. and 283.b.:

282.c. Ngim dume mi-suud-an-ta-maa-d'e daga to maako?
because+ what I hide for you them from at her
of

S V EXT VAP O O

'Why was I going to hide them from her on your (sg)
behalf?'

283.c. Ndee 'on-ngar-t - id-an-ay -noo Muusa 'e maakoyŋ?
when you come back for Musa with them
S V EXT EXT EXT VAP ANT

'When were you (sg) going to come back with them for
Musa?'

Since in such SV complexes, only four appendages occur after the root, the prepositional phrase may be dispensed with, and a complex with five appendages after the root may be used:

282.d. Ngim dume mi-suud-an-ta-maa-mo-d'e?
because+ what I hide you her them
of

S V EXT VAP O O O

'Why was I going to hide them from her on your (sg)
behalf?'

283.d. Ndee 'on-ngar-t - id - an - ay - noo Muusa 'e maakoyŋ?
when you come back with for Musa with them
S V EXT EXT EXT VAP ANT O

'When were you (sg) going to come back with them for
Musa?'

(In 283.d., Muusa, as the object associated with the extension -an-, must precede the prepositional phrase 'e maakoyŋ.) Again, the difference between the c. and d. sentences of 282. and 283. is one of style and idiolectal preference.

4.4.1.2. VS>SV with a lsg Subject

Although with a lsg subject, VS complexes do occur in relative conjugations, SV complexes are in fact a frequent alternative. This is true regardless of the number of appendages in the complex. Thus, both the a. and b. sentences of 284. and 285. are acceptable:

- 284.a. 'E zaman Aliyu mi-dany-aa.
 at time Aliyu I bear
 S V VAP
 'I was born at the time of Aliyu.'
- b. 'E zaman Aliyu dany-aa-mi.
 at time Aliyu bear I
 V VAP S
 'I was born at the time of Aliyu.'
- 285.a. Ko mi-'annd-i wondon.
 what I know is
 S V VAP
 'It's what I know.'
- b. Ko 'annd-u-mi wondon.
 what know I is
 V VAP S
 'It's what I know.'

It seems, then, that a lsg subject 'tolerates' either VS or SV order in a relative conjugation.

Relative complexes with a 2nd person subject are much less 'tolerant' of SV order, and VS order is the norm. Thus, 286.b. and 287.b. are perfectly understandable in the Fulfulde of the Kaceccere'en, although 286.a. and 287.a. are more normal and more correct:

- 286.a. 'E zaman Aliyu dany-a-daa.
 at time Aliyu bear you
 V VAP S
 'You were born at the time of Aliyu.'
- b. ?'E zaman Aliyu 'a-dany-aa.
 at time Aliyu you bear
 S V VAP
 'You were born at the time of Aliyu.'

287.a. Ko 'annd - u - dfaa wondon.
 what know you is
 V VAP S
 'It's what you know.'

b. ?Ko 'a - 'annd - i wondon.
 what you know is
 S V VAP
 'It's what you know.'

It is worth noting that in some dialects, such as that of Adamawa, VS order is never found. It is recognized and understood, but considered laughable and old-fashioned. Maybe VS order will eventually disappear from the Fulfulde of the Kaceccere'en too. In any event, the evidence of their Fulfulde today shows that the greatest 'resistance' to SV order is found in the presence of a 2nd person subject.

4.4.2. 'E and don

In this section, I shall briefly defend my inclusion of 'e and don within the verbal complexes of the Stative and Progressive conjugations. In order to do this, I shall review the functions of 'e and then don, both outside and inside verbal complexes.

4.4.2.1. 'E

Both in discussion and in morphological analysis, I have so far treated 'e as an identifiable morph in Kaceccereere Fulfulde. Other writers, describing other dialects of Fulfulde, treat 'e as part of the pronouns which are typical of the Stative and Progressive conjugations. (As far as I am aware, 'e does not occur in other dialects with locative and existential sentences.) Arnott, for example, speaks of 'subject elements series 3', having the forms 'e-mi, 'e-'a, 'e-mo, etc. (Arnott 1970: 194); and Gaden (1931: xviii) speaks of 'modification du pronom-sujet'. In this section, I shall justify my treatment of 'e in Kaceccereere Fulfulde not as part of a subject pronoun series, but rather as a morph in itself; and I shall then show why 'e should be considered part of the verbal complex when it occurs with the Stative Progressive.

The reason why it is convenient, and indeed necessary, to consider 'e as a morph that is independent of the subject pronoun is that it does not only occur with a subject pronoun. Consider, for example, the following:

288.a. Mi-yii-mo 'e-mo-daan-ii.
I see him he sleep
VAP

'I saw him asleep.'

b. Mi-yii Hawwa 'e-daan-ii.
I see Hawwa sleep
VAP

'I saw Hawwa asleep.'

289.a. 'E-be - 'annd-i-mmi.
they know me
VAP

'They know me.'

b. Biβbe 'e-'annd-i-mmi.
children know me
VAP

'(The) children know me.'

From these sentences, we see that if a Stative or Progressive complex has a pronoun subject, 'e precedes the subject (cf. 'e-mo in 288.a. and 'E-be in 289.a.); but if the complex has an NP subject, then 'e occurs alone. If we say that 'e is part of a series of subject pronouns, then there is no way of accounting for the occurrence of 'e without a pronoun, as in 288.b. and 289.b. above.

There are two reasons why it is necessary to consider 'e as part of Stative and Progressive complexes, rather than simply as a 'floating' particle that 'happens' to accompany such complexes. Firstly, 'e has very evidently coalesced with the 2sg subject pronoun 'a, in Kaceccereere Fulfulde, giving 'aa:

290.a. 'Aa-waaw-i bir-ki na'i na?
you milk cows
VAP INF QU

'Can you milk cows?'

b. *'E-'a waaw-i bir-ki na'i na?
you milk cows

Although 290.b. would be acceptable in the Gombe dialect (cf. the subject pronouns given in Arnott (1970: 194)), it is not in Kaceccereere Fulfulde. Since the subject pronoun is part of the verbal complex, a morph that has coalesced with the subject pronoun must also be part of the

complex. And if an underlying 'e, as in 290.a. is thus part of a complex, it is reasonable, in terms of the Stative and Progressive morphological paradigms, to consider 'e elsewhere as part of the verbal complex with which it occurs.

Secondly, the position of 'e in relation to the subject of a complex is variable. If the subject is an NP, the 'e follows the subject:

- 291.a. Yaa'u 'e-nokk - a nyiiri.
 Ya'u scoop 'nyiiri'
 S VAP
 'Ya'u is 'scooping up' 'nyiiri' (food).'

However, if the subject is pronominal, then 'e precedes the subject:

- 291.b. 'E-mo-nokk - a nyiiri.
 he scoop 'nyiiri'
 S VAP
 'He's scooping up 'nyiiri' (food).'

This fact suggests that 'e cannot be separated from the verbal complex by an NP; and that 'e must either immediately precede a verbal complex, or be considered to be the initial morph in a verbal complex. Given the close relationship between 'e and subject pronouns (compare 'aa in 290.a. above), the latter suggestion seems the more reasonable.

Another reason for considering 'e to be part of the verbal complex is the fact that without 'e, the complexes in 291. would in fact be interpreted as being of the Subjunctive:

- 292.a. Yaa'u nokk - a nyiiri.
 Yaa'u scoop nyiiri
 VAP
 'Ya'u should scoop up 'nyiiri'.'
- b. Mo-nokk - a nyiiri.
 he scoop nyiiri
 VAP
 'He should scoop up 'nyiiri'.'

'E is, then, an essential part of the Progressive morphological paradigm. It is similarly essential to the Stative paradigm:

293.a. 'E-di - daan-ii.
 they sleep
 VAP

'They're asleep.'

b. Sey di - daan-ii.
 then they sleep
 VAP

'Then they slept.'

The complexes in 293.a. and b. are distinguished by the presence or absence of 'e: while that in 293.a. is of the Stative Middle, that in 293.b. is of the Relative Completive Middle.

Given its crucial role in identifying the conjugation of a complex, there can be little doubt but that 'e, when it occurs in a verbal sentence, is morphologically part of the complex.

4.4.2.2. Don

Just as I have so far treated 'e as a separate morph within a verbal complex, so have I also treated d̄on. Again other writers vary in their treatment of d̄on. Arnott considers it to be part of a 'subject element series 2' (Arnott 1970: 194-5); Noye considers d̄on to be an adverb which helps to form the 'Progressif' (Noye 1974: 58); and Gaden, like Arnott, considers that the 'Duratif' uses a special modification of the pronoun subject, which sometimes includes d̄o or d̄on (cf. Gaden 1931: xviii). In this section, I shall show why it is not possible to consider d̄on as part of a composite subject pronoun in Kaceccereere Fulfulde; and I shall then show why it is useful to consider d̄on as a separate morph within Stative and Progressive complexes.

The arguments concerning the first point are parallel to those that were used for 'e above. When the subject of a Stative or Progressive verbal complex is an NP, then no pronoun subject occurs with d̄on (cf. 294.b.):

294.a. 'E-be - d̄on-njar-a njumri.
 they drink honey
 VAP

'They are drinking honey.'

294.b. Yimbe 'e-d̄on-njar-a njumri.
 people drink honey
 VAP

'People are drinking honey.'

If d̄on is simply part of a subject pronoun, how can it be accounted for in 294.b., where it (and indeed 'e) occurs without a subject pronoun? In the Fulfulde of the Kaceccere'en at least, it is necessary to consider d̄on, like 'e, as a separate morph.

It is less easy to argue for the inclusion of d̄on in the verbal complex than it was for 'e. As Noye's analysis points out, d̄on is essentially an adverb. It means 'around', 'present', 'in existence', and it belongs to a paradigm of deictic adverbs that also includes d̄oo 'here' and ton 'there' (cf. §2.2.2.4. of chapter 2). In fact, the latter two adverbs can occur in the place of d̄on with a verbal complex, thus:

295.a. Tummbude 'e-d̄on-keew-i.
 calabashes fill

'The calabashes are full.'

b. Tummbude 'e ton keew-i.
 calabashes there fill

'The calabashes are there, full.'

c. Tummbude 'e d̄oo keew-i.
 calabashes here fill

'The calabashes are here, full.'

I have rather prejudged the issue under discussion, by hyphenating d̄on to 'e and the verbal root, but by not so hyphenating ton and d̄oo. The fact is that while ton and d̄oo are deictic in 295.b. and c., d̄on is not in 295.a.. Don, although maybe at one time deictic, is now 'neutral' in meaning, and has become intergrated into the morphology of the Stative and Progressive verbal conjugations; whereas ton and d̄oo have retained their deictic meaning. The latter in fact seem to 'intrude' in the verbal complexes in 295.b. and c., to the extent that one could question the unity of the complexes; and this is why I have not hyphenated ton and d̄oo to 'e and keew-i. It may be that in the light of evidence such as in 295., the definition of the verbal complex needs to be revised. Or it may be that we simply have to accept that sentences

such as 295.a. contain a periphrastic verbal form; and that such forms have variants such as 295.b. and c. (at least in this dialect), which are a throw-back to the origin of the periphrastic verbal forms. These matters are further discussed in McIntosh (1980).

4.4.2.3. 'E and Don: Conclusions

In conclusion, while there is every reason to include 'e within the verbal complex, as a separate morph, the issue is not so simple in the case of don. Nevertheless, since don is more 'neutral' than the other deictic adverbs mentioned above, it is possible to regard the Stative and Progressive verbal complexes with don as periphrastic verbal forms including, rather than interrupted by, don.

4.5. The Morphological Classification of Conjugations

By way of conclusion to this discussion of verbal morphology, it will be useful to classify the 14 conjugations according to some of the features that have been discussed here. The features I choose are the occurrence of VS complexes (with 1st or 2nd person subject only), and the occurrence of 'e and don. Using these two criteria, the classification given in table XXVII results:

Table XXVII

Classification of Conjugations

		<u>VS Order</u>	<u>'E and don</u>
<u>Type 1</u>	Vague Incompletive	-	-
	General Completive	-	-
	General Incompletive	-	-
	Negative Completive	-	-
	Negative Incompletive	-	-
	Emphatic Completive	-	-
	Exhortative	-	-
	Imperative	-	-
	Continuative Imperative	-	-
<u>Type 2</u>	Stative	-	+
	Progressive	-	+
<u>Type 3</u>	Subjunctive	+	-
	Relative Incompletive	+	-
	Relative Completive	+	-

Although the above classification has been established on the basis of only two criteria, it correlates to some extent with other features of the various conjugations: for the suffixal precedence hierarchy operates in complexes of conjugations of types 2 and 3, but with the exception of the Exhortative, it does not operate in type 1 conjugations; and broadly speaking, conjugations of types 1 and 2 occur in neutral sentences, whereas those of type 3 occur in non-neutral sentences (cf. §3.6. - §3.8. of the preceding chapter).

A corollary of the observations that have just been made is the fact that conjugations of type 1 are morpho-syntactically and morpho-phonologically simpler than those of types 2 and 3. Type 1 conjugations always have SV order, and there is rarely any morpho-phonological interaction between the VAP-suffix and other suffixes. Since the SP hierarchy and VS order do not occur in type 1 conjugations, it is much easier to 'compose' a complex of one of these conjugations than of type 2 or 3 conjugations.

Let us now turn from the detailed description of verbal complexes to a consideration of the ways in which they realise the verbal properties that were established in chapter 3.

Chapter 4: Footnotes

1. The complex in 215.b. in fact expresses 3rd person and singular twice, once each in the subject ('o) and the object (ngal).
2. Concerning the connotations or meanings of the various nominal classes, see §1.3.1..
3. The alternation between -∅ and -u as the VAP-suffix for the Imperative Active is conditioned by the final consonant of the verbal root. See §4.2.1. below.
4. The short-vowelled -i that accompanies yah- characterises the active voice of the Relative Completive, whereas the long-vowelled -ii that accompanies 'umm- and wurt- characterises the middle voice of the same conjugation.
5. Henceforth, I shall use the phrase '1st and/or 2nd person' to refer to 1st person singular, 1st person plural (inclusive), 2nd person singular and 2nd person plural.
6. In using the abbreviations 'SVO', 'VSO' and 'VOS', I disregard the distinction between direct and indirect objects, since it is immaterial to the discussion.
7. My use of 'suffix' is rather ambivalent. Inasmuch as I use it to refer to a surface-structure phonetic form, it is concrete; but inasmuch as I use it to refer to an item with alternative realisations, it is abstract.
8. The basic VAP-suffix for the General Completive Active is -ii. However, when this -ii is followed by the 1sg object pronoun, the final element of the long vowel becomes a glide, resulting in the sequence -iy-am. Alternatively, the y could be analysed as the initial consonant of the pronoun, and the VAP-suffix as a short -i, thus: -i-yam. I use the latter orthographic representation here, but I do not believe there is sufficient reason to claim that there is a modified VAP-suffix for the General Completive Active.
9. Exceptionally -aayi occurs before the 2sg pronoun -ma. See §5.5.2..
10. It should be noted that I do not use 'clitic' to refer to a phonologically-reduced form of a word.
11. Moo only occurs as first object in a VOS complex (see example 233.c., p. 184), i.e. with a 1sg subject in a Relative conjugation. If it co-occurs with the Anteriority-Marker in such a complex, it is short, for example: Keenya mball-u-no-moo-mi 'It's yesterday I had helped him'. I therefore place moo above noo in the SP hierarchy. If a 2sg and 3sg (personal) object pronoun co-occur in a VOS complex, whichever is the indirect object occurs first, with a long vowel, and the other follows the subject, with a short vowel: Keenya mball-an-maa-mi-mo 'It's yesterday I helped him for you', and Keenya mball-an-moo-mi-ma 'It's yesterday I helped you for him.' Whether complex-final -mo and -ma are modified forms of their pre-subject counterparts is a moot point.
12. 'u' represents an alternation between u and ∅. See pp. 207-8.

Chapter 5

Types of Exponence

5.0. Introduction

This chapter will address the question: how are the verbal properties that were identified in chapter 3 realised in a verbal complex? In other words, what types of exponence, or realisation of properties, are found in verbal complexes?

The identification of types of exponence is no simple matter, and I shall confine this brief discussion to the most obvious types. Moreover, I shall ignore the distinction made by Carstairs (1981) between a type of exponence that is displayed by all properties belonging to one category, and a type only displayed by certain properties of a category. (It will be remembered (cf. §3.3.) that most properties are terms in one of several categories: for example, active, middle and passive are terms in the category of voice.)

In the discussion that follows, I shall use the terms 'exponence' and 'realisation' synonymously, though the latter is more readily qualifiable (eg. in the phrase 'realisation of properties') than is the former. Similarly, I use 'express' and 'realise' synonymously.

There are two broad types of exponence in Fulfulde verbal complexes. The first, which I shall term syntactic exponence, is not identified by Matthews or Carstairs. Its existence in Fulfulde is a function of the fact that the Fulfulde verbal complex may be a syntactic structure, with subject and/or object(s). Syntactic exponence is effected by means of morph-order, and is discussed in §5.1..

The second broad type of exponence is morphological in nature, ie. it depends on morph-shape rather than order; and it comprises several of the types of exponence identified by Carstairs and Matthews. It includes cumulative exponence, where two or more properties are

consistently realised together (see §5.2.); sensitive exponence, where the realisation of a property is 'sensitive' to the presence of other properties in the complex (see §5.3.); and extended exponence, where a property is realised by more than one feature in the complex (see §5.4.). What we can term a fifth type of exponence, homonymy, will be discussed in §5.5..

5.1. Syntactic Exponence

The internal syntax of verbal complexes was discussed in §4.1. above. The order of pronominal morphs within a complex is in fact the most important exponent of case, though morph-shape may also contribute (see §4.3.2. . and §5.3.1.).

Three cases may be realised in a complex: subject, direct object, and indirect object. Normally, a subject pronoun precedes any direct or indirect objects, and an indirect object precedes a direct object. These facts are illustrated in the following by the position of nga and mi: in the a. sentences, the underlined pronoun is subject, in the b. sentences, it is direct object ('DO') and in the c. sentences, indirect object ('IO').

- 296.a. Nga-nyaam-ataa.
 it eat not
 S VAP
 'It (eg. donkey) won't/doesn't eat.'
- b. Tokoye soor-at-aa-nga?
 where sell you it
 VAP S DO
 'Where will you (sg) sell it?'
- c. 'O-hokk-ii-nga-ndu.
 he give it it
 S VAP IO DO
 'He gave it (eg. donkey) it (eg. food).'
- 297.a. Nduu suudu ðad - ii-mi
 this house approach I
 VAP S
 'It's this house that I approached.'

- 297.b. Seese-seese 'o-bad - ii - mi.
 gradually he approach me
 S VAP DO

'It's gradually that he approached me.'

- c. Ngim maajum 'o-bad - an - ii - mi - mo.
 for that he approach for me him
 S VAP IO DO

'That's why he approached him on my behalf.'

Note that a subject precedes any objects in the clause regardless of whether the complex is an SV one or a VS one. (The only exception to this rule was mentioned in §4.1.2., and exemplified by sentences 233.c. and 234.c. on page 184 above.) Note also that the verbal root and VAP-suffix may or may not intervene between the subject and the object(s), depending on the conjugation of the complex, and the person of the subject (cf. §4.1.).

5.2. Cumulative Exponence

The properties of voice, aspect and polarity, and sometimes other properties besides, are realised cumulatively in the VAP-suffix; and the properties of person, number, and sometimes of case, are normally realised cumulatively in dependent pronouns within the complex. (Number may also be realised in other ways, such as by initial consonant alternation, and by the VAP-suffix of Imperative complexes; and case is realised by morph-order (see above) as well as by the form of pronouns.)

5.2.1. VAP-Suffixes

The fact that a VAP-suffix realises properties of voice can be demonstrated by the contrast between the -ii, -ake and -aama suffixes in 298 a. - c., which express active, middle and passive respectively:

- 298 a. Mi-suud^f-ii - koyŋ.
 I hide them
 VAP

'I hid them (eg. kittens).'

- b. Koyŋ-suud^f-ake.
 they hide
 VAP

'They hid (themselves).'

- 298.c. Koyŋ-suud^f-aama.
 they hide
 VAP
 'They have been hidden.'

The fact that a VAP-suffix realises properties of aspect can be demonstrated by contrasting the -ay and -oto suffixes of 299.a. and b., which realise incompletive aspect, with the -ii and -ake suffixes of 289.a. and b., which realise completive aspect. (The General Incompletive Passive is rarely, if ever, used, for reasons that are explained in §5.5.2.. The commonly used incompletive equivalent to 298.c. is Koyŋ suud^f-etee-koyŋ, which is a non-verbal sentence consisting of a subject pronoun koyŋ and a participle suud^f-etee-koyŋ, and means 'They are (little things that are) to be hidden.'.)

- 299.a. Mi-suud^f-ay-koyŋ.
 I hide them
 VAP
 'I'll hide them.'
- b. Koyŋ-suud^f-oto.
 they hide
 VAP
 'They'll hide (themselves).'

The fact that a VAP-suffix realises properties of polarity can be shown by contrasting the VAP-suffixes in the following with those in 298.:

- 300.a. Mi-suud^f-aa - koyŋ.
 I hide not them
 VAP
 'I didn't hide them.'
- b. Koyŋ-suud^f-aaki.
 they hide not
 VAP
 'They didn't hide (themselves).'
- c. Koyŋ-suud^f-aaka.
 they hide not
 VAP
 'They haven't been hidden.'

In 300., the -aa, -aaki and -aaka VAP-suffixes which express negative polarity, contrast with the -ii, -ake and -aama VAP-suffixes in 298., which express positive polarity.

Sometimes, properties of other categories are also realised in the VAP-suffix. For example, with a 3rd person subject, the only morphological (ie. non-syntactic and non-intonational) exponent of the properties relative and non-relative is the VAP-suffix. (In complexes with a 1st or 2nd person subject, on the other hand, the properties relative and non-relative are partially realised by the distinction between SV and VS morph-order.) Here are some examples of VAP-suffixes as exponents of these properties. (Inverted commas, " , have been placed before the syllable bearing contrastive stress in 301.b..)

301.a.	Asabe hadd- <u>ake</u> -nde. Asabe gird it VAP GEN COMPL MID 'Asabe put it (skirt/ wrapper) on.'	b.	Asa"be hadd- <u>ii</u> -nde. Asabe gird it VAP FOCUS REL COMPL MID 'It's Asabe who put it (skirt/wrapper) on.'
--------	--	----	--

The only morphological difference between these two sentences lies in the fact that the one has -ake, the other ii, as its VAP-suffix, and it is this distinction that realises the properties non-relative (or general) and relative respectively. (The relative conjugation in 301.b. is necessitated by the fact that the subject of the sentence, Asabe, is focussed.)

5.2.2. Pronouns

Dependent pronouns always cumulatively realise properties of person and number. These pronouns are morphologically indivisible, for it would be impossible to say that one part realises person, and another part number. Thus, though ngel and mi both realise singular, and although ngel and koyŋ both realise 3rd person, the members of each pair share no morphological feature that could be identified as realising singular or 3rd person respectively. (3rd person pronouns such as ngel and koyŋ also realise nominal class; but since we are here concerned with verbal properties, not nominal ones, I shall not discuss this fact any further.)

Where the realisation of properties of person and number varies according to case (cf. 2sg in table XXVIII below), then case is also cumulatively realised in a pronoun. For example, -daa always realises

subject case, and -maa object case, though both also realise person and number.

5.3. Sensitive Exponence

Given the fact that Fulfulde is an inflecting language, it could be argued that the realisation of every property is sensitive to the presence of other properties in the same complex. The preceding discussion of cumulative exponence, for instance, presupposed the fact that the properties of voice, aspect and polarity are sensitive to each other, as are those of person and number.

Sensitive exponence is not only involved in the morphology, but also in the syntax of verbal complexes. By way of example, in type 2 conjugations (cf. table XXVII on page 222), VS order occurs with 1st or 2nd person subject, but SV order with 3rd person subject. Since each conjugation realises a particular group of properties, we must conclude that the realisation of those properties is sensitive to person and subject.

I do not propose to discuss all the intricacies of sensitive exponence. There are, however, two areas of sensitive exponence that do merit elaboration here. These are the realisation of pronouns (cf. §5.3.1.) and of anteriority (cf. §5.3.2.).

5.3.1. Pronouns

The realisation of properties of person, number and case is 'sensitive' to other properties realised in the same complex; and it is this fact that explains why in some instances, several pronouns representing the intersection of the same group of properties are to be found in table XXIII on page 197 above.

The most essential criterion for the distribution of the pronouns shown in table XXIII is conjugation. For example, a 2pl subject pronoun in the Subjunctive Active is always -on; but a 2pl subject pronoun in the General Completive Active is always 'on. However, in certain conjugations the realisation of object case and of 1st and/or 2nd person is sensitive to the occurrence of another set of such 'pronominal' properties in the same complex. For example, in the Emphatic Completive Active, a 2sg object is realised as -e if it is the sole object:

- 302.a. 'O - loot- \emptyset - e.
 she wash you
 VAP
 'She washed you (sg).'

But if the syntax and semantics demand that the 2sg object be preceded by another object, then the 2sg object is realised as -ma rather than as -e:

- 302.b. 'O - loot-an - \emptyset - am-ma. c. *'O - loot-an - \emptyset - am-e.
 she wash for me you she wash for me you
 EXT VAP
 'She washed you (sg) on
 my behalf.'

From 302.a. and b., we see that a group of properties of person, number and case may have various morphological realisations, even in complexes of a single conjugation.

Table XXVIII below shows the distribution of basic pronouns over the various conjugations. (It should be remembered that -mmi may be reduced to -mi because of the SP hierarchy: cf. table XXVI, p. 204.)

Table XXVIII

Distribution of Pronouns by Conjugation

<u>Per- son</u>	<u>Num- ber</u>	<u>Case</u>	<u>Pronoun</u>	<u>Conjugations of Occurrence</u>	<u>Restrictions</u>
1	sg	subj	<u>mi</u>	All conjugations	-
		obj	<u>am</u>	Emphatic Completive Act/Mid Relative Incompletive Act General Incompletive Act Exhortative Act	Only occurs as first object in a complex.
			<u>mmi</u>	Relative Completive Stative Progressive Subjunctive Exhortative	Only occurs as first object; and never after a 1pl (incl) or 2pl sub- ject in VS complex.
			<u>'am/yam</u>	All conjugations	Occurs in all cir- cumstances except as mentioned above.

Table XXVIII (continued)

<u>Per- son</u>	<u>Num- ber</u>	<u>Case</u>	<u>Pronoun</u>	<u>Conjugations of Occurrence</u>	<u>Restrictions</u>
2	sg	subj	<u>'aa</u>	Progressive Stative	-
			<u>ɕaa</u>	Relative Incompletive Relative Completive Subjunctive Mid/Pass	In Rel.Incompl. Act. only occurs in complexes expressing anter- iority.
			<u>aa</u>	Relative Incompletive Act Subjunctive Act	In Rel.Incompl. Act., only occurs in complexes not expressing anter- iority.
			<u>'a</u>	All other conjugations	-
		obj	<u>e</u>	Subjunctive General Incompletive Act Progressive Act Emphatic Completive Act Exhortative	Only occurs as first object in a complex.
			<u>maa</u>	Progressive Relative Incompletive Relative Completive Subjunctive Exhortative.	Only occurs as first object in a complex.
			<u>ma</u>	All conjugations.	In circumstances mentioned with <u>e</u> and <u>maa</u> above, only occurs as second object in a complex.
		3	sg	subj, pers class	<u>mo</u>
<u>'o/mo</u>	All other conjugations				-
non- pers class	<u>ngel,</u> etc.			All conjugations	-
	obj, pers class			<u>moo</u>	Relative Completive Relative Incompletive
<u>mo</u>				All conjugations	In conjugations men- tioned with <u>moo</u> , only occurs as 2nd object.
non- pers class	<u>ngel,</u> etc.			All conjugations	-

Table XXVIII (continued)

<u>Per- son</u>	<u>Num- ber</u>	<u>Case</u>	<u>Pronoun</u>	<u>Conjugations of Occurrence</u>	<u>Restrictions</u>
1 incl	pl	subj	<u>en</u>	Subjunctive Act Relative Incompletive Act	In Rel.Incompl. Act. only occurs in com- plexes not expre- ssing anteriority.
			<u>'en</u>	All conjugations except Subjunctive Act	In Rel.Incompl. Act only occurs in com- plexes expressing anteriority.
		obj	<u>en</u>	Subjunctive Act. Relative Incompletive Act	Only occurs as first object in a complex.
			<u>'en</u>	All conjugations	In conjugations mentioned with <u>en</u> , only occurs as second object in a complex.
1 excl	pl	subj	<u>min</u>	All conjugations	-
		obj	<u>min</u>	All conjugations	-
2	pl	subj	<u>on</u>	Subjunctive Act Relative Incompletive Act	In Rel.Incompl.Act. only occurs in com- plexes not express- ing anteriority.
			<u>'on</u>	All conjugations except Subjunctive Act	In Rel.Incompl.Act. only occurs in com- plexes expressing anteriority.
		obj	<u>on</u>	Subjunctive Act Relative Incompletive Act	Only occurs as first object in a complex.
			<u>'on</u>	All conjugations	In conjugations mentioned with <u>on</u> , only occurs as second object in a complex.
3	pl	subj	<u>be, di,</u> etc.	All conjugations	-
		obj	<u>be, di</u> etc.	All conjugations	-

- 304.c. Jooni-jooni ndu-nyaam-ay -no-maa.
 now now it eat you
 VAP ANT
 'It was going to eat you (sg) immediately.'

d. *Jooni-jooni ndu-nyaam-ay -noo-maa.

In 304.c., no is shortened because of the presence of maa in the complex; 304.d. is unacceptable, because noo has not been thus shortened.

5.4. Extended Exponence

The most striking example of extended exponence is found in the Stative and Progressive: this is dealt with in section §5.4.1.. However, there are also instances of this type of exponence that are less regular but nevertheless worth noting. For example, the choice of a particular pronoun may help to realise the properties of a conjugation (see §5.4.2.). Often, extended exponence involves two or more of the types of exponence that have already been identified. For instance, morph-shape and morph-order may together realise the properties emphatic and relative, or the properties of case (see §5.4.3.). Finally, when morpho-phonology and morphology help to realise a property, then this must surely be regarded as extended exponence (see §5.4.4.).

5.4.1. Stative and Progressive

The exponents of stative and progressive are 'e and/or don, plus one of a particular set of VAP-suffixes in a verbal complex. Here are some examples:

- | | |
|--|---|
| <p>305.a. 'E-di - <u>d</u>on-sankit-ii
 they scatter
 VAP
 'They are scattered.'</p> | <p>306.a. Nyalahol 'e-<u>d</u>on-daan-oo.
 calf sleep
 VAP
 'The calf is falling asleep.'</p> |
|--|---|

Without 'e/don, (cf. 305.b. and 306.b.), or with an incorrect VAP-suffix (cf. 305.c. and 306.c.), the stative or progressive properties are not realised:

- | | |
|--|--|
| <p>305.b. Di - sankit-ii
 they scatter
 VAP
 'They scattered.'</p> | <p>306.b. Nyalahol daan-oo.
 calf sleep
 VAP
 'The calf should sleep.'</p> |
|--|--|

305.c. *'E-d̄i-d̄on-sankit-ataake.
 they scatter

306.c. *Nyalahol 'e-d̄on-d̄aan-aama.
 calf sleep

Although 305.b. and 306 .b. are grammatical, their complexes are of the Relative Completive Middle and Subjunctive Middle respectively, rather than of the Stative or Progressive. Sentences 305.c. and 306.c., on the other hand, have no possible interpretation, for the -ataake and -aama VAP-suffixes can never co-occur with 'e/d̄on: they are characteristic of the Negative Incompletive Passive and the General Completive Passive respectively.

5.4.2. Pronouns

Where a choice of pronouns for the same person, number and case is indicated in table XXVIII then the choice of one pronoun rather than another implies a particular property. For example, since -mmi only ever occurs in active conjugations, it necessarily helps to realise active voice. (In the middle and passive voices, -mmi is always reduced to -mi, since mmi is at the bottom of the suffixal precedence hierarchy: cf. tables XXV and XXVI.) Moreover, since -mmi only ever occurs in the active voice of certain conjugations, the choice of mmi also helps to realise the properties of those conjugations. True, the choice of a pronoun rarely, if ever, absolutely distinguishes one conjugation from another - the VAP-suffix is the most important and consistent marker of conjugation. But in a certain sense, one cannot avoid the fact that the choice of pronoun is a secondary marker of conjugation, and that a particular kind of extended exponence therefore operates in this way. Here is an example of the contrast between -mmi and -kam, both lsg object pronouns.

<p>307.a. "Kosam he'y - i - <u>mmi</u>. milk suffice me VAP</p> <p>'There's enough <u>milk</u> for me (but not enough of some- thing else).'</p>	<p>b. Ndiyam he'y - aa-<u>kam</u>. water suffice me VAP</p> <p>'There's not enough water for me.'</p>
--	--

The complex in 307.a. is of the Relative Completive conjugation (necessitated by the focussing of kosam 'milk'), whereas that in 307.b. is of the Negative Completive conjugation. Now, is there any reason for us

to say that the -i-/-aa- distinction between 307.a. and b. is any more important than the -mmi-/-kam distinction, for the establishment of these respective conjugations? Where the pronouns are so distinct, I believe that they must be considered to be exponents of conjugation, together with the VAP-suffix; and we must say that we have here an instance of extended exponence.

(I do not believe that the above argument is invalidated by the fact that -i and -mmi in 307.a., and -aa and -kam in 307.b., are contiguous suffixes; for these are separate, identifiable, morphs, each being replaceable by another member of the same pronominal or VAP-suffix paradigm. For example: "Kosam he'y-i-βe 'There's enough milk for them.' and 'Igga kosam he'y-a-mmi 'There'd better be enough milk for me'. In the former, -mmi has been replaced by βe 'them', and in the latter, -i has been replaced by the Subjunctive Active VAP-suffix, -a.)

5.4.3. Morph-Order

We have already seen, in section §5.1., that morph-order alone can determine case. However, where more than one pronoun realises the same person and number, then case may be determined by both order and shape: and we thus have an instance of extended exponence. For example, neither -mmi nor -kam in 307.a. and b. above can be a subject pronoun; and object case is realised by their shape, as well as by the fact that they occur after the verbal root, in a complex which is preceded by its subject (kosam and ndiyam in 307.a. and b. respectively).

Here are two further examples of the realisation of subject and object case by both the shape of a pronoun, and by its position. In 308.a., the subject is 'a, which precedes the verbal root, winnd-an- 'write to'; and in 308.b., the object is ma, which follows the verbal root. Both these pronouns realise 2nd person and singular.

308.a.	<u>'A</u> - winnd-an - ii-mo? you write to him EXT VAP	b.	'O-winnd-an - ii- <u>ma</u> ? he write to you EXT VAP
	'Have you (sg) written to him?'		'Has he written to you (sg)?'

If the shape of these pronouns is retained, but their position exchanged, unacceptable complexes result:

- | | |
|-------------------------------------|----------------------------------|
| 309.a. * <u>Ma</u> -winnd-an-ii-mo? | b. *'O-winn-d-an-ii-' <u>a</u> ? |
| you write to him | he write to you |

Nevertheless, if a learner of Fulfulde, or a Fulani child, were to say these unacceptable sentences, there is a good chance that they would be interpreted as their equivalents in 308: namely, 309.a. would be interpreted as meaning 'Have you written to him?', and 309.b. as 'Has he written to you?' This suggests that order in fact overrides shape in the interpretation of case. This whole question needs much further research. For the moment, what is important is the fact that case may be realised by both and shape, and that we therefore have another instance of extended exponence.

There is another area where morph-shape and morph-order combine to realise properties. Consider the complexes of 310.: that in 310.a. has \emptyset VAP-suffix and VS order; whereas that in 310.b. has -ii VAP-suffix and SV order. The former is of the Relative Completive Active, and the latter of the General Completive Active.

- | | |
|--|---|
| 310.a. Keenya ngar- \emptyset -'on.
yesterday come you
V VAP S | b. 'On-ngar- <u>ii</u> keenya.
you come yesterday
S V VAP |
| 'It's <u>yesterday</u> you (pl)
came.' | 'You came yesterday.' |

Is there any reason why morph-order should not be considered as much an exponent of the relative and non-relative properties in these complexes as are the \emptyset and -ii suffixes? If the answer to this question is 'no', as I believe it is, then we must conclude that morph-order and morph-shape may both be exponents of relative and non-relative, and constitute an instance of extended exponence.

5.4.4. Consonant Alternation

One further type of extended exponence is worth mentioning. This concerns the realisation of the properties singular and plural in a complex based on a root whose initial consonant alternates. This consonant is sensitive to the number of a preceding subject (cf. §1.2.1.);

and if that subject is in fact a pronoun within the complex (rather than an NP), then it is arguable that that complex realises number both in the pronoun and in the initial consonant of the root. Consider the complexes of 311.:

- | | | | |
|--------|--|----|---|
| 311.a. | Ngel- <u>w</u> oy-ataa.
it cry not
VAP | b. | Koyŋ- <u>m</u> boy-ataa.
they cry not
VAP |
| | 'It (diminutive) doesn't
cry.' | | 'They (diminutive)
don't cry.' |

Is not the number of the subject of these complexes partially realised by the initial consonant of the verbal root (w- and mb-), as well as by the form of the ngel and koyŋ pronouns? If yes, then this is surely an example of extended exponence.

5.5. Homonymy

Homonymous exponence is fairly rare in Fulfulde verbal morphology. It can be divided into two main types. Firstly, there are instances where the morphological distinction between two properties is consistently and systematically neutralised in a particular conjugation. I shall call this 'syncretism', and it will be discussed in §5.5.1.. Then, there are instances of what can be regarded as 'accidental' (as opposed to 'systematic') homonymy, where the morphological distinction between two or more properties is only sometimes lost in a particular morpho-syntactic environment. Some instances of 'accidental homonymy' are deliberately avoided or disambiguated by Fulfulde speakers, and these will be discussed in §5.5.2.. Others are automatically disambiguated by context and they will be dealt with in §5.5.3..

5.5.1. Syncretism

Consider the following Imperative Singular complexes:

- | | | | |
|--------|---|----|---|
| 312.a. | Suud- <u>u</u> - mo!
hide him
VAP | b. | Suud- <u>a</u> - mo!
hide him
VAP |
| | 'Hide (sg) him!' | | 'Hide (sg) from him!' |

Here, the distinction between active and middle voice is maintained by the -u and -a conjugation-suffixes. (There is no passive voice in Imperative conjugations.) However, there is only one plural equivalent

of 312.a. and b.:

- 313.a. Suud-ee-mo!
 hide him
 VAP
 'Hide him!'/ 'Hide from him!'

In other words, Active and Middle Imperative complexes with a Plural Subject both have -ee VAP-suffix. The ambiguity of 313.a. has to be resolved either by context, or by the addition of a further phrase or clause, as in 313.b. and c.:

- 313.b. Suud-ee-mo, to 'o-yi'-ee!
 hide him lest he see
 VAP VAP
 'Hide him, lest he be seen!'
- c. Suud-ee-mo, to 'o-yi'-a - 'on!
 hide him lest he see you
 VAP VAP
 'Hide from him, lest he see you (pl)!'

In the Continuative Imperative, the active - middle distinction is realised neither with a singular nor with a plural subject. Thus, the -atay and -etee conjugation-suffixes in 314.a. and 315.a. express either active or middle voice:

- 314.a. Born - atay-ngel!
 dress it
 VAP
 'Keep on dressing him/her (eg. a child)!'/
 'Keep on putting it on (eg. a little gown)!'
- 315.a. Born - etee-koyŋ!
 dress them
 VAP
 'Keep on dressing them (eg. children)!'/
 'Keep on putting them on (eg. little gowns)!'

(I believe that it would not be useful to say that voice is not realised in such complexes: if this were so, then surely no ambiguity would arise.)

The neutralisation of the active - middle voice distinction in Imperative complexes (except those with a singular subject in the

'Ordinary' Imperative) is regular and systematic - rather like the neutralisation of dative and ablative case in the plural of Latin nouns. Despite this fact, however, ambiguity rarely arises, for usually there are contextual clues as to the voice realised in a complex. For example there are few pronouns that can refer either to a personal or a non-personal referent. Ngel and koyŋ in 314.a. and 315.a. are amongst those few, and the choice of a different pronoun (as in 314.b. and 315.b.), or indeed of an NP object (as in 314.c. and 315.c.), implicitly realises the voice of Imperative complexes:

314.b.	Born - atay- <u>mo</u> ! dress him/her VAP ACT 'Keep on (sg) dressing him/her!'	315.b.	Born - etee- <u>de</u> ! dress them VAP MID 'Keep on (pl) putting (gowns) on!'
314.c.	Born - atay <u>binngel maa</u> ! dress child your VAP ACT 'Keep on (sg) dressing your child!'	315.c.	Born - etee <u>toggooje dee</u> ! dress gowns these VAP MID 'Keep on (pl) putting on these gowns!'

Moreover, there are few verbal roots that sometimes take active voice and sometimes middle. Suud- and Born- are amongst those few. Most verbal roots consistently take either active or middle voice, but cannot take both. (I am regarding extended verbal roots as different roots, for the purpose of ascertaining the 'voice potential' of a root; and since Imperatives do not combine with the passive voice, I am not concerned here with whether a root can combine with the passive.) Thus, since raar- 'look at' never takes middle voice, sentence 316. will be interpreted as having a complex of active voice; and since Bad- 'approach' never takes active voice, sentence 317. will be interpreted as consisting of a complex of middle voice:

316.	Raar-atay maaroori! look rice VAP 'Keep on looking (sg) at the rice!'	317.	Bad - ee! approach VAP 'Approach (pl)!'/ 'Come closer (pl)!'
------	---	------	--

In complexes such as raar-atay and bad-ee in 316. and 317., the voice of the complex is absolutely obvious - to the Fulfulde speaker - from the choice of verbal root, and there is, therefore, no possibility of ambiguity.

5.5.2. 'Accidental Homonymy' - (i)

I shall deal here with two instances of homonymy that involve 2sg object pronouns, whose forms 'happen to' be homonymous with part of a VAP-suffix.

If the reader refers to tables XXII and XXIII, he will note the following:

VAP-suffix for		VAP-suffix for	
Negative Completive Active:	<u>aa</u>	General Incompletive Active:	(e) <u>t</u>
2sg Object pronoun for		2sg Object pronoun for	
Negative Completive Active:	<u>ma</u>	General Incompletive Active:	<u>e</u>
VAP-suffix for		VAP-suffix for	
General Completive Passive:	<u>aama</u> .	General Incompletive Passive:	(e) <u>te</u> .

Now, the combination of the first two forms in each column (aa + ma, and (e)t + e) would lead to a form homonymous with the last form in each column (aama and (e)te).

These potential instances of homonymy are recognised by Fulfulde-speakers, and, on the whole, they are deliberately avoided. Usually, the -aa suffix becomes -aayi in front of ma, cf. 318.b., but remains as -aa in front of all other pronouns, cf. 318.b.. Thus:

- 318.a. Min-kokk-aayi-ma ko ngid- \emptyset -daa.
 we give you what want you
 VAP VAP
 'We didn't give you (sg) what you wanted.'
- b. Min-kokk-aa-mo ko ngid- \emptyset -daa.
 we give him what want you
 VAP VAP
 'We didn't give him what you (sg) wanted.'

The -aama suffix, on the other hand, is retained for the General Completive Passive, as in 318.c.:

- 318.c. Min-kokk-aama ko ngid- \emptyset -daa.
 we give what want you
 VAP VAP
 'We've been given what you (sg) wanted.'

However, Fulfulde-speakers do recognise -aa-ma as a possible alternative to -aayi-ma in 318.a., and it seems that a form such as min-kokk-aa-ma in 318.d. could be used in the sense of 318.a., provided that there were enough contextual clues (in the discourse situation, etc.) to disambiguate it:

- 318.d. Min-kokk-aa-ma ko ngid- \emptyset -daa.
 we give you what want you
 VAP VAP
 'We didn't give you what you wanted.'

Ambiguity in the General Incompletive is normally avoided by using the General Incompletive Passive participle instead of a verbal complex. Thus 319.a. would normally be used, but not 319.b.:

- 319.a. Mi-koow-etee-do ɓii Yaamuusa.
 I marry child Yamusa.
 CL
 'I'm to be married to the child of Yamusa.' (literally,
 'I'm the/a person to be married to the child of Yamusa.')
- ?b. Mi-hoow-ete ɓii Yaamuusa
 I marry child Yamusa.

The -et-e form is normally reserved for the General Incompletive Active with a 2sg Object:

- 319.c. Mi-hoow-et-e ɓii Yaamuusa.
 I marry you child Yamusa
 'I'll marry you to the child of Yamusa.'

Nevertheless, Fulfulde-speakers do recognise -ete as a possible suffix for the General Incompletive Passive (cf. 319.b.); and it is accepted by some speakers in unambiguous contexts. For example, winnd- 'write' takes a direct object referring to what has been written; and any other object would have to be accompanied by an extension (such as -an 'to/for'). Thus the -e part of -ete in 319.d. could only be interpreted as being part of the General Incompletive Passive suffix, and not as the 2sg object pronoun found in 319.c.:

319.d. Dereeji d̄ii mbinnd-ete.
 letters these write
 VAP

'These letters will be written.'

5.5.3. 'Accidental' Homonymy - (ii)

I shall deal here with four instances of morphological homonymy that are automatically disambiguated by context.

Firstly, with a subject that semantically includes 3rd person, complexes of the Relative Completive Middle and the General Completive Active may be identical, for they have SV order, and the basic suffix is -ii (cf. table XXII). Here are some examples of sentences containing homonymous complexes:

320.a. Sey min-kadd-ii gude 'amin.
 then we gird wrappers our
 VAP

'Then we (women) put on our wrappers (= skirts).'

b. Min-kadd-ii minyiimin.
 we gird our younger sibling
 VAP

'We dressed our younger sister in her wrapper.'

Now, sey must be followed by a Relative (rather than Non-Relative) complex; and the non-personal object (gude 'amin) in 320.a. indicates that the action of 'wrapping around' (hadd-) must be being performed reflexively (ie. on the person indicated by the subject), rather than on another person. For these two reasons, the complex in 320.a. will be interpreted as realising the properties relative and middle. As for 320.b., since the object is personal (minyiimin), the action denoted by the verb will be interpreted as being performed on the object, rather than reflexively; and the voice of min-kadd-ii in 320.b. will therefore be interpreted as active rather than middle. (There is, however, no conjunction in 320.b. (like sey in 320.a.) which requires a Relative or Non-relative complex; and so the syntax of 320.b. gives no clues as to whether the complex is Relative or Non-relative.) A Relative Completive Active complex would have -i rather than -ii suffix; and therefore, the complex in 320.b. must be interpreted as being of the General Completive Active.

With a Subject that includes 1st and/or 2nd Person, complexes of the Relative Completive Middle and of the General Completive Active are morphologically distinct: for the former have VS order, and participate in the Suffixal Precedence Hierarchy, whereas the latter do not. These morpho-phonological and morpho-syntactic factors help to reduce the number of homonymous complexes of these two conjugations.

Secondly, it is possible to find complexes of the Negative Completive Active and of the Relative Completive Passive that are homonymous. For example:

321.a. Nyaako hoow - aa - mo.
 father marry not her
 VAP
 'Father didn't marry her (off).'

b. Ndee Maaroori hoow - aa - mo?
 when Maaroori marry him
 VAP
 'When was Maaroori married to him?'

In such pairs of sentences, several factors help to disambiguate the homonymous verbal complexes. Firstly, the semantics of the verbal root will often dictate the interpretation of the voice of the complex. In the case of hoow- 'marry', for example, a father marries off his child, rather than is married off himself; and 321.a. is therefore likely to be interpreted as realising active voice. However, a girl is married off; and so 321.b. is likely to be interpreted as realising passive voice. (In any case, there are very few verbal roots that can have a direct object with the passive voice.) Secondly, the syntax of a sentence with a question-word, such as 321.b. requires a Relative conjugation; whereas there is no obvious syntactic need for a Relative conjugation in 321.a.. This fact will help 321.a. to be interpreted as Negative Completive Active, and 321.b. as Relative Completive Passive. Lastly, of course, the general discourse-context will provide clues as to the meaning of such sentences. All in all, there is in fact little danger of misinterpretation.

Thirdly, there is sometimes homonymous realisation of a 2sg Subject in the Subjunctive and of the VAP-suffix of the Negative

- 323.a. Ndee puɕɕf - at-aa?
 when start you
 VAP
 'When will you start?'

However, -ataa is in fact the conjugation-suffix for the Negative Incompletive Active:

- 232 .b. Husseini'en puɕɕf - ataa.
 Husseini's start
 people
 VAP
 'Husseini's people won't start.'

The complexes in 323. are homonymous, phonologically, although their morphological structure is different (as reflected by the extra hyphen in 323.a.). There is in fact no danger of ambiguity here. In 323.a., there is no subject before the root, so aa must necessarily be interpreted as subject (as indeed we observed happened with 322.a. too); and in any case, ndee requires a Relative conjugation, which often results in VS order. In 323.b., Husseini'en is obviously the subject, so there is no danger of the aa of -ataa being interpreted as subject.

5.6. Conclusion

This chapter has been an attempt to look at the morphology of Fulfulde verbal complexes from the theoretical rather than the descriptive point of view. With the development of a more adequate theory of morphology, perhaps it will eventually be possible to provide a more systematic account of the types of exponence displayed in an inflecting language like Fulfulde.

Chapter 6

Topic and Focus

6.0. Introduction

The aim of this chapter is to establish the categories of topic and focus, and to highlight some of their syntactic and morphological exponents.

These two categories are in fact recognised in Arnott (1970: §7.10 - §7.17 and §7.7. respectively), though under a different guise. Arnott calls topic 'prelude', and focus 'emphasis'. However, since the morphological and syntactic evidence of Fulfulde bears comparison with that of other languages where these categories have been established, it seems advisable to use the more commonly-accepted terminology.

A topic is necessarily an NP; a focussed item may, however, be an NP, a verb, or an adverb.¹ A focussed NP resembles a topic NP inasmuch as it occurs at the beginning of a sentence. Although the resemblance ends there, there is considerable room for confusion between a topic NP and a focussed NP, and for this reason, focussed NP's will be allocated considerably more attention here than other focussed constituents.

After some initial exemplification, the discussion of topic will consider topic and anaphoric reference (§6.1.1.); variation in topic-position within the sentence (§6.1.2.); and topic markers (§6.1.3.). The discussion of focus will be divided into a consideration of NP focus (§6.1.2.) and verb focus (§6.2.2.). Finally, some concluding remarks about focus will be made (§6.2.3.).

6.1. Topic

Topic NP's were first discussed and defined in section §2.3.1. above. Many types of sentence may be preceded by such an NP. However, in

this outline, I shall concentrate on the occurrence of a topic with the types of sentence that are discussed in various parts of this study, and only brief mention will be made of topic in relative clauses and other subordinate clauses.

Here, then, are some examples of topic NP's. 324 . and 325. are verbal sentences, the former 'neutral', the latter with a focussed constituent; 326. is a non-verbal sentence.²

324. Kanje, mi-'annd-aa -de.
 them I know not them
 TOPIC VAP
 '(As for) them (eg. books), I don't know them.'
325. 'Innde maako, Gaya 'o-wi'-etee.
 name his Gaya he call
 T O P I C FOCUS VAP
 '(As for) his name, he's called Gaya.'
326. Mo nan-ataa Fulfulde fu, 'o kaado.
 who hear not Fulfulde all he non-Fulani
 VAP
 T O P I C
 'Whoever does not understand Fulfulde is a non-Fulani.'

Note that the above examples involve various types of topic NP's. Kanje in 324. is an independent pronoun. 'Innde maako in 325. consists of a head ('innde) plus genitival modifier (maako). Mo nan-ataa Fulfulde fu in 326. consists of a headless relative clause which includes the quantifier, fu. (Fu 'quantifies' mo, not Fulfulde, and conveys the '-ever' of 'whoever'.) Various other types of NP structure will be exemplified in the topic NP's shown during the following discussion; and in the section on topic and anaphora (§6.1.), the importance of the nature of the topic NP will become apparent.

Note also that either part or all of the topic NP in the above sentences is referred to anaphorically in what we may call the 'comment' part of the sentence (cf. Gruber 1969 and Gundel 1977). The anaphoric pronouns in the above examples are -de, 'o- and 'o in 324.-326. respectively. Because of the presence of such pronouns in the comment, it has been argued that a topic NP is extraposed from within the comment by a process of 'topicalisation'. Such an analysis is made of Hausa topics, for example, in Jaggar (1978).

and comment would be implied. These matters will be discussed further in §6.1.3.. For the moment, however, it should be noted that when using the term 'topic', I include the topic-marker; but 'topic NP' excludes the topic-marker.

The structure of this section on topic is as follows. In §6.1.1., I shall discuss anaphora within topic-comment sentences. Then, in §6.1.2., I shall turn to the position of a topic in a sentence. Finally, in §6.1.3., I shall discuss the distribution of topic-markers such as boo and kam.

6.1.1. Topic and anaphoric reference

In this section, I shall be concerned with the way in which the topic is anaphorically referred to by pronouns, or by zero, in the comment. The discussion can usefully be divided according to the case-function of the anaphoric pronouns or zero.

6.1.1.1. Subject and Topic coreferential

Let us compare the following three sentences:

- 328.a. Kambe, no be - mbi'-etee?
 them how they call
 TOPIC S VAP
 '(As for) the what are they called?'
- 329.a. Bee, no \emptyset mbi'-etee?
 these how call
 TOPIC S VAP
 '(As for) these (people), what are they called?'
- 330.a. Haabe doo, no \emptyset mbi'-etee?
 non-Fulani here how call
 TOPIC S VAP
 '(As for) the non-Fulani here, what are they called?'

These sentences are similar, yet crucially different. All have a topic-comment structure; all contain the question-word no followed by a verbal complex of the Relative Incomplete Passive conjugation; and the verbal root of each has the prenasalised form, mb-, which is characteristic of a preceding plural subject. However, 328.a. has an independent pronoun, kambe, as topic, and be- as subject; 329.a.

has a deictic pronoun, bee, as topic and zero subject; and 328.a. has a nominal topic, Haabe (qualified by doo), and zero subject. How can we account for these differences in subject-form, given the fact that Kambe, Bee and Haabe all belong to, or refer to, the personal plural nominal class?

Essentially, when the topic and subject of a sentence are coreferential, then the form of the subject is determined by the nature of the topic NP. The following rule in fact operates:

If the topic and subject of a sentence are coreferential, then zero subject normally occurs, although a dependent pronoun (such as be- in 328.a.) may optionally occur. However, if the topic is an independent pronoun (such as kambe in 328.a.), then the dependent pronoun subject is obligatory.

This rule precludes 328.b. as a variant of 328.a., but allows 329.b. and 330.b. as variants of 329.a. and 330.a.:

328.b. *Kambe, no ∅ mbi'-etee?
 them now call

329.b. Bee, no be- mbi'-etee?
 these how they call
 '(As for) these (people), what are they called?'

330.b. Haabe doo, no be- mbi'-etee?
 non-Fulanis here how they call
 '(As for) the non-Fulanis here, what are they called?'

In other words, a dependent subject pronoun such as be- is obligatory with an independent pronoun topic such as kambe; but it is optional with a topic of any other form, such as the deictic pronoun bee in 329., and the nominal Haabe in 330..

6.1.1.2. Object and Topic coreferential

When the topic is coreferential with the object, or one of the objects, zero object seldom occurs.³ This is true regardless of whether the object is a direct object (cf. 331.) or an indirect object (cf. 332.), and regardless of whether the topic is an independent pronoun (cf. 332. 331.b. and 332.b.) or not (cf. 331.a. 332.a.). The 'non-zero' objects in the following examples are underlined:

- 331.a. Dereeji ɕii, sey min-njanng - a - ɕi.
 letters these must we read them
 TOPIC VAP
 '(As for) these letters, we must read them.'
- b. Kanji, sey min-njanng - a - ɕi.
 them must we read them
 TOPIC VAP
 '(As for) them, we must read them.'
- 332.a. Banndam, 'a - hoow - aa - mo ɕiyaa.
 my kinsman you marry not him your child
 TOPIC VAP
 '(As for) my kinsman, you didn't marry your child to him.'
- b. Kanko, 'a - hoow - aa - mo ɕiyaa.
 him you marry not him your child
 TOPIC VAP
 '(As for) him, you didn't marry your child to him.'

Zero never occurs as the object of a preposition:

333. Labi 'am kesi, mi-ta'y-ir - ii kusel 'e maaki.
 knife my new I cut meat with it
 T O P I C EXT VAP
 '(As for) my new knife, I cut meat with it.'

6.1.1.3. Genitive and Topic Coreferential

When the topic is coreferential with a genitive, then the situation is slightly more complicated than that just described. Generally, the genitive pronoun of the relevant nominal class is used (cf. 334.a. and b.), or of the relevant 1st or 2nd person (cf. 335.a. and b.):

- 334.a. Kanko, na'i maako fu mbaat-id - ii.
 him cows his all die
 TOPIC EXT VAP
 '(As for) him, all his cows have died.'
- b. Puccu 'am, mi-heɓ-aayi maagani maagu.
 horse my I get medicine its
 TOPIC VAP
 '(As for) my horse, I haven't got its medicine.'
- 335.a. Minn, ɕiɕe 'am nan - ataa Fulfulde.
 me children my hear not Fulfulde
 TOPIC VAP
 '(As for) me, my children don't understand Fulfulde.'

- 335.b. 'Onon, tokoye wuro moodon?
 you where home your
 TOPIC
 '(As for) you (pl), where is your home.'

The sentences of 334. contain a 3rd person topic (kanko and puccu 'am), and the appropriate genitive pronoun in the comment (maako and maagu); while those of 335. contain a 1st or 2nd person topic (minn and 'onon), and the appropriate genitive pronoun ('am and moodon).

However, if the topic is a nominal of the singular personal class ('Q), then the genitive pronoun muudum is used instead of maako. Thus if we replace kanko of 334.a. by the nominal nyaako 'father', maako will have to be replaced by muudum:

- 336.a. Nyaako, na'i muudum fu mbaat - id - ii.
 father cows his all die
 EXT VAP
 '(As for) father, all his cows have died.'

- b. *Nyaako, na'i maako fu mbaat - id - ii.
 father cows his all die
 EXT VAP

336.b. is unacceptable because maako cannot refer back to a nominal. A variant of muudum is mum, thus:

- 336.c. Nyaako, na'i mum fu mbaat - id - ii.
 father cows his all die
 EXT VAP
 '(As for) father, all his cows have died.'

Muudum and mum are interchangeable, and 336 .a. and c. have exactly the same meaning.

There are two types of topic that seem to waver between maako and muudum (or mum) in their anaphoric requirements. A topic of the singular personal class, and which includes a deictic adjective or pronoun, may be referred to either by maako or muudum (cf. 337.a. and b.); and this is also true of a topic of the singular personal class if it includes a participle (cf. 338.a. and b.). For example, both of the following were accepted by informants:

- 337.a. 'Otton debbo, mi-'annd-aa 'innde maako.
 that woman I know not name her
 VAP
 '(As for) that woman, I don't know her name.'
- b. 'Otton debbo, mi-'annd-aa 'innde mum.
 that woman I know not name her
 VAP
 '(As for) that woman, I don't know her name.'

And both of the following were also accepted, though there was a certain amount of doubt about the second, which I have therefore marked (?):

- 338.a. Gad^o-do kuugal ngal, yaadu maako farit-ii.
 do SG work the journey his postpone
 PERS VAP
 CL
 PARTICIPLE
 '(As for) the person who did the work, his journey
 has been postponed.'
- (?)b. Gad^o-do kuugal ngal, yaadu muudum farit-ii.
 do SG work the journey his postpone
 PERS VAP
 CL
 PARTICIPLE
 '(As for) the person who did the work, his journey
 has been postponed.'

Further, deeper, research will perhaps clarify some of the issues involved here.

6.1.1.4. Anaphoric Reference: Summary

Before discussing the more general implications of the observations made in this section, let me summarise them in tabular form. Table XXIX shows how a third person case-function is realised if it is coreferential with the topic of the same sentence. In considering the table, the following points should be borne in mind:

- (i) First and second persons have not been shown, since their form does not depend on the nature of a preceding coreferential topic.
- (ii) The Nde class has been arbitrarily chosen to represent non-personal classes.

- (iii) Participles based on war- 'come' have been arbitrarily chosen to represent all participles.
- (iv) Pullo/Fulbe 'Fulani/Fulani', and asaweere 'week' have been arbitrarily chosen to represent all other NP's.

Table XXIX

Form of a 3rd Person Case-function if it is coreferential with the Topic of the same Sentence

<u>Nature of Topic NP</u>		<u>Nature of Coreferent of Topic in Comment</u>			<u>Class</u>
		<u>Subject</u>	<u>Object</u>	<u>Genitive</u>	
Independent Pronoun	kanko	'o	mo	maako	'O
	kambe	be	be	mabbe	Be
	kayre	nde	nde	mayre	Nde
NP including deictic	'oo	∅/o	mo	maako/muudum	'O
	bee	∅/be	be	mabbe	Be
	ndee	∅/nde	nde	mayre	Nde
NP including participle	garaydo	∅/o	mo	maako/muudum	'O
	waraybe	∅/be	be	mabbe	Be
	waraynde	∅/nde	nde	mayre	Nde
Other NP	Pullo	∅/o	mo	muudum	'O
	Fulbe	∅/be	be	mabbe	Be
	Asaweere	∅/nde	nde	mayre	Nde

What are the implications of the observations made in this section? First of all, I think that they should be studied in the context of the system of reference in the language as a whole: for the way in which a subject, object, or genitive is realised if it is coreferential with the topic generally correlates with the way each of these cases is realised if it is coreferential with any item in the same horizontal line in table XXIX. So, for example, while maako may have a kanko topic as its antecedent (cf. sentence 334.a., page 253), it may also have a kanko subject as its antecedent, or a mo object. These latter facts are exemplified in 339.a. and b.:

339.a. Kanko nyo'-i ngafalewol maako.
 he sew gown his

VAP

'It's he who sewed his (own) gown.'

- b. Mi-yigg-an-ii mo baawo maako.
 I rub for him back his
 VAP

'I rubbed his back for him.'

Similarly, while mum/muudum may have a noun topic as its antecedent, it may also have a noun subject (cf. 340.a.) or object (cf. 340.b.) as its antecedent:

- 340.a. Pullo semt-ay 'afo mum.
 Pullo be shy first-born his
 VAP

'A Fulani is shy of/shows respect to his first-born child.'

- b. 'On-ngi'-ii Dawoobe 'e danyoobe mum?
 you see Dawoobe and parents his
 VAP

'Did you see Dawoobe and his parents?'

The only caveat that needs to be made concerning the 'mutual referability' of the items in the horizontal lines of table XXIX is that if 'o or mo has been used, then it must be referred to by 'o, mo or maako, not \emptyset or muudum/mum. Thus 341.a. is correct, but 341.b. is not:

- 341.a. Raa mo 'e-mo-wuund-ii binngel maako.
 see him he hug child his
 VAP

'Here he is, hugging his child.'

- b. *Raa mo 'e- \emptyset -wuund-ii binngel mum.⁴
 see him hug child his

In summary, then, table XXIX is not only useful for determining the form of an anaphoric subject, object or genitive that refers back to a topic; it is also useful for determining the form of such a subject, object or genitive referring back to any case-function - though with the caveat mentioned in the preceding paragraph.

Since the main concern of this section is topic NP's, rather than reference in general, I shall leave this matter here. However, I believe that it could lead to fruitful research in the future.

6.1.2. The Position of a Topic NP in a sentence

The examples given so far in this section have the topic NP in sentence-initial position. This is to be expected, for the topic represents 'given' information, about which comment is made, and it therefore more naturally occurs before the comment. In Fulfulde, it is possible, however, for a topic to be in non-initial position. In this section, I shall deal with the principal exceptions to the sentence-initial rule.

6.1.2.1. After-thought Topic

First of all, one finds 'after-thought topics' in Fulfulde. (Concerning this construction, see Givón 1976, for example.) It is arguable that these should be treated separately from other, 'ordinary', topics. However, for the purposes of this study, I shall treat them as variations of the same construction. The after-thought topic in 342. is underlined:

342. Dume 'o-wad-ata, kanko boo?
 what he do him TM
 'What's he do/What's he doing, him, on the other hand?'
 'He, on the other hand, what's he do/what's he doing?'

An after-thought topic may in fact co-occur with an 'ordinary' topic, for instance:

343. 'Oo, no Ø wi'-etee, mo jooni?
 this how call him now
 'This person, what's he called, him of today?'
 'What's he called, the present one (eg. leader)?'

Here, 'oo is an 'ordinary' topic, and mo jooni an after-thought topic. Alternatively, 'oo and mo jooni could be analysed as a 'discontinuous topic'.

6.1.2.2. Inversion of Topic and Question-Word, Relative Pronoun or Adverb

Some speakers of the Kaceccereere dialect accept the inversion of a topic NP and a question-word (cf. 344.) or a relative pronoun or adverb (cf. 345.). Thus, the a. sentences below have the topic in initial position, but inversion has occurred in the b. sentences:

- 344.a. 'Aan, moye ngid- \emptyset - daa wolw -an-go?
 you whom want you speak to
 TOPIC VAP EXT INF
 '(As for) you (sg), whom do you want to speak to?'
- b. Moye 'aan, ngid- \emptyset - daa wolw -an-go?
 whom you want you speak to
 TOPIC VAP EXT INF
 '(As for) you (sg), whom do you want to speak to?'
- 345.a. Bee kammaa, nde \emptyset senndir-i, \emptyset ngart-i Kaceccere'en.
 these when separate become Kaceccere'en
 TM VAP VAP
 T O P I C S S
 '(As for) these (people), when they separated (off),
 they became Kaceccere'en.'
- b. Nde Bee kammaa, \emptyset senndir-i, \emptyset ngart-i Kaceccere'en.
 when these separate become Kaceccere'en
 TM VAP VAP
 T O P I C S S
 'When these (people) separated (off), they became
 Kaceccere'en.'

It must be emphasised that 344.b. and 345.b. were not accepted by all my informants, and I therefore suspect that this type of inversion is only marginally acceptable. It is also worth noticing that such inversion occurs most easily, perhaps only, when the topic is coreferential with the subject.

6.1.2.3. Complement Clauses

Another circumstance when a topic does not always occur in initial position is when its comment is a complement clause, ie. the object of a verb of thinking, knowing, etc.. Consider sentence 346.a.:

- 346.a. Mi-tamm-ii, bikkoyŋ wojjere, fowru looh-ay-koyŋ.
 I think children hare hyena hunt them
 VAP T O P I C VAP
 'I think the hyena hunts leverets.'

Here, the topic (bikkoyŋ wojjere) intervenes between the main clause and its complement. However, a variant of 346.a. is 346.b., where the topic is in the more normal, sentence-initial position:

- 346.b. Bikkoyn wojjere, mi-tamm-ii fowru looh-ay-koyn.
 children hare I think hyena hunt them
 T O P I C V A P V A P
 '(As for) leverets, I think the hyena hunts them.'

6.1.2.4. Two Topics

A final type of sentence where a topic NP is not in initial position is where there are two topic NP's - they cannot both be simultaneously in initial position. Consider sentence 347., for example, where the first topic is an independent pronoun ('aan'), and the second an NP that includes a relative clause (ko ngidf-daa fu):

347. 'Aan, ko ngidf-~~o~~-daa fu, sey be - kokk-u-maa-dum.
 you what want you all must they give you it
 V A P V A P
 TOPIC T O P I C
 '(As for) you (sg), whatever you want, then they should give it you.'

Here, the first topic is coreferential with the indirect object (-maa-) and the second one is coreferential with the direct object (-dum). The second topic contains a quantifier, fu 'all'. (Fu and pat, both meaning 'all'/'every', and tan, meaning 'only', often occur in this topic-final position. Their co-occurrence possibilities with the topic-markers that are discussed in the next section, have yet to be investigated.)

6.1.3. Topic-Markers

Certain 'particles' are sometimes used to mark off a topic from the rest of a sentence, i.e. from the comment. Such is for instance, kam (found in 327. above). Other such topic-markers are boo, maa, (which is almost certainly borrowed from Hausa), and kammaa (which is sometimes used in other ways as well as a topic-marker).

Topic-markers 'oil the wheels' of discourse, but they are not syntactically obligatory. In fact, many of the examples given so far are not accompanied by a topic-marker. However, since these items frequently occur, I shall offer an explanation of how a sample of them are used.

6.1.3.1. Kam

Kam is the most 'neutral' of the topic-markers, which is perhaps why it is sometimes combined with one of the less 'neutral' ones. It may be used to mark the first topic in a series of sentences on a related theme in the discourse.⁵ For example:

348. Altine kam, 'e-mo-yid-i maaroori.
 Altine she like rice
 TOPIC TM VAP
 '(As for) Altine, she likes rice.'

Let us assume that this is the opening sentence in a conversation. Gradually, we shall follow through various possible responses to such an opening. Kam may simply be used to mark the first topic in a discourse (eg. Altine in 348.), or it may be used to relate the next topic (eg. Muusa in 349.a.) to the previous sentence. In the latter function, it is similar to English 'and'. Thus:

- 349.a. Muusa kam, 'e-mo-yid-i masaari.
 Musa he like maize
 TOPIC TM VAP
 'And (as for) Musa, he likes maize.'

Although there is a contrast both in the topic and comment of 348. and 349.a., the contrast is not brought out, not emphasised.

Kam is rarely collocated with the 3rd person independent pronouns, which all consist, morphologically, of kaN- (where N represents a nasal that is homorganic with the subsequent consonant) plus a nominal class-suffix. A collocation such as kanko kam is, perhaps, not euphonious to the Fulani ear. Alternatively, I wonder whether kam and kaN- are cognates, and whether they are not easily collocated for that reason?

6.1.3.2. Boo

Boo implies a contrast of both topic and comment. Thus, if a speaker wanted to emphasise the difference between the culinary tastes of Altine and Musa, he would use boo instead of kam, thus:

- 349.b. Muusa boo, masaraari 'o-yid'-i
 Musa maize he like
 TOPIC TM VAP
 'Musa, on the other hand, it's maize he likes.'

The discourse-function of boo is thus roughly equivalent to 'on the other hand', 'but', or 'however' in English. Here are some further examples of the use of boo, the first of which involves kam too:

350. Sisilbe kam, to Zaariya Ø ngon-i; Kaceccere'en boo,
 Sulebawa in Zaria live Kaceccere'en
 TOPIC TM S VAP T O P I C TM
 doo Kaceccere Ø ngon-i.
 here Kaceccere live
 'The Sulebawa (Fulani clan) live in Zaria; S VAP
 however, the Kaceccere'en live here in Kaceccere.'
351. Muusa, duubi mum joweetati; Habu boo, duubi mum sappo.
 Musa years his eight Habu years his ten
 TOPIC TM TOPIC TM
 'Musa's eight (years old), whereas Habu's ten.'

6.1.3.3. Maa

Maa means 'also', 'too' or 'even'. It is often used to mark a new topic, whose comment is similar to the preceding one. Thus, if we return to our examples expressing culinary taste, a speaker might say after sentence 349.a.:

352. Minn maa, 'e-mi-yid'-i masaraari.
 me I like maize
 TOPIC TM VAP
 'Me too, I like maize.'/'Even I like maize.'

The comment in 352. is similar to that in 349.a. (both concern the liking of maize), but the topic is different (minn rather than Muusa).

6.1.3.4. Kammaa

The meaning of kammaa is roughly equivalent to English 'moreover' or 'whereas'. It is often placed after a topic (cf. 353.), though it also occurs elsewhere in a sentence (cf. 354.):

- 353 . Bee, sey ∅ laat-i moodi**bb**e; **betton** kammaa, sey
 these then become teachers those then
 TOPIC S VAP TOPIC TM
- ∅ ngadd-an - aa garmaa**je**.
 bring for hoes
 S EXT VAP
- 'These (people), they then became teachers; whereas those, they were brought hoes (ie. became farmers).'

- 354 . Asali na'i wond**on**, kammaa, ko **bur** - i.
 lineage cows is moreover which exceed
 VAP
- 'It's the lineage of cattle (Fulani), moreover, that is best.'

Since kammaa follows the topic, betton, in 353., I have glossed it 'TM' ie. 'topic-marker'. However, since kammaa in 354. does not occur after a topic, but rather after a focussed NP (asali na'i - see section 6.2.1. below) and its accompanying clefting particle (wond**on** - see 6.2.1.7. below), it cannot be glossed 'TM' there. It may be, then, that kammaa should simply be regarded as an adverb that can, sometimes, be placed after a topic.

It seems possible, though it has yet to be proven, that kammaa is derived from a combination of kam and maa, which have just been described. The fact that one informant mentioned the existence of another 'particle'/topic-marker, kambo lends weight to this idea. However, the latter is not used by most of my informants, and the investigation of these possibly compound forms will have to be continued at a later stage.

6.1.3.5. Topic-Markers: Conclusions

Since topic-markers constitute a link between one sentence and another, they should really be considered in their discourse context, rather than within isolated sentences. The remarks made here are intended, then, simply as a pointer to further research in this field.

6.2. Focus

I use 'focus' to refer to a constituent that introduces new or highlighted information into the discourse, and that potentially receives contrastive stress (cf. §1.1.4.3.). I shall concentrate here on some of

the morphological and syntactic exponents of focus, which were touched on in §2.3.2. and §3.7.1.1. above. I deal first with NP focus (in §6.2.1.), and then with verb focus (in §6.2.2.). These two types of focus are mutually exclusive in the same clause, as will be illustrated in §6.2.3..⁶

6.2.1. NP Focus

Focussed NP's, like topic NP's, were first mentioned in section §2.3.1.. Like topic NP's, they usually occur in sentence-initial position. However, if a topic and focussed NP co-occur, the former precedes the latter. Consider the following three sentences, for example (here, as throughout this section, I shall underline a focussed constituent and its English equivalent):

- 355.a. 'A-yoβ-ii-mo ceede dee.
 you pay her money this
 VAP
 'You (sg) paid her this money.'
- b. Ceede dee kam, 'a-yoβ-ii-mo-de.
 money this you pay her it
 TM VAP
 T O P I C
 '(As for) this money, you paid her it.'
- c. Ceedee dee njob-u-daa-mo.
 money this pay you her
 F O C U S VAP
 '(It's) this money you paid her.'
- d. Ceede dee kam, kanko njob-u-daa-de.
 money this her pay you it
 TM VAP
 T O P I C FOCUS
 '(As for) this money, (it's) her you paid it to.'

Sentence 355.a. is a 'neutral sentence', consisting of a verbal complex of the General Completive Active conjugation. Sentence 355.b. begins with a topic ceede dee kam, which is potentially followed by a pause (indicated by the comma), and which is referred to anaphorically by the object pronoun, de - compare the discussion in §6.1.1. above. Sentence 355.c. starts with the NP ceede dee: however, here there is no potential pause, and no anaphoric pronoun referring to ceede dee;

and moreover, the verbal complex is of the Relative Completive Active conjugation. Sentence 355.d. also has ceede dee kam in initial position. This time, ceede dee kam is followed by potential pause, and is referred to anaphorically by de in the comment; the comment begins with an independent pronoun, kanko, and mo is no longer present in the sentence; and the verbal complex is of the Relative Completive Active. What we have in sentence 355.d. is in fact a topic followed by a comment which begins with a focussed NP.

There are several features of focussed NP's that are illustrated in 355.c. - d.. These are:

- (i) A focussed NP usually requires a relative conjugation in the same clause.
- (ii) A focussed NP is not referred to anaphorically in the same clause.
- (iii) If a focussed NP is an anaphoric pronoun, then it has the form of an independent pronoun, rather than of a dependent pronoun.
- (iv) If a topic NP and a focussed NP co-occur, the former precedes the latter.

In view of (ii), I assume that a focussed NP, unlike a topic NP, (cf. §6.1. above) is part of the matrix sentence, and that it has been fronted by a process of 'focalisation'. This is why I speak of a focussed (rather than focus) NP.

In sections §6.2.1.1. to §6.2.1.4., I shall deal with each of the above features in turn.

6.2.1.1. Focus: Relative Conjugations

A positive sentence containing a focussed NP usually has a relative rather than a non-relative complex. Thus, a General Completive complex, for example, is unacceptable:

355.e. *Ceede dee 'a-yoß-ii-mo.
 money this you pay him
 VAP

355.f. *Ceede dee, kanko 'a-yob-ii-de.
 money this her you pay it
 VAP

As the tree on page 166. demonstrates, there are only two relative conjugations, one each for Completive and Incompletive aspect. This means that the conjugations in the left-hand column below are 'neutralised' in favour of those in the right-hand column:

<u>Non-Relative</u>	<u>Relative</u>
General Completive } Stative	Relative Completive
General Incompletive } Progressive	Relative Incompletive

The occurrence of a Relative Completive instead of a General Completive complex in clauses with a focus has already been exemplified in sentences 355.c. and d.. Here are some further examples of the non-occurrence of the left-hand conjugations in clauses with a focused NP:

356.a. 'E-mi-'annd-i hiigo mum.
 I know friend his
 VAP
 STATIVE

'I know his friend.'

b. Hiigo mum 'annd-u-mi.
 friend his know I
 VAP
 REL COMPL

'(It's) his friend I know.'

c. *Hiigo mum 'e-mi-'annd-i.
 friend his I know

357.a. 'A-tuf - ay na'i?
 you vaccinate cattle
 VAP
 GEN INCOMPL

'Do you (sg) vaccinate cattle?'

b. Na'i tuf - at-aa?
 cattle vaccinate you
 VAP

REL INCOMPL

'Is it cattle you vaccinate?'

357.c. *Na'i 'a-tuf - ay.
cattle you vaccinate

358.a. 'On-don - mbaal - an - a - be?
you spend for them
night

EXT VAP
P R O G R E S S I V E

'Are you (pl) spending the night at their place?'

b. Kambe mbaal - an - t - on?
them spend for you
night

EXT VAP
REL INCOMPL

'Is it at their place that you're spending the night?'

c. *Kambe 'on-don-mbaal-an-a?
them you spend for
night

In 356. - 358., each a. sentence is 'neutral' and contains a non-relative complex; each b. sentence contains a focussed NP, and a complex of the requisite relative conjugation (completive in 356.b., incompletive in 357.b. and 358.b.); each c. sentence is unacceptable, because a non-relative conjugation has been used (Stative Active in 356.c., General Incompletive Active in 357.c., and Progressive Active in 358.c.).

(Only a sentence with a Subjunctive verbal complex does not undergo a change of conjugation if one of its NP's is focussed. For example:

359.a. 'O-weet - an - a bandiiko.
he visit for his kinsman
early

EXT VAP

'He should visit his kinsman in the early morning.'

b. Bandiiko 'o-weet - an - a.
his kinsman he visit for
early

FOCUS EXT VAP

'Its his kinsman he should visit early in the morning.'

6.2.1.2. Focus: no Anaphoric Pronouns

In the discussion of sentences with a topic, it was noted that the topic is frequently referred to anaphorically in the comment (see section §6.1.1.). However, a focussed NP is not normally referred to anaphorically in the same sentence. Consider, for example:

- 362.a. Koynton, mi-looh-ii-koyŋ.
 those I hunt them
 TOPIC VAP
 'Those (little ones), I hunted them.'
- b. Koynton looh-u-mi.
 those hunt I
 FOCUS VAP
 'It's those (little ones) that I hunted.'

In 362.a., koynton is a topic, which is referred to anaphorically by koyŋ in the comment. However, in 362.b., koynton is the focussed object, and it is not referred to anaphorically in the rest of the sentence. In fact, if koyŋ were added to 362.b., then the focussing effect would be lost, and an unacceptable sentence would result:

- 362.c. *Koynton looh-u-mi-koyŋ.
 those hunt I them

6.2.1.3. Focus: Pronouns

A dependent anaphoric pronoun never occurs as the focus of a sentence; rather, an independent pronoun must be used in its place:

- 363 .a. 'Aa-don-jill-an-a-mmi-dfi?
 you mix for me them
 VAP
 'Are you mixing them for me?'
- b. Kanji njill-an-t-aa-mi?
 these mix for you me
 FOCUS VAP
 'Is it these you're mixing for me?'
- c. *Di njill-an-t-aa-mi?
 them/ mix for you me

363.a. is a neutral sentence. In 363.b., the direct object pronoun has been focussed and taken the form kanji; and the verbal complex

is of the Relative Incompletive conjugation. In 363.c., all the requirements for focussing have been met, except that di has been used instead of kanji; 363.c. is therefore unacceptable.

Deictic pronouns and adverbs are often focussed. For example:

- | | | | |
|--------|--|----|---|
| 364.a. | Mi-soor-ii ndetton.
I sell that one
'I sold that one.' | b. | <u>Ndetton</u> soor - u - mi.
that one sell I
FOCUS VAP
'It's <u>that</u> one I sold.' |
|--------|--|----|---|

However, unlike anaphoric pronouns, deictic pronouns and adverbs only have one form, regardless of whether they are focussed (as in 364.b.) or not (as in 364.a.).

6.2.1.4. Focus with Topic

Sentence 355.d. above has provided us with an example of a topic preceding a focussed NP. Here is a further example:

- | | |
|--------|---|
| 365.a. | 'Onon, <u>bilkiire</u> mbolw - ot - on.
you pidgin speak you
Fulfulde
TOPIC F O C U S VAP
'You, (pl) speak <u>pidgin</u> Fulfulde.' |
|--------|---|

If the order of the two constituents is reversed, then an unacceptable sentence results:

- | | |
|--------|--|
| 365.b. | *Bilkiire 'onon mbolw-ot-on.
pidgin you speak you |
|--------|--|

The only occasion when a topic does not precede a focus is with an after-thought topic, (cf. §6.1.2.1. above) such as 'onon in 363.c.:

- | | |
|--------|--|
| 365.c. | <u>Bilkiire</u> mbolw - ot - on, 'onon.
pidgin speak you you
F O C U S VAP
'You speak <u>pidgin</u> , you.' |
|--------|--|

6.2.1.5. Question-Words

Questions involving a question-word are syntactically very similar to sentences involving a focussed NP. Compare, for example, the following:

- 366.a. Moye meel - an - too - 'en?
whom put on for we
turban
EXT VAP
'In whose honour are we (incl) putting on our turbans?'
- b. Laamiido meel - an - too - 'en.
Emir put on for we
turban
FOCUS EXT VAP
'We're putting on our turbans in honour of the Emir.'
- 367.a. Dume dany-aa?
what bear
VAP
'What has she had?'
- b. Ko natt-i dany-aa.
what enter bear
VAP VAP
FOCUS
'She's given birth to a boy.'

The verbal complexes of the a. sentences in 366. and 367. are each of a relative conjugation, just as are those of the b. sentences; but whereas the b. sentences contain a focussed NP, the a. sentences contain a question-word. In a sense, question-words and focussed NP's fill the same syntactic slot in such sentences, and so constitute part of the same syntactic paradigm; and I shall therefore henceforth consider question-words in Fulfulde to be a particular type of focus. This is in line with Welmers (1973: 416-7), for example.

6.2.1.6. Focussed Adverbs

Focussed adverbs and adverbial phrases behave syntactically like focussed NP's. Consider the following, for example:

- 368.a. Tokoye di - ndur-eteetee?
where they graze
VAP
'Where are they grazed?'
- 369.a. Non ndef - ir - ay - mi-ngal.
thus cook I it
EXT VAP
'That's how I cook it.'

In view of the remarks that have just been made concerning question-words, I have underlined tokoye, and consider it as a focussed adverbial question-word. In both 368. and 369a, the focussed adverb has been fronted, and is accompanied by a relative verbal complex - just as

happens with a focussed NP. Moreover, a variation of the above sentences involves a pseudo-cleft construction, with a copular verb linking the focussed adverb and a relative clause:

368.b. Tokoye woni to di - ndur-eteē?
 where is where they graze
 VAP

'Where is where they are grazed?'
 'Where is it that they are grazed?'

369.b. Non woni no ndef-ir-ay-mi-ngal.
 thus is how cook I it
 EXT VAP

'Thus is how I cook it.'/'That's how I cook it.'

Whether sentences such as 368.b. and 369.b. are identifying sentences, with an underlying 'NP be NP' deep-structure is a moot point. (For discussion, see Pinkham and Hankamer 1975, and Gundel 1977, for example.) Given the syntactic similarities between sentences with a focussed adverb, and those with a focussed NP, it seems likely that they are in fact identical in deep-structure. It is to be hoped that future research will clarify this issue.

6.2.1.7. NP Focus: Conclusions

This section has been concerned with NP focus and two of its most important exponents: fronting, and the use of a relative conjugation. By way of conclusion, I should like to show the similarity between focus constructions and relative clauses. Consider the underlined verbal complexes in the following, each of which is of a relative conjugation:

370.a. Mo 'annd-in-∅-daa winnd-an-aa-'en.
 whom know you write to not us
 EXT VAP EXT VAP

'The person you informed has not written to us.'

b. Minn 'annd-in-∅-daa.
 me know you
 EXT VAP

'You informed me.'

370.c. Minn woni mo 'annd-in-Ø-daa.
 me is whom know you
 EXT VAP

'The person you informed is me.'

371.a. 'Agoogoyel ngel sood-u-mi sad-aa.
 watch which buy I dear not
 VAP VAP

'The watch I bought is not expensive.'

b. 'Agoogoyel sood-u-mi.
 watch buy I
 VAP

'I bought a watch.'

c. 'Agoogoyel woni ko sood-u-mi.
 watch is what buy I
 VAP

'A watch is what I bought.'

The underlined complexes in the a. and c. sentences are each in a relative clause whose antecedent (mo, ngel, or ko) immediately precedes it. If the relative clauses contain a non-relative complex, unacceptable sentences would result, for example:

370.d. *Mo 'a-'annd-in-ii winnd-an-aa-'en.
 whom you know write to not us
 GEN COMPL ACT

e. *Minn woni mo 'a-'annd-in-ii.
 me is whom you know
 GEN COMPL ACT

The underlined complexes in 370.b. and 371.b. are the 'out of focus' parts of sentences beginning with a focussed NP (minn and 'agoogoyel respectively). Like their counterparts in the a. and c. sentences, they cannot be replaced by a complex of the General Completive conjugation:

370.f. *Minn 'a-annd-in-ii.
 me you know
 GEN COMPL ACT

However, unlike their a. and c. counterparts, they are not in a relative clause.

One way of explaining the occurrence of a relative conjugation with a focussed NP is to postulate that sentences such as 370.b. and

371.b. are derived from sentences such as their c. counterparts. The latter are in fact pseudo-cleft sentences. Further research will, it is hoped, prove whether this suggestion is viable.

Before leaving this matter, I should like to point out that sentences like 370.b. and 371.b. also have cleft counterparts. These involve a topic NP containing a relative clause, followed by the focussed NP and either a dummy subject, dum 'it' (cf. 370.g. and 371.d.), or a clefting particle wondon (cf. 370.h. and 371.e.):

- 370.g. Mo 'annd-in- \emptyset -daa, dum minn.
whom know you it me
EXT VAP
'Whom you (sg) informed, it's me.'/'It's me you informed.'
- h. Mo 'annd-in- \emptyset -daa, minn wondon.
whom know you me is
EXT VAP
'Whom you informed, it's me.'/'It's me you informed.'
- 371.d. Ko sood-u-mi, dum agoogoyel.
what buy I it watch
VAP
'What I bought, it's a watch.'/'It's a watch I bought.'
- e. Ko sood-u-mi, agoogoyel wondon.
what buy I watch is
VAP
'What I bought, it's a watch.'/'It's a watch I bought.'

These also need to be considered in the investigation of sentences with NP focus.

6.2.2. Verb-focus

By verb-focus, I mean the focussing of a verbal root in a complex. This is realised by several methods. The most obvious and frequent is contrastive stress on the root, which I mark in the following examples by means of underlining. However, my main concern here will in fact be the syntactic and morphological, rather than the prosodic, exponents of verb-focus.

6.2.2.1. Completive Aspect

In completive aspect, the Emphatic Completive conjugation is normally used in a positive clause with verb focus:

372.a. 'A - hokk-a ngaa mbabba na?
 you give this donkey
 VAP QU
 'Were you given this donkey?'

373.b. Be - ngar-∅
 they come
 VAP
 'They came.'

Often, such a clause is accompanied by another, contrasting, clause:

372.b. 'A - hokk-a ngaa mbabba na, koo 'a - wujj-u-nga?
 you give this donkey or you steal it
 VAP QU VAP
 'Were you given this donkey, or did you steal it?'

373.b. Naa doo be - ndany-aa, be - ngar-∅.
 not here they bear they come
 VAP VAP
 'It's not here they were born, they came.'
 'They weren't born here, they're immigrants.'

The contrasting clause may similarly contain a focussed verbal root (such as wujj- in 372.b.); but the focus may be elsewhere - in 373.b., it is on the adverb, doo.

An optional accompaniment to the Emphatic Completive in completive aspect is the clefting particle wondon, which was mentioned at the end of the last section (§6.2.1.7.), and illustrated in 370.h. and 371.d.. It is placed after a clause whose verb is focussed, if the verbal complex is in clause-final position. For example:

373.c. Naa doo be - ndany-a, be - ngar-∅ wondon.
 not here they bear they come is
 VAP VAP
 'It's not here they were born, (it's that) they came.'

As the translation of 373.c. suggests, wondon in a sense focusses the whole verbal complex. However, since within a complex the verbal root is the only constituent that is eligible for focus, the effect of wondon is to focus the verbal root. (A focussed pronoun is necessarily fronted, and cannot stay within the complex: cf. the discussion in §6.2.1.2. above.)

A few speakers accept the use of the General Completive conjugation in place of the Emphatic Completive in sentences such as those of 372. - 373.. Thus, 372.c. is marginally acceptable:

- ?372.c. 'A - hokk-aama ngaa mbabba na, ko 'a - wujj-ii-nga?
 you give this donkey or you steal it
 VAP QU VAP
 GEN COMPL GEN COMPL ACT
 PASS
- 'Were you given this donkey, or did you steal it?'

However, any other positive conjugation is totally unacceptable. For example, neither the Relative Completive nor the Stative can be used. (Since sood- does not occur with the Stative, I have used a different root in 374..)

- 372.d. *Kokk-a-daa ngaa mbabba na, ko ngu~~jj~~-u-daa-nga?
 give you this donkey or steal you it
 REL COMPL QU REL COMPL ACT
 PASS

- 374.a. Naa mi-daan-i, mi-jood-i nii.
 not I sleep I sit just
 VAP VAP
 'I'm not asleep, I'm just sitting.'

- b. *Naa 'e-mi-daan-ii, 'e-mi-jood-ii nii.
 not I sleep I sit just
 STAT MIDDLE STAT MIDDLE

372.d. is unacceptable because of its complexes of the Relative Completive, and 374.b. because of its complexes of the Stative. 374.a. however has complexes of the Emphatic Completive, and is therefore acceptable. The fact that neither the Relative Completive nor the Stative can be used in a clause with verb-focus shows that certain distinctions are neutralised with verb-focus, just as they are with NP focus (cf. §6.2.1.1.).

It is perfectly possible for verb-focus to occur in a complex of the Negative Completive. For example:

375. Naa be - piil-aaki to, be - kadd-aaki to.
 not they put not yet they gird not yet
 head-tie
 VAP VAP
 'It's not that they haven't yet put their head-ties
 on yet, they haven't put their wrappers on yet.'

In such instances, focus is realised by means of stress, and by the juxtaposition of contrasting clauses. There is no special negative conjugation for verb-focus.

6.2.2.2. Incompletive Aspect

In incompletive aspect, there is no special conjugation for verb-focus, either positive or negative: the General Incompletive or the Negative Incompletive is used. Thus, the incompletive equivalents of 371.a. and 374.a. are:

- 376.a. Be - "ngar-ay
 they come
 VAP
 GEN INCOMPL ACT
 'They'll come.'
- 377.a. Naa mi "daan-oto, mi "jood-oto nii.
 not I sleep I sit just
 VAT VAP
 GEN INCOMPL GEN INCOMPL MID
 MID
 'I won't go to sleep, I'll just sit down.'

In such sentences, verb-focus is realised by stress (marked by "), or by means of the contrasting verbal roots (daan- vs. jood-).

A Relative or Progressive complex cannot occur in a positive clause with verb-focus. Thus the following are unacceptable variants of 376.a. and 377a.:

- 376.b. *Be - ngar-ata.
 they come
 REL INCOMPL ACT
- c. *'E-be - don-ngar-a.
 they come
 PROGRESSIVE ACTIVE

- 377.b. *Naa daan-otoo-mi, njood-otoo-mi nii.
 not sleep I sit I thus
 REL INCOMPL REL INCOMPL MID
- c. *Naa 'e-mi-daan-oo, 'e-mi-jood-oo nii.
 not I sleep I sit thus
 PROG MID PROGRESSIVE MIDDLE

Thus, when verb-focus occurs in Incompletive aspect, the distinction between the Progressive, the Relative Incompletive and the General Incompletive is neutralised. (It is not yet clear whether the Vague Incompletive can occur with verb-focus.)

A complex of the Subjunctive (cf. 378.), or of the Negative Incompletive (cf. 379.) is perfectly compatible with verb-focus:

378. Ndi 'un - ee koo ndi nam - ee?
 it pound or it grind
 VAP VAP
 SUBJ PASS SUBJ PASS
 'Should it be pounded, or should it be ground?'
379. Naa 'o-yerd - ataako natt-ugo asbiti, 'o-yam^ɗin-taako wondon.
 not he agree not enter hospital he cure not is
 VAP INF VAP
 GEN INCOMPL MID GEN INCOMPL MID
 'It's not that he refuses to go into hospital, it's that he can't be cured.'

6.2.3. Focus: Conclusions

Three other points are worth mentioning in conclusion. Firstly, NP focus and verb-focus seem to be mutually-exclusive, ie. they cannot co-occur in the same clause. For instance 380.a. below has verb-focus (on hett-), and 380.b. has NP focus (on doyaaaje); but these cannot be combined, as in 380.c.:

- 380.a. Faatu hett-u doyaaje.
 Fatu peel yams
 VAP (<Hausa)
 FOCUS
 'Fatu peeled the yams.'
- 380.b. Doyaaaje Faatu hett-i.
 yams Fatu peel
 FOCUS VAP
 'It's yams that Fatu peeled.'

380.c. *Doyaaje Faatu hett-u.

Secondly, it is difficult, if not impossible, to have NP focus in a relative clause. So, while 381.a. below contains a 'normal' relative clause, and was accepted by all informants, 381.b. was found to be only marginally acceptable, with focus on Faatu:

381.a. Raa doyaaje de Faatu hett-i.
 see yams that Fatu peel
 VAP

'Here are the yams that Fatu peeled.'

b. ?Raa doyaaje de Faatu hett-i.
 see yams that Fatu peel

'Here are the yams that Faatu peeled.'

Thirdly, it is impossible to have verb-focus in a relative clause. Thus, 381.c. is completely unacceptable:

381.c. *Raa doyaaje de Faatu hett-u.
 see yams that Fatu peel

No doubt further research into the syntax and semantics of focus constructions will help to explain these restrictions on the occurrence of focussed constituents. For the moment, what is important is the fact that there is ample syntactic and morphological evidence for the establishment of the category of focus in Fulfulde, and that we are thus able to account for the occurrence of a relative conjugation in sentences with a fronted NP, and the occurrence of the Emphatic Completive in sentences that involve verb focus plus completive aspect.

Chapter 6: Footnotes

1. Adverbs in Fulfulde bear comparison with NP's, and this is especially evident in the way adverbs are focussed. Whether adverb, or adverbial phrase, is a useful syntactic (as opposed to morphological) category in the language is not yet certain.
2. Sentence 326. is 'neutral' and non-verbal, with a topic. Non-verbal sentences involving a focussed NP have yet to be investigated.
3. I say 'seldom' rather than 'never', because zero object is sometimes found, for example in recipes, where the object is obvious. An example of zero object is in fact found in sentence 61, page 72: here, however, the object is coreferential with the preceding object, rather than with the topic.
4. The meaning 'Here he is hugging someone else's child' would be rendered by Raa mo 'e-mo wuund-ii binngel mum/muudum.
5. I do not attempt a formal definition of 'discourse' here: I assume that it refers to a series of sentences, in dialogue or monologue or amongst many people, which treat a particular theme. For further discussion see, for example, Grimes (1975).
6. It has not yet been ascertained whether it is useful to distinguish between different sorts of focus (other than NP or adverb focus on the one hand and verb-focus on the other). The distinctions proposed by Dik, within the framework of Functional Grammar, have yet to be investigated in Fulfulde.
7. This sentence raises the question of the possible differences between focus on the verbal root and focus on the VP - if indeed the latter is a useful syntactic category for Fulfulde. This issue will be shelved, since it is not crucial to the establishment of verb-focus in the language.

Conclusion

In this conclusion, I shall summarise the findings of this study, and then point the way to areas of future research.

My principle aim has been to present a systematic description of Fulfulde verbal morphology, and thus to improve on the rather *ad hoc* nature of previous descriptions. However, morphology cannot be considered in isolation, and this study has therefore drawn on other levels of linguistic description, particularly the phonological and the syntactic. Phonological considerations have been used to explain such features as syllable structure and the occurrence of anaptyctic *u*; and syntactic considerations have been used to account for the distribution of certain conjugations, and to establish the category of Noun Phrase, for example. The border areas between morphology and syntax, and between morphology and phonology have also been explored. Thus, the suffixal precedence hierarchy and the occurrence of vowel harmony, for example, involve morpho-phonology rather than pure phonology or pure morphology. Similarly, morpho-syntactic considerations are involved in explaining such issues as morph-shape and morph-order within the verbal complex.

This study has provided new insights into the morpho-phonological, morpho-syntactic and morphological principles that operate within verbal complexes. Most importantly, it has highlighted the principle of sensitive realisation of verbal properties, and within the description of this sensitivity, the suffixal precedence hierarchy is the most significant 'discovery'. It has also shown that morphological patterns exist between conjugations, despite the initially bewildering array of suffixes they display.

However, many of the non-morphological observations made in this study are also new, or are presented in a new way, which it is hoped will make Fulfulde more accessible to linguists seeking exemplification of theoretical issues. Amongst these are the operation of consonant alternation in nominal class suffixes and in root-final position (see §1.2.3. and §1.2.4.); the identification of different types of sentence, and particularly the difference between sentences expressing existence or location on the one hand, and those expressing attribution or identi-

fication on the other (see §2.1.2.); and the establishment of the categories of topic and focus, and their syntactic, morphological and phonological correlates (see §2.3., and chapter 6).

While this study has no doubt made a contribution to knowledge about Fulfulde, it has at the same time exposed many gaps. I shall therefore mention here some of the most obvious areas of possible future investigation.

In chapter 1, certain observations were made concerning the distribution of different types of consonants in root-final position, and these observations were correlated to the system of consonant alternation. A similar analysis of stem-final consonants may well account for the distribution of the grades of nominal-class suffixes: in other words, I believe that there may be a correlation between the final consonant of a nominal stem and the grade of suffix with which that stem combines. Another line of investigation that arises from chapter 1 is the distinction, if any, between nouns and adjectives in Fulfulde.

The non-verbal sentences discussed in chapter 2 raise many issues, amongst which is the syntactic status of the constituent that is commented on or predicated. Further research may well prove that a sentence such as Nyaako 'am Sarkin Fulaani Naraayi (example 54.a., page 70) starts with a topic NP rather than with a subject. The borderline between non-verbal sentences expressing attribution, and those expressing identification also requires further investigation.

It will be remembered that various morphological and morpho-phonological features of participles were invoked in order to distinguish them from verbal complexes (see pp. 77-78). Now, although the distinction is valid, this is not to deny that participles and verbal complexes are extremely similar in many respects: their morphology, the verbal properties they realise, and in the operation of the suffixal precedence hierarchy. At least two lines of enquiry arise with regard to participles. Firstly, their morphological similarity with the relative conjugations suggests a diachronic link with the latter (see McIntosh 1981). Secondly, the use of a participle as a 'predicating NP'

in a non-verbal sentence is a common alternative to the use of a verbal complex (in a verbal sentence); and it is as yet unclear whether there is a semantic distinction between these two syntactic constructions (cf. example 52.a. and footnote 10 chapter 2).

On the morpho-syntactic level, the status of the category of mood has been thrown into doubt by the fact that there is no obvious morphological exponent of the indicative vs. non-indicative distinction, and by the fact that the Subjunctive conjugation apparently straddles the two moods. Further investigation may prove that this category should be dispensed with completely, or that a category of a different character should be established - perhaps factivity vs. non-factivity?

Another morpho-syntactic issue concerns the status of certain constituents inside and outside the verbal complex. The status of 'e, don and of the anteriority-marker are particularly problematic when they occur in non-verbal sentences, for there are no content words for them to 'lean on' (as clitics), or to be appended to (as suffixes, or, for that matter, as prefixes); yet their word status is also doubtful. Within the verbal complex, don in particular seems, in some sense, to intrude, and this idea is corroborated by the fact that don may be replaced by other deictic adverbs such as ton and doo.

The discussion of topic and focus in chapter 6 is simply intended to establish the categories and some of their correlates. However, there is much room for fruitful research in this area. As well as the occurrence of topic in non-verbal sentences (mentioned above), topic and anaphoric reference, and the use of topic-markers are two obvious lines of investigation. As regards focus, the relationship between sentences with NP focus and cleft and pseudo-cleft constructions has yet to be more fully elucidated, as has also the relationship between NP focus constructions and relative clauses, both of which involve a relative conjugation.

This study has been concerned with a relatively unknown dialect. However, comparison with other works on Fulfulde reveals that the morphological, syntactic and phonological issues in other dialects are very similar to those raised here, though they may differ in detail. For example, it is clear that many dialects do have the CVVC and CVCC

syllables that are normally unacceptable in Kaceccereere; and the suffixal precedence hierarchy operates in some dialects in different conjugations from those in which it operates in Kaceccereere. I believe that the findings of this study will be useful for the study of other dialects of Fulfulde; and it is to be hoped that one day, the further research suggested here, and more besides, will be carried out, whether on Kaceccereere or on another dialect or dialects.

Appendix A

Summary of the Morphology of the 14
Conjugations

This appendix provides a summary of the morphology of the 14 conjugations. Although much of the discussion of the morphology has centred around the distinction between SV and VS complexes (cf. chapter 4), a three-way distinction will be made here. First, the morphology of SVO complexes will be summarised (pp. 287-292), then that of VSO complexes (pp. 293-296), and then that of VOS complexes (p. 297).

In considering the tables, the following points should be borne in mind:

1. The place of the verbal root amongst the cluster of appendages given in each table is marked by a double vertical line: in fact, it always immediately precedes the VAP-suffix. Its form is invariable, apart from a certain amount of phonetic assimilation (cf. example 32.b., p. 41).
2. To form a verbal complex of the conjugation indicated in the right hand column of the table, any one subject pronoun may combine with the VAP-suffix and any one object pronoun in the same line, semantic compatibility allowing. For example, in the Emphatic Completive Active (see p. 287), any subject pronoun except mi- may combine with ∅ VAP-suffix and -am object. (Since there are no reflexive pronouns in Fulfulde, a co-referential subject and object may not co-occur in a complex.)
3. Only the form of a first object pronoun has been given. A second object pronoun will always have clitic form (cf. table XXIII, p. 197), and follow the last morph shown in the table. Thus, a second object pronoun will follow immediately after the first object pronoun in SVO and VSO complexes, but immediately after the subject in VOS complexes.
4. The 'basic' form of a VAP-suffix is underlined: this is the form of the suffix that occurs in complex-final position, as discussed in §4.2., pp. 185-192.

5. Concerning the distribution of vowels in parentheses, see §4.2.2.2..
6. The pronoun be represents all class pronouns: cf. p. 65.
7. An arrow indicates exceptional order. For example, -am and -e precede rather than follow -no; and -no- 'intrudes' into the -aama VAP-suffix for the General Completive Passive. These matters are discussed on pp. 179-180 above.
8. The significance of '-' varies according to context:
 - (i) '-' in the ANT column indicates that complexes without the Anteriority-Marker are being considered. (It should be remembered that certain conjugations, such as the Imperative and the Subjunctive, never combine with anteriority.)
 - (ii) '-' is also used for collocations that do not occur: for example, coreferential subjects and objects, as mentioned in 2. above.
9. Further comments on the morphology of individual conjugations are found in the footnotes on page 297.

Appendix A: SVO Complexes

SVO Complexes

Conjugation	Person of Subject Pronoun			VAP	ANT	Person of First Object Pronoun		
	P l u r a l					P l u r a l		
	1	2	3			1	2	3
Cont Imper ¹	-	'a ²	-	(a)t	--	-	-	-
	-	'a	-	(a)tay	-	-	-	-
	-	-	'on ²	(e)tee	-	-	-	-
Emph Compl Act	mi	'a	'o	∅ ³	-	am	e	-
	mi	'a	'o	(u) ³	-	-	'en	'on
	mi	'a	'o	∅	no	-	min	'en
	mi	'a	'o	(u)	no	-	-	'on
	mi	'a	'o	∅	-	am	e	-
	mi	'a	'o	i	-	-	'en	'on
Mid	mi	'a	'o	∅	-	am	e	-
	mi	'a	'o	i	-	-	'en	'on
	mi	'a	'o	∅	no	-	min	'en
	mi	'a	'o	i	no	-	-	'on
	mi	'a	'o	∅	-	am	e	-
	mi	'a	'o	i	-	-	'en	'on
Pass	mi	'a	'o	a	-	'am	ma	mo
	mi	'a	'o	a	no	'am	ma	mo
	-	-	-	∅ ³	-	am	e ⁵	-
	-	-	-	(u) ³	-	-	maa ⁵	mo
Exhortative Act	-	'Allah	-	∅	-	am	e	-
	-	'Allah	-	o	-	-	maa	-
	-	'Allah	-	oo	-	-	-	-
	-	'Allah	-	∅	-	-	min	'en
	-	'Allah	-	oo	-	-	min	'en
Mid	-	'Allah	-	∅	-	-	-	-
	-	'Allah	-	o	-	-	-	-
	-	'Allah	-	oo	-	-	-	-
	-	'Allah	-	∅	-	-	min	'en
	-	'Allah	-	oo	-	-	min	'en

SVO Complexes (cont)

Conjugation	Person of Subject Pronoun			VAP	ANT	Person of First Object Pronoun							
	P l u r a l					P l u r a l							
	Singular	1	2			3	Singular	1	2	3			
Neg Compl	Mid	mi	'a	'o	aaki	-	yam	ma	mo	min	'en	'on	be
	Pass	mi	'a	'o	aaki	no	'am	ma	mo	min	'en	'on	be
Neg Incompl	Act	mi	'a	'o	(a)taa	-	kam	ma	mo	min	'en	'on	be
	Mid	mi	'a	'o	(a)taa	no	'am	ma	mo	min	'en	'on	be
Pass		mi	'a	'o	(a)taako	-	'am	ma	mo	min	'en	'on	be
		mi	'a	'o	(a)taako	no	'am	ma	mo	min	'en	'on	be
'Ord' Imper	Act	mi	'a	'o	(a)taake	-	'am	ma	mo	min	'en	'on	be
	Mid	mi	'a	'o	(a)taake	no	'am	ma	mo	min	'en	'on	be
		-	'a ²	-	∅ ³	-	am	-	-	-	-	-	-
		-	'a	-	(u) ³	-	-	-	mo	min	-	-	be
		-	-	-	ee	-	'am	-	mo	min	-	-	be
		-	'a	-	∅	-	am	-	-	-	-	-	-
		-	'a	-	a	-	-	-	mo	min	-	-	be
		-	-	-	ee	-	'am	-	mo	min	-	-	be

SVO Complexes (cont)

<u>Conjugation</u>	<u>Person of Subject Pronoun</u>			<u>VAP</u>	<u>ANT</u>	<u>Person of First Object Pronoun</u>		
	<u>Plural</u>					<u>Plural</u>		
	1	2	3			1	2	3
Progressive Act	mi	-	mo	∅	-	-	-	-
	mi	-	mo	(u)	-	-	-	-
	mi	'aa	mo	a	-	min	'en	'on
	mi	-	mo	ay	no	-	-	be
	mi	'aa	mo	ay	noo	mi	'en	'on
	mi	-	mo	o	-	-	-	be
	mi	'aa	mo	oo	-	mi	'en	'on
	mi	-	mo	(o)to	no	-	-	be
	mi	'aa	mo	(o)to	noo	mi	'en	'on
	mi	-	mo	e	-	-	-	be
	mi	'aa	mo	ea	-	mi	'en	'on
	mi	-	mo	(e)te	no	-	-	be
mi	'aa	mo	(e)te	noo	mi	'en	'on	
Rel Compl Act	mi ¹⁰	'o	'o	(u)	-	maa ¹²	-	-
	mi	'a ⁻¹⁰	'o	i	-	-	min	'en
	mi	-	'o	(u)	no	-	-	be
	mi	'a	'o	(u)	noo	mi	'en	'on
	mi	-	'o	i	-	-	-	be
	mi	'a	'o	ii	-	mi	'en	'on
	mi	-	'o	i	no	-	-	be
	mi	'a	'o	i	noo	mi	'en	'on
	mi	-	'o	i	-	-	-	be
	mi	'a	'o	i	-	mi	'en	'on
	mi	-	'o	i	no	-	-	be
	mi	'a	'o	i	noo	mi	'en	'on

SVO Complexes (cont)

Conjugation	Person of Subject Pronoun			VAP	AWT	Person of First Object Pronoun		
	Singular	Plural				Singular	Plural	
	1	2	3			1	2	3
Stative	Mid	mi	mo	be		-	-	-
		mi	'aa	mo	i	-	'en	'on
		mi	-	mo	ii	-	'en	'on
		mi	-	mo	i	no	-	-
		mi	'aa	mo	i	noo	'en	'on
	Pass	mi	-	mo	a	-	-	-
	mi	'aa	mo	aa	-	'en	'on	
	mi	-	mo	a	no	-	-	
	mi	'aa	mo	a	noo	'en	'on	
Subjunctive Act		mi	'o	be		-	-	-
		mi	-	be	∅ ³	-	-	-
		mi	'a ¹¹	'o	(u) ³	mi	'en	'on
		mi	-	'o	a	mi	'en	'on
	Mid	mi	'a	'o	o	-	'en	'on
	Pass	mi	'a	'o	oo	-	'en	'on
	mi	-	'o	e	mi	'en	'on	
	mi	'a	'o	ee	mi	'en	'on	
Vague Incom Act		mi	'a	be	(u)ma	'am	'en	'on
	Mid	mi	'a	be	ooma	'am	'en	'on
	Pass	mi	'a	be	eema	'am	'en	'on

Appendix A: VSO Complexes

VSO Complexes

Conjugation	VAP	ANT	Person of Subject		Person of First Object				
			Singular	Plural	Singular	Plural			
			1 2	1in 2	1 2 3	1ex 2 3			
Rel Compl Active	(u)	-	mi ¹⁰	-	-	ma ¹²	-	'on	be
	(u)	noo	mi	-	-	ma ¹² mo ¹²	-	'on	be
	(u)	-	-	-	-	mi	min	-	be
	(u)	no	-	daa ¹⁰	-	mi	min	-	be
	(u)	-	-	-	'en ¹⁰	-	-	-	be
	(u)	noo	-	-	'en	-	-	-	be
	(u)	-	-	-	-	'on ¹⁰	'am	min	be
	(u)	noo	-	-	-	'on	'am	min	be
Middle	ii	-	mi	-	-	ma ¹² mo ¹²	-	'on	be
	i	noo	mi	-	-	-	-	'on	be
	i	-	-	-	-	mi	min	-	be
	i	no	-	daa	-	mi	min	-	be
	ii	-	-	-	'en	-	-	-	be
	i	noo	-	-	'en	-	-	-	be
	ii	-	-	-	-	'am	min	-	be
	i	noo	-	-	-	'am	min	-	be

VSO Complexes (cont)

<u>Conjugation</u>	<u>VAP</u>	<u>ANT</u>	<u>Person of Subject</u>		<u>Person of First Object</u>				
			<u>Singular</u>	<u>Plural</u>	<u>Singular</u>	<u>Plural</u>			
			1 2	1in 2	1 2 3	1ex 2 3			
Rel Compl Passive ¹³	aa	-	mi	-	ma	mo	-	be	
	a	-	-	-	-	mo	-	be	
	aa	-	-	'en	-	mo	-	be	
	a	noo	-	'en	-	mo	-	be	
	aa	-	-	-	'on	mo	min	be	
	a	noo	-	-	'on	mo	min	be	
	Rel Incompl Active	ay	-	¹⁴ mi	-	maa	¹² mo	-	'on be
		(a)t	-	-	-	mi	mo	min	be
ay		no	-	-	mi	mo	min	be	
(e)t		-	-	en	-	mo	-	be	
ay		noo	-	'en	-	mo	-	be	
(o)t		-	-	-	on	mo	min	be	
ay		noo	-	-	'on	mo	min	be	
(o)too		-	-	¹⁴ mi	-	-	-	'on be	
(o)to		-	-	-	-	mi	mo	min	be
(o)to		noo	-	-	-	mi	mo	min	be
(o)to		-	-	-	-	-	mo	-	be
(o)to		noo	-	-	'en	-	mo	-	be
(o)to	noo	-	-	'en	-	mo	-	be	
(o)to	-	-	-	-	'am	mo	min	be	
(o)to	noo	-	-	-	'am	mo	min	be	

VSO Complexes (cont)

<u>Conjugation</u>	<u>VAP</u>	<u>ANT</u>	<u>Person of Subject</u>			<u>Person of First Object</u>			
			<u>Singular</u>		<u>Plural</u>	<u>Singular</u>		<u>Plural</u>	
			1	2	1in 2	1	2	3	1ex 2 3
Rel Incompl Passive	(e)tee		mi	-	-	-	-	'on	be
	(e)te	-	-	daa	-	-	mi	-	be
	(e)te	-	-	-	'en	-	-	-	be
	(e)te	-	-	-	-	'on	'am	-	be
Subjunctive Active	∅	-	-	aa	-	-	mi	-	be
	∅	-	-	-	en	-	-	-	be
	∅	-	-	-	-	on	'am	-	be
Middle	o	-	-	-	-	-	mi	-	be
	oo	-	-	-	'en	-	-	-	be
	oo	-	-	-	-	'on	'am	-	be
Passive	e	-	-	-	-	-	mi	-	be
	ee	-	-	-	'en	-	-	-	be
	ee	-	-	-	-	'on	'am	-	be

VOS ComplexesVOS Complexes

<u>Conjugation</u>	<u>VAP</u>	<u>ANT</u>	<u>Person of First Object</u>		<u>Subject</u>	<u>Person of Second Object</u>			
			2sg	3sg		2sg	3sg	2pl	3pl
Rel Compl Active	(u)	-	maa	moo	mi	ma	mo	'on	be
	(u)	no ¹⁵	maa	moo	mi	ma	mo	'on	be
	i	-	maa	moo	mi	ma	mo	'on	be
Rel Incompl Active	ay	-	maa	moo	mi	ma	mo	'on	be
	(o)to	-	maa	moo	mi	ma	mo	'on	be

Appendix A: Footnotes

1. In the Continuative Imperative, there is no morphological distinction between active and middle voices (cf. §5.5.1.).
2. The subject pronoun in Imperative complexes is only evident in surface structure if the complex is preceded by the negating particle, to.
3. Although the distribution of \emptyset and (u) is morphologically determined (see §4.2.1.), I show \emptyset separately with -am and -e, because only \emptyset occurs with these vowel-initial pronouns.
4. No follows rather than precedes an -e or -am occurring in the same complex. See §4.1.1..
5. In the Exhortative, -e rather than -maa is used for formulaic greetings such as 'Allah reen-e 'May God protect you!' Otherwise, -e and -maa are apparently in free variation in active complexes of the Exhortative, Progressive, and Subjunctive.
6. Concerning this VAP-suffix, see footnote 8, p. 224.
7. The Anteriority-Marker 'intrudes' into the VAP-suffix of the General Completive Passive (see §4.1.1.). It should also be noted that my informants did not accept the combination of no and an object pronoun in complexes of the General Completive Passive.
8. The Passive of the General Incompletive is not normally used: see pp. 186 and 243.
9. Concerning the distribution of -aa and -aayi in complex-final position, see §3.6.1.2. (pp. 153-4), and §4.3.1. (p. 194).
10. In Relative conjugations, both SV and VS complexes occur with a subject that semantically includes first and/or second person. For further discussion, see §4.4.1., and footnotes 12 - 15 below.
11. In the Subjunctive, only SV complexes occur with a 1sg subject; but with a 2sg, 1pl (incl) and 2pl subject, both SV and VS complexes may occur. See §4.4.1..
12. In the Relative conjugations, VOS order normally occurs if (i) the subject is 1sg, (ii) the object is 2sg or 3sg (personal class), and (iii) the complex expresses active or middle voice. However, SVO order usually occurs if the complex contains the Anteriority Marker, and is not of the Relative Completive Active; and VSO order usually occurs if the complex is of the Relative Completive Passive without the Anteriority Marker. Despite these generalisations, there is considerable idiolectal variation in usage, and wherever more than one patterning of morphs has been recorded, the alternatives are shown.
13. In the Relative Completive Passive, VSO complexes with an object pronoun as well as the Anteriority Marker were generally considered unacceptable, though those with a 1pl (incl) or 2pl subject were considered marginally acceptable, and have therefore been shown here.
14. For Relative Incompletive Active and Middle complexes with a 1sg subject and the Anteriority Marker, my informants used SVO order.
15. It was only in a VOS complex of the Relative Completive Active that my informants accepted the Anteriority Marker. Otherwise, SVO order was preferred if Anteriority was to be expressed in a Relative conjugation with 1sg subject and 2sg or 3sg (personal class) object.

Appendix B

This appendix contains two fragments of recorded speech, which are intended to convey an impression of the Kaceccereere dialect in connected speech, as opposed to the isolated sentences that have been used as examples throughout the rest of this study.

Certain features are common to both texts: in particular, they both employ certain 'Hausa-isms', such as the 'discourse-fillers', or pause features waato (literally 'that is to say') and shi ke nan (literally 'that's that'). Otherwise, the texts are fairly different from each other. Text 1 is the beginning of a conversation between Mallam Hassan Moturba and his father, Sarkin Fulani Narayi, concerning the history of the Kaceccere'en. The style is fairly formal, for Mallam Hassan has considerable experience of broadcasting, and adopted his broadcasting style for this recording. Text 2 is the recounting of a recipe by Sa'adatu Rahaman Caawi, wife of Dawoobe Abayin. Here, the style is more informal, though there are certain characteristics that are peculiar to recipes. Such are, for example, the frequent use of wadd- 'bring' or 'take', and the frequent use of a zero object. Both texts display considerable repetition, but these have not been 'edited out', for the aim here is to preserve the 'naturalness' of the flow of speech.

The presentation of these texts is not quite the same as that used for the examples given in the body of this study. Although a morphological analysis of verbal forms has been given, I have not marked absolutely every morph (for example, VAP-suffixes have not been marked, since they are well documented elsewhere). However, I have marked the conjugation and voice of each verbal complex, in order to help the reader to see the use of the conjugations in context. Below each line of Fulfulde text is a literal translation of each word, and below that certain syntactic or morphological pieces of information, and then a free translation.

Text 1

(HM = Hassan Moturba; SN = Sarkin Fulaani Narayi.)

- HM: To, hannde kaddii, bano ko woow -aa, 'Allah wadd-ii-min
 well today indeed as what usual not Allah bring us
 NEG COMPL ACT GEN COMPL ACT
 Well, today, God has given us the unusual opportunity to come
 wuro, ngam min-nan-a habaruuji feerefeere dow no Kaceccere'en
 home so that we hear histories various on how Kaceccere'en
 SUBJ ACT
 home, so that we can hear various aspects of the history of how
 laat - or-i. Doo nii hannde, 'e-min-ngid-i
 become here thus today we want
 REL COMPL ACT STAT ACT
 the Kaceccere'en came into being. Thus here today we want
 min-mbolw-id-a 'e Sarkin Fulaani Naarayi, ngam 'o-hokk-a-min
 we speak with Sarkin Fulani Narayi so that he give us
 SUBJ ACT SUBJ SCT
 to speak with Sarkin Fulani Narayi, so that he can give us
 habaru no Fulbe ngar-d-oy-i. To, ko min-ngid-i
 history how Fulanis come far well what we want
 REL COMPL ACT REL COMPL ACT
 the history of how the Fulanis came (from afar). Well, what we want
 min-'yam-a hannde, kanjum won-i,¹ waato 'En-'annd-i Fulbe
 we ask today that is that is to say we know Fulani
 SUBJ ACT STAT ACT
 to ask today is, well, We know that we Fulani,
 nii 'en-ngar-u² feerefeere, wobbe Buulanko'en, wobbe kadii
 thus we come variously some Bulanko'en some moreover
 REL COMPL ACT
 we came in various ways, some of the Bulanko'en (lineage), others
 Dallaaji, wobbe Gijiya. To,
 Dallaji some Gijiya
 moreover of the Dalaji (lineage), others of the Gijiya. Well,
 d'oo, hiddeko be - ngar-a, d'oo dum Fulbe ngal-aa-no na,
 here before they come here it (is) Fulanis live not
 SUBJ ACT NEG COMPL ACT QU
 here, before they came, were no Fulanis already living here,
 koo boo a'a, Fulbe 'en-ngon-Ø-do³ d'oo?
 or on the contrary no Fulanis we live here
 or were we Fulanis in fact already living here?
 To, kanjum won-i¹ hoore haala dow ko yewt - etee. To,
 well that is head speech on what discuss well
 REL INCOMPL PASS
 Well, that is the introduction to our discusssion. Well,

kanjum won-i ko min-ngid-i mi-yid-i mi-'yam-Ø-maa,
 that is what we want I want I ask you
 REL COMPL ACT REL COMPL ACT SUBJ ACT
 that's what we want I want to ask you,

Sarkin Fulaani Naarayi. To, bismillah
 Sarkin Fulani Narayi well, in the name of Allah ...
 Sarkin Fulani Narayi. So, please

SN: To, kanjum ngid-Ø-daa 'yam-go, ko?
 so that want you ask
 REL COMPL ACT INF
 So, that's what you want to ask, is it?'

HM: 'Ee. To, hiddeko Fulbe ngar-a doo, ndii leydi, beye
 yes well before Fulanis come here this country who
 SUBJ ACT T O P I C
 Yes. Well, before the Fulani came here, who lived in this area?

ngon-Ø-do³ doo?
 live here
 REL COMPL ACT

Text 2

Bete,⁴ no min-ndef-ir-ta dum. Sey⁵ min-boh-a gawri. To
 bete how we cook it must we bruise guinea-corn when
 TOPIC REL INCOMPL ACT SUBJ ACT

As for how we cook 'bete'.⁴ We bruise guinea-corn. When we

min-boh - ii gawri sey⁵ min-njaar-a-ndi enjin
 we bruise guinea-corn then we take it grinding-machine
 GEN COMPL ACT S U B J A C T
 have bruise it, then we take it to the grinding-machine

min-nam-a-ndi. To min-nam-ii-ndi, sey min-ngar-a, sey
 we grind it when we grind it then we come then
 SUBJ ACT GEN COMPL ACT SUBJ ACT
 to grind it. When we have ground it, then we come and

min-sed-a. To min-sed-ii-ndi, shi ke nan, sey min-ngadd-a
 we sift when we sift it well then we bring
 SUBJ ACT GEN COMPL ACT SUBJ ACT
 sift (it). When we have sifted it, well, then we take it and put

min-njonng-a.⁶ To min-njonng-ii, min-ngad-a manja, min-ngad-a
 we boil when we boil we put palm-oil we put
 SUBJ ACT GEN COMPL ACT SUBJ ACT SUBJ ACT
 it on to boil.⁶ When we've put it on to boil, we add palm-oil,

'inna li'o,⁷ min-ngad-a maagi, min-ngad-a borkonu⁸
 mother soup we put maggi-cube we put pepper
 SUBJ ACT SUBJ ACT
 we add 'locust-bean-cakes',⁷ we add a maggi cube, we add pepper,

min-ngad'a lamdam, shi ke nan!.... Min-ngadd-a ceu, min-ngad'a.
 we put salt that's that we bring meat we put
 SUBJ ACT SUBJ ACT SUBJ ACT
 we add salt, there we are!.... (Then) we take meat and add it.

To ceu 'e don, min-ngadd-a min-ngad'a. To min-ngad-ii ceu
 if meat is we bring we put when we put meat
 SUBJ ACT SUBJ ACT GEN COMPL ACT
 If there is any meat, we bring it and add it. When we have

to dam⁹-fat-ii, dam-fat-ii, dam-fat-ii, dam-fat-ii, sey
 when it boil it boil it boil it boil then
 GEN COMPL ACT
 added the meat, and it has (all) boiled furiously, then

min-'omt - a, sey lungowel sey¹⁰... dill-a. To min-'omt-ii,
 we uncover then aroma escape when we uncover
 SUBJ ACT SUBJ ACT GEN COMPL ACT
 we uncover the pan, and the aroma escapes. When we have uncov-

shi ke nan, sey min-ngadd-a min-ngeer - oo-dum boddum,
 well then we take we agitate it thoroughly
 SUBJ ACT S U B J M I D

ered it, well, then we take it and agitate it thoroughly, and

min-'itt - a dumu ko min-nduf - a. Min-ngadd-a buruki
 we remove bran which we throw we bring whisk
 SUBJ ACT SUBJ ACT SUBJ ACT
 we remove any bran, which we throw away. (Then) we take a whisk

min-ngad'a sey min-'irt-a sey min-'irt-a sey min-'irt-a sey
 we do then we stir then we stir then we stir then
 SUBJ ACT SUBJ ACT SUBJ ACT SUBJ ACT
 and we stir and we stir and we stir and

sey min-mburw-a, shi ke nan. To min-mburw-ii, to dum-wood-i¹¹
 then we whisk that's that when we whisk if it good
 SUBJ ACT GEN COMPL ACT STAT ACT
 we whisk, there we are. When we have whisked (it), if it is good,

sey min-'ommb-a, sey dum-soof-a. To dum-soof-ii,
 then we cover then it soak when it soak
 SUBJ ACT SUBJ ACT GEN COMPL ACT
 then we cover (it), then it should stand. When it has stood (for

sey min-ngadd-a kwaanooje,¹² sey min-nokk - an-a koomoye fu.
 then we take little bowls then we scoop for everyone all
 SUBJ ACT SUBJ ACT
 a while), then we take little bowls and scoop up some for every-

To nebbam 'e don, sey dam-wad-ee, dum¹³-'irt-a. To dum-'irt-ii
 if butter is then it put one stir when one stir
 SUBJ PASS SUBJ ACT GEN COMPL ACT
 one. If there is butter, then it should be added, and you stir.

nebbam, shi ke nan. Nan-Ø no min-ndef-ir-ta bete.
 butter that's it hear how we cook bete
 IMPER SG REL INCOMPL ACT
 When you've stirred the butter, that's it. That's how we
 cook 'bete'.

Appendix B: Footnotes

1. When used as a copula, won-i is defective and cannot be easily assigned to a particular conjugation. See footnote 8, p. 116.
2. One might have expected this complex to have VS order rather than SV order: the fact that it does not is perhaps a reflection of the trend towards SV order that was noted in §4.4.1..
3. This -do suffix is a variant of the Anteriority-Marker. See footnote 8, page 116.
4. This word is borrowed from Hausa, and is often pronounced with a low-high tone pattern, which is totally uncharacteristic of a Fulfulde word. In Hausa, the term fàtèfate is also used. It refers to a mushy soup of vegetables and flour, sometimes with meat, as mentioned in this recipe:
5. It is difficult to give a consistent translation of sey, for with the Subjunctive it may indicate either obligation or 'and then'.
6. The speaker has obviously forgotten to mention that water should be added!
7. 'Inna li'o, literally 'mother of soup' is a favourite flavouring in Northern Nigeria (as indeed are maggi cubes). 'Inna li'o is made from the beans of the locust-bean tree. In Hausa it is daddawa.
8. Borkonu is a generic term for 'pepper', and is borrowed from Hausa bàrkòno.
9. The pronoun dám is used without an antecedent. The choice of pronoun is governed by the fact that the Dám class refers to liquids, and at this stage in the preparation of bete, it is fairly liquid.
10. The use of sey both at the beginning of a clause and after the subject is very frequent. It might perhaps be argued that the subject is in fact topic in such circumstances, for it is effectively separated from the predication that follows.
11. Wood-, like certain other stative verbs, is sometimes used in the Stative conjugation without either 'e or dón.
12. This word is borrowed from Hausa kwā̀nò, with the same meaning.
13. The use of dum as an impersonal subject meaning 'one' (French 'on', German 'man') is a calque from Hausa an. Its use in Fulfulde is already eroding the use of the Passive.

Bibliography

- Ali, Saeed, and Yero Sylla (1977): 'Perceptual Transparency and Relativisation: a Case-study in Fula'. In Studies in African Linguistics, Supplement 7.
- Anderson, John M. (1971): The Grammar of Case: towards a Localistic Theory. Cambridge University Press.
- Arnott, D.W. (1956): 'The Middle Voice in Fula'. In Bulletin of the School of Oriental and African Studies, 28, 1.
- Arnott, D.W. (1960): The Tense System in Gombe Fula. Ph.D. thesis, University of London. Published in Afrika und Übersee, 49 (1965).
- Arnott, D.W. (1965): 'Sentence Intonation in the Gombe dialect of Fula'. African Language Studies, 6.
- Arnott, D.W. (1967): 'Some Reflections on the Content of Individual Classes in Fula and Tiv'. In G. Manessy (ed): La Classification nominale dans les langues négro-africaines. Paris: Colloques internationaux du Centre National de la Recherche Scientifique.
- Arnott, D.W. (1970): The Nominal and Verbal Systems of Fula. Oxford: The Clarendon Press.
- Bennett, Patrick, and Jan P. Sterk (1977): 'South-Central Niger-Congo: a Reclassification'. In Studies in African Linguistics, 8, 3.
- Carstairs, Andrew (1981): Constraints on Allomorphy in Inflexion. Ph.D. thesis, University of London. Unpublished.
- Chafe, Wallace L. (1976): 'Givenness, Contrastiveness, Definiteness, Subjects, Topics and Point of View'. In Li (ed) 1976.
- Comrie, Bernard (1976): Aspect. Cambridge University Press.
- Daneš, F. (1972): 'Order of Elements and Sentence Intonation'. In D. Bolinger (ed): Intonation. London: Penguin.
- Diallo, Djibril (1979): Fuuta Jaloo and Fuuta Tooro: a Comparative Study of two Pulaar Dialects. Ph.D. thesis, University of London. Unpublished.
- Dik, Simon, Sie Ing Djiang, Maria E. Hoffman, Jan R. de Jong, Harry Stroemer, and Lourens de Vries (1980): 'On the Typology of Focus Phenomena'. Glott, 3, 3-4. University of Leiden.
- Faidherbe, Gal. L. (1875): Essai sur la langue poul, grammaire et vocabulaire. Paris: Maisonneuve.
- Fillmore, C.J. (1968): 'The Case for Case'. In E. Bach and R. Harms (eds): Universals in Linguistics. New York: Holt.
- Fillmore, C.J. (1971): 'Some Problems for Case Grammar'. In Monograph Series on Language and Linguistics, 24. Washington D.C.: Georgetown University.

- Gaden, H. (1914): Le Poular. Tome II: Lexique Poular-Français. Paris: Ernest Leroux. Reprinted Gregg, 1967.
- Gaden, H. (1931): Proverbes et maximes peuls et toucouleurs. Paris: Institut d'Ethnologie.
- Givón, T. (1971): 'Dependent Modals, Performatives, Factivity, Bantu Subjunctives and what not'. In Studies in African Linguistics, 2, 1.
- Givón, T. (1973): 'Opacity and Reference in Language: an Inquiry into the Role of Modalities'. In J. Kimball (ed): Syntax and Semantics, vol. II.
- Givón, T. (1976): 'Topic, Pronoun and Grammatical Agreement'. In Li (ed) (1976).
- Greenberg, Joseph (1966): 'Some Universals of Grammar, with particular Reference to the Order of Meaningful Elements'. In J. Greenberg (ed): Universals of Language. Cambridge, Mass.: MIT Press.
- Greenberg, Joseph (1970): Languages of Africa. 3rd edition. The Hague: Mouton.
- Grimes, Joseph E. (1975): The Thread of Discourse. The Hague: Mouton.
- Gruber, J.S. (1969): 'Topicalisation in child-language'. In D.A.Reibel and S.A.Shane (eds): Modern Studies in English. Englewood Cliffs, N.J.: Prentice-Hall.
- Gundel, Jeanette K. (1977): Role of Topic and Comment in Linguistic Theory. Indiana University Linguistics Club.
- Gunn, H.D. (1956): Pagan Peoples of the Central Area of Northern Nigeria. London: International African Institute Ethnographic Survey.
- Hansford, Keir, John Bendor-Samuel and Ronald Stanford: 'A Provisional Language Map of Nigeria'. Savanna, 5, 2.
- Harris, M.B. (1980): 'Noun Phrases and Verb Phrases in Romance'. Transactions of the Philological Society, 1980.
- Hockett, C.F. (1954): 'Two Models of Grammatical Description'. Word, 10.
- Jaggar, Philip (1978): ''And what about ...?' - Topicalisation in Hausa'. Studies in African Linguistics, 9, 1.
- Kiparsky, P., and C. Kiparsky (1970): 'Fact'. In M.Bierwisch and K.E.Heidolph: Progress in Linguistics. The Hague: Mouton.
- Klingenheben, A. (1963): Die Sprache der Ful. Hamburg: J.-J. Augustin.
- Kraft, C., and A.H.M.Kirk-Greene (1973): Teach Yourself Hausa. English Universities Press.
- Labatut, R. (1973): Le Parler d'un groupe de Peuls nomades. Paris: SELAF.
- Lakoff, G. (1970): Irregularity in Syntax. Holt, Rinehart and Winston.

- Li, Charles (ed) (1976): Subject and Topic. New York: Academic Press.
- Li, Charles, and Sandra Thompson (1976): 'Subject and Topic: a new Typology of Language'. In Li (ed) (1976).
- Lyons, J. (1968): An Introduction to Theoretical Linguistics. Cambridge University Press.
- Lyons, J. (1977): Semantics. Cambridge University Press.
- Matthews, P.H. (1972): Inflectional Morphology. Cambridge University Press.
- Matthews, P.H. (1974): Morphology: an Introduction to the Theory of Word-structure. Cambridge University Press.
- McIntosh, Mary (1980): 'Locative-based Periphrastic Verb-forms in Fulfulde'. Unpublished Seminar Paper, School of Oriental and African Studies, London.
- McIntosh, Mary (1981): 'Fulfulde as a VSO Language'. Unpublished Seminar Paper, School of Oriental and African Studies, London.
- Newman, Paul (1972): 'Syllable Weight as a Phonological Variable'. In Studies in African Linguistics, 3, 3.
- Noye, Dominique (1974): Cours de Foufouldé. Maroua: Mission Catholique, and Paris: Geuthner.
- Palmer, F.R. (1971): Grammar. Penguin.
- Pinkham, Jessie, and Jorge Hankamer (1975): 'Deep and Shallow Clefts'. In Papers from the 11th Regional Meeting, Chicago Linguistic Society.
- Reichardt, C.A.L. (1876): Grammar of the Fulde Language. London: Church Missionary Society.
- Robins, R.H. (1964): General Linguistics: an Introductory Survey. Longman.
- Sapir, J. David (1971): 'West Atlantic: an Inventory of the Languages, their Noun Class Systems, and Consonant Alternation'. In Thomas A. Sebeok (ed): Current Trends in Linguistics, vol. 7. The Hague: Mouton.
- Schachter, Paul (1973): 'Focus and Relativization'. In Language, 49, 1.
- Seydou, Christiane (ed) (1979): Dictionnaire Général de Peul: Méthodologie, Inventaire des Source existantes. Paris: Comité scientifique international, C.N.R.S..
- Skinner, Neil, and Corinne Pelletier (1979): Adamawa Fulfulde: an Introductory Course. African Studies Program, University of Wisconsin.
- Smith, M.G. (1969): Government in Zazzau. Oxford University Press, for International African Institute.

- Taylor, F.W. (1921): A First Grammar of the Adamawa Dialect of the Fulani Language (Fulfulde). Oxford.
- Taylor, F.W. (1932): A Fulani Dictionary. Oxford.
- Temple, O. (1922): Notes on the Tribes, Provinces, Emirates and States of the Northern Provinces of Nigeria. Reprinted by Frank Cass, 1965.
- UNESCO (1966): Rapport final sur la réunion d'un groupe d'experts pour l'unification des alphabets des langues nationales.
- UNESCO (1971): Dictionnaire élémentaire Fulfulde-Français-English. (Prepared by D.W.Arnett, P.-F.Lacroix, E.Mohammadou and A.I.Sow.) Niamey: Centre régional pour la Documentation de la Tradition Orale.
- Waziri Junaidu, Alhaji (undated): Unpublished manuscript of a Fulfulde Grammar in Fulfulde. Sokoto.
- Westermann, D. (1909): Handbuch der Fulsprache: Wörterbuch, Grammatik, Übungen und Texte. Berlin: Reimer.