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A Grammar of Mina



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A Grammar of Mina

by

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with Adrian Edwards

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List of abbreviations

1	First person	INCL	Inclusive
2	Second person	INF	Infinitive
3	Third person	INTERJ	Interjection
ADDR	Addressee	L(OC)	Locative
ANAPH		NEG	Negative
	Anaphor	PL	Plural
Ar.	Arabic		
ASSC	Associative	POL	Marker of polite re-
ATT	Attributive	quest	
COM	Comment marker	POS	Point-of-view of
COMP	Complementizer	subject	
CONJ	Conjunction	POSS	Possessive
D	Dependent (aspect)	PRED	Predicator
DAT.OR	Dative orientation	PREP	Preposition
DEB	Debitive	Q	Question
DED	Deduced reference	QUANT	Quantifier
DEM	Demonstrative	REL	Relative marker
DU	Dual	REM	Remote previous
DUB	Dubitative	mention	-
EE	End of event marker	SG	Singular
EXCL	Exclusive	STAT	Stative marker
F.	Fula (Fulfulde)	TOP	Topic marker
GEN	Marker of modifica-	UNSP	Unspecified
tion			•
GO	Goal orientation		

H. HAB Hausa Habitual

Chapter 1 Introduction

1. Name, classification, and geographical location

The present study is intended to give a full description of Mina phonology, morphology, and syntax, including a description of the meanings and functions of various constructions. It is the first published account of any kind of the grammatical system of this language. Mina is the selfname of the language referred to in the literature as Hina or Besleri. Mouchét 1967 states that Hina is a Fula word, but the speakers of Mina consider iná, a component of miná, a Mina word. The name "Besleri," which can be found in some publications as referring to Mina (Newman 1990, Dieu and Renaud 1983), is unknown to Mina speakers. The word itself may be related to bétálè 'leaf cover for lower front and back part of the body, pubic apron'. There is no reason whatsoever to use this word in reference to Mina. The term Hina, sometimes used in the literature, is probably derived from iná, the place name. The self-name iní-yíì designates people speaking Mina. A single Mina speaker is called *l-ìná*, i.e. one who belongs to the place iná. The form mà is a productive morpheme deriving, among other nominal expressions, names of languages. There is a noun mà 'mouth' that is also a potential candidate for the formation of names of languages. However, such a use would normally require a genitive construction, which is absent in names of languages. The initial h in Hina is a result of glottal epenthesis, described in Chapter 2.

The language is spoken in the western part of Northern Cameroon in the following villages and settlements, some of which very likely do not bear a Mina name: Hina-Marbak; Goungong [gùngón]; Bamguel [bàmgél]; Lèngél; Mbourdan [mbùrdán]; Palva [pàlvá]; Mbraf [mbráf]; Wuro-Gertodé (a Fula name); Mouldar [mùldár]; Kaftaka [kàftàká]; Bereng [bèrén]; Wanaru-Hina [wànàrù hínà]; hákúlà; bígídín; and hùvá. The old capital of Hina is called mánjà. A dialect of Mina called mùdzùndzùn by Mina speakers is spoken about 15 kilometers from Hina-Marbak.

The language belongs to the Central branch of Chadic. Newman

1990 has it in Family A 7 of the Biu-Mandara branch. Hoffmann 1971 has Hina as a member of the Daba group. The only information available on another language from the same subgroup is Mouchét 1967 and Lienhard and Gieger (Ms), both on Daba. Our language assistants report that there is no mutual intelligibility between Daba and Mina. There are, however, Daba speakers who live near Mina speakers, and they do understand Mina. According to oral tradition, when Hina settled in their present area, the *dzundzun* were already there. With respect to the origin of Hina, one tradition has it that they came from the Bagirmi area in Chad, and another tradition, from what is now Gongola State, in Nigeria. Thus, the traditions point to diametrically different origins.

Hina are farmers. The main crops are sorghum, peanuts, and cotton, cultivated by men, and sesame, beans, and green peas, cultivated by women. Most Hina appear to be Moslems, but there are some Christians too. In the nineteenth century, Hina were a dominating military force in their region mainly because of their skillful use of cavalry. Hina raiding parties were a threat to many neighbors (Christian Seignobos, p.c., and Hina oral traditions). A description of the demographic situation of Hina in the early 1960s can be found in Podlewski 1965. The situation described in that study has, however, changed in the almost forty years since Podlewski gathered his data. In particular, the number of speakers, education, marriage customs, migration patterns, and linguistic situation are quite different today, according to information provided by knowledgeable observers and by Hina themselves.

There are considerable dialectal variations among speakers even from the same village. We were able to establish the existence of three dialects: Marbak, Kefedjevreng, and Dzundzun. The bulk of our description is based on the Marbak dialect. Data from the Kefedjevreng dialect are included as recorded, i.e. without any attempt at unification at the phonological or morphological level. Here are the basic differences between the Marbak and Kefedjevreng dialects: For nasals in one dialect, there are prenasalized stops in the other dialect. For example, the habitual marker for Kefedjevreng is ni and for Marbak is ndi. Word-final back vowels in one dialect have corresponding glides in the other, e.g., the word for child is mbù in Marbak and mbw in Kefedjevreng. In Kefedjevreng, a nasal is systematically inserted between the subject prefix and aspect-tense markers and auxiliary verbs. In Marbak this rule is not systematic, e.g., Kefedjevreng focus in past tense, first-person singular, has the form sò nkó, and in Marbak it is sò kó or s kó. These dialectal differences account for some variation in the transcription of individual lexical items and such grammatical morphemes as subject focus, especially the forms with prefixes, habitual, plural pronouns, demonstratives,

and perhaps a few others.

Most contemporary speakers of Mina are bilingual, Fula being the second language. Because of this bilingualism, the Mina of all but the oldest speakers has a large number of Fula borrowings, including grammatical morphemes, particularly conjunctions and complementizers. We tried to identify Fula borrowings as well as we could, but there might be some lexical items or even grammatical structures borrowed from Fula that we did not identify as such.

Hina from Marbak with whom we talked claim that they do not understand Dzundzun, while Dzundzun claim that they fully understand Mina. Our very limited tests, consisting of playing a tape with Dzundzun recordings, showed that Hina do indeed understand Dzundzun.

The data for this grammar were collected in the summer of 1991, spring of 1993, summers of 1994, 1996, 1997, 1998, and 1999. A list of language assistants follows: Bouba Abdouraman, born February 18, 1974, had six years of elementary school, and two years of secondary school in 1991. Apart from three years of school in Mokolo, he spent all his life in his native village, Marbak, returning there for vacation each school year. Hamadu Oumaru, born in March 1974 in Hina-Marbak, graduated from the lycée at Mokolo. Like Abdouraman, Hamadu Umaru also spent all his life in Hina-Marbak. Saibu, who divides his time between Hina-Marbak and Maroua, was our assistant for one season. Hamadou Haman (Konay), born in 1960, who finished the first year of Lycée in Garoua, has been our main assistant in the last two years of our work. Keenly interested in his language he has read the examples in the present work, suggesting some changes in transcription and translation. Apart from Mina and French, all language assistants also speak Fula, the vehicular language of Northern Cameroon, and Hamadou Haman can also read English.

Adrian Edwards has been collecting Mina texts for many years, many of them from elderly speakers. Five notebooks of these texts were used in the present grammar. Most examples from Edward's notes have been checked with language assistants, and they were given a tonal transcription, new segmental representation, morpheme-by-morpheme analyses, glosses, and sometimes a new interpretation and translation.

The aim of this work is descriptive and explanatory. The description consists of hypotheses concerning the form of linguistic structures and hypotheses concerning the functions of linguistic structures. For both types of hypotheses, we provide supporting argumentation and evidence. We tried to explain various components of grammar through their relationship to other constructions or subsystems in the language.

On the sound advice of Bernard Comrie given with respect to an-

4 Introduction

other grammar, we refrained from drawing implications for past and current theoretical controversies in linguistics. We have also refrained from drawing implications for past and current controversies in comparative Chadic linguistics, an entirely different task, which cannot be made from the narrow perspective of any single language.

When illustrating grammatical paradigms, rules, and patterns, we use elicited examples to limit the material to the issue being discussed. When describing functions we use data from natural texts. The elicited examples frequently lead to incorrect conclusions when it comes to describing the function of a form.

2. Outline of Mina grammar

The purpose of this outline of is to give some typological information and to highlight those elements of the grammar that make this language interesting for a linguist concerned with typology, language universals, and linguistic theory, a specialist in African and Afroasiatic linguistics, or a Chadicist.

2.1 Phonology

The consonantal system of Mina is characterized by the presence of prenasalized and glottalized stops in addition to oral and nasal stops. The language also has a series of continuants, including voiceless and voiced lateral continuants, and it has two affricates. There are clusters with different values for the feature voice. No geminated consonants are allowed except for the lateral liquid. Continuants and affricates are palatalized before a high front vowel. The underlying glides are deleted in word final position after the vowel with identical values for the features [round] or [front]. The vowel system consists of six vowels, including schwa. There is a fronting vowel harmony, whereby if a back vowel follows a consonant that is preceded by a front vowel, the back vowel is fronted. A palatal glide is a barrier to vowel harmony. There is also a very limited leftward vowel harmony, whereby the vowel a undergoes fronting when followed by a consonant and a front vowel. An outstanding feature of the phonological system of Mina is the interaction between syntax and phonology, whereby all word-final vowels other than grammatical morphemes are deleted in phrase-internal position. This rule is in fact a marker of phrase-internal position. Its absence marks phrase-final position. The language has two tones, high and low. Tone has a lexical and a

grammatical function. When the final vowel of a word is deleted, its tone is deleted as well.

2.2 Lexical categories

We take the defining characteristics of lexical categories to be their inherent properties with respect to the role they play in a proposition or in a discourse, as the case may be. Nouns can be derived from verbs and numerals, and adverbs can be derived from all other lexical categories. We did not find morphological means to derive verbs from other lexical categories. The following lexical categories exist in Mina: nouns, whose inherent function is to serve as arguments of the predication; deictics and anaphors, which serve as arguments in predication but can also modify nouns; a limited number of adjectives, whose function is to modify nouns; verbs, whose function is to serve as predicates in propositions; adverbs; numerals; prepositions, whose function is to code the grammatical relations between the elements of a proposition; and ideophones.

Within the pronominal system, three persons are distinguished: speaker, addressee, and third-person. There are also three numbers: singular, dual, and plural. The category dual exists only for the first person. A description of the lexical categories is included in the chapters dealing with the noun phrase (Chapter 3) and the verbal roots and stems (Chapter 4).

2.3 Morphology

There are only a few morphological processes that allow the derivation of one lexical category from another. The stative marker -yi allows the derivation of nominalized forms of verbs. A full reduplication of any category derives adverbs of many kinds. This derivation is described in Chapter 8, Adjuncts.

Deictics and anaphors have phrase-internal forms derived through vowel reduction and phrase-final forms derived through the addition of the suffix -n to the underlying form. The category nominal plural is a syntactic category in that it is added to the end of the noun phrase. If the noun phrase consists of the noun only, then the plural marker is added to it.

The inflectional morphology of verbs consists of tonal changes that code modality; reduplication of verbs to derive aspectual forms; and pre-

fixes and suffixes to derive adverbs and nominal forms of verbs.

2.4 Syntax

In pragmatically neutral clauses, the subject precedes the predicate, and the object follows the verb. In object focus constructions, the object follows the subject but precedes the predicate. Such an object must be marked by the preposition n, resulting in the structure S PREP O V. The language makes a clear structural distinction between the categories subject and object, and between the direct object and other objects, including locative complements.

Several syntactic characteristics make this language particularly interesting for typologists. Some tense, aspect, and mood markers occur before the verb, and others occur after the verb. The markers of interrogative and negative modality occur in clause-final position. The conjunction used for a conjoined noun phrase in the subject function differs from the conjunction used for a conjoined noun phrase in all other functions. The genitive construction has a different form when it is an argument and a different form when it is a complement of locative predication.

The complex sentences include: Asyndetically conjoined clauses; sequential clauses coding a temporal or cause-and-effect relationship between clauses; counter-expectation clauses; embedded clauses, and relative clauses. The relative clause codes the existential status of its head through clause-final deictics.

In addition to the coding of argument structure, adjuncts, tense, aspect, and mood categories, Mina also codes the category point-of-view. In Mina, this category has only subject or speaker in its scope.

2.5 Discourse structure

The outstanding characteristic of the discourse structure of Mina is the existence of the category comment clause, which may be used in both simple and complex sentences and which overtly marks a speaker's comment on the proposition. The comment clause may be used in a variety of syntactic constructions.

Another characteristic is the unmarked value of the principle of unity of place. If one of the participants in an event changes scene, such a situation is coded by a special syntactic construction in addition to any verb of movement that may be used.

Chapter 2

Phonology

1. Introduction

The aim of this chapter is to provide a set of underlying segments, a set of allowed phonological structures, and a set of rules to derive the phonetic realization of morphemic and phrasal structures. The outstanding features of the phonology of Mina are limited vowel harmony and vowel deletion to mark phrase-internal position and vowel retention to mark phrase-final position. The two rules code in this way the syntactic structure of the utterance.

2. The consonantal system

Phonetic and underlying consonants

Table 2.1. Phonetic consonants

Table 2.1. Phonetic consonants					
	Labial	Alveolar	Palatal	Velar	Glottal
Stops					
Voiceless	р	t		k	,
Voiced	Ъ	d		g	
Prenasalized	mb	nd		ŋg	
Glottalized	6	ď			
(voiceless)					
Èjective	p'				
Affricate		ts	č		
		dz	j		
Nasal	m	n		ŋ	
Continuants	f	S	Š Ž	X	h
	V	Z ŧ	Ž		
Lateral continuants		ł			
		В			
Glides	w	-	y		
Liquids		i			
		r			

The lateral fricatives end impressionistically with a stop, viz. [t] and [td]. We have observed this property in several Central Chadic languages in Mandara mountains.

2.2 The underlying segments

The underlying set differs from the phonetic set in not having palatalized obstruents. Those consonants are derived through a palatalization rule, which is described later. There is only one underlying back continuant, the glottal voiceless h.

Table 2.2. Underlying consonants

	labial	alveolar	palatal	velar	glot- tal
Stops Vless	p	t		k	(')
Voiced	Ъ	d		g	, ,
Prenasalized	mb	nd		ŋg	
Glottalized (voiceless)	6	ď		30	
Ejective	(p')				
Affricate	•	ts			
		dz			
Nasal	m	n			
Continuant	f	S			h
	V	Z			
Lateral		ł			
Continuant		<u></u> ያ			
Glides	w	J	у		
Liquid		1	•		
		r			

The evidence for the underlying status of the segments in Table 2.2 is provided by the following near minimal pairs, where the relevant consonants are followed by the same vowels:

Voiceless	Voiced	Prenasalized	Glottalized	
Labial stops: pàt 'next day' food)'	báytàŋ 'large'	mbál 'to like'	6ám 'eat (hard	
pék 'cover a receptacle'				
pèt 'sharpen'				
pipi 'when?'	<i>bú</i> 'turn'	ngámbù 'friend	<i>θðη</i> 'think'	
pits [pič] 'sun' mbé 'close'				

The labial voiceless stop p does not occur before round vowels u and o, but does occur before the vowel a and before schwa:

```
(1) *pú, *pù, *púk

*pó, *pò, *pók

kà pád 'to roll a mat', 'bandage something'
```

The voiceless stop before schwa occurs only in the ideophone $p \delta k$, which modifies the verb $g \partial d$ 'push':

(2) pók gàd 'push'

There is only one instance of the ejective consonant, p', in the word $p'\acute{u}m$ or $p'\acute{o}m'$ deep'. The exceptional status of the ejective may well be due to its origin as an ideophone.

The phonological status of the glottal stop is problematic. We do have a minimal pair, where the glottal stop in word final position contrasts with the glottalized consonant. The meanings of the two verbs, are, however, very close. Their tones are different, and that is why we are tentatively postulating the glottal stop to be a part of the underlying segment:

kà pà' (ends in the glottal stop) 'to dress a corpse' kà pád' 'to roll a mat', 'bandage something'

Labial continuants

```
fát 'to skin'

fin 'remain'

fiu 'all' (F.)

fàk 'to abandon'

dòf 'boil'

vá 'spend time'

vi 'who?'

vú 'interrogative marker'

dòv 'grow'
```

Alveolar stops

```
ták 'forbid' dà 'cook' ndà 'go' dá 'NEG'
tíkì 'where' hìdì 'person' ndí 'HAB'
làkwát 'river' --- dód' 'pull (weeds)'
```

The difference between the consonant cluster *nd* and the prenasalized stop is that in the cluster the nasal is a tone-bearing unit, and in the prenasalized stop it is not:

(4) hà kà ndà zá ngiɗ 2SG INF go EE there 'you went there'

Alveolar continuants:

sàn '1SG independent pronoun' za 'end-of-event marker'

Affricates:

tsáy 'then' dzán 'find'

Velars:

á kà cín 'here' gám 'chase out' ngàz 'leg'

hàzá 'dog'

The glottal voiceless continuant h may occur only in word-initial position preceding vowels and in intervocalic position:

(5) nákáhà 'remote previous mention marker' hà 'second-person singular independent pronoun'

The velar and glottal voiceless continuants are allophones of the same phoneme. The velar continuant occurs before the high front vowel i. Thus hidi 'person' is [xidi], hi 'second-person plural pronoun'. There are instances of word initial a 'third-person singular pronoun' and i, as in ina 'Hina' and in-yii 'the inhabitants of Hina'. Based on these distributional facts, we postulate that glottal continuants in word-initial position are underlying.

A glottal continuant also occurs in word-final position, which is also pre-pausal position: $b \grave{o} h$ 'split tree by tearing on a branch' and $v \acute{a} h$ 'to spend time, last'. It is in contrast in this position with words without a glottal continuant: $v \grave{a}$ 'age of somebody or something', $n d \grave{a}$ 'go', z a 'end-of-event marker', $k \grave{a}$ 'affected marker'.

The velar nasal η occurs only in word-final position. The alveolar nasal n cannot occur in word-final position. We postulate therefore that the velar nasal derives from the underlying alveolar nasal. Additional evidence that the velar nasal is not underlying is provided by words that have a velar nasal in word-final position but an alveolar nasal in intervocalic position or in position preceding segments other than velar:

(6) bin 'hut, room' bin-yii 'houses'

Lateral continuants:

łá 'measure'ķà 'cow'łàh 'tear apart'ķà 'cut'

Liquids:

tàlàn 'head'

rá 'dependent habitual marker'

ká llà 'take something from somebody'

kà lláh 'bring a girl to marriage'

Glides:

kàdwirì 'clay pot' kà wáŋ 'to sleep'

ká wà 'to start'

2.3 Consonant devoicing

In normal speech, a voiced obstruent is devoiced before a voiceless obstruent. Here are two examples: The noun $h \dot{a} z \dot{a}$ 'dog' has the word-medial voiced continuant z. When the final vowel is deleted in phrase-internal position, the voiced consonant assimilates to the following voiceless consonant:

(7) hàzá tá bítsì → hàz tá bícì → [hàs tá bíčì]
 dog GEN Bitsi
 'a dog of Bitsi'

The interrogative marker for human participants has the form $v \ge 0$. In phrase-internal position, the vowel of this marker is deleted. The voiced labiodental continuant may become voiceless when followed by a voiceless consonant:

(8) \acute{a} $v\grave{\partial}$ $t-\acute{i}$ \rightarrow [á vtí] and [á ftí] PRED who GEN-Q 'whose?'

Some speakers devoice stops after a nasal with a different place of articulation:

$$(9) d \rightarrow t/\eta_{\underline{}}$$

12 Phonology

(10) tàlàŋ dàm-ák rà → [tàlàŋ dàm-ák rà] and head hurt-1SG D.HAB [tàlàŋ tàm-ák rà] 'I have a headache'

2.4 Rhotacization

Glottalized stops may be rhotacized in syllable-final position. This rule is not obligatory, as rhotacization has been recorded only with some speakers:

(11) mùkàdkádáŋ → [mùkàrkádáŋ] 'upside down'

2.5 Palatalization

Alveolar continuants and affricates s, z, ts, and dz are palatalized before and after front high vowel i, producing \check{s} , \check{z} , \check{c} , and \check{j} :

(12) $zin \rightarrow zin$ 'return' $bitsi \rightarrow bici$ 'return' 'proper name for a first born child'

The voiced continuant z is palatalized in the cluster nz when followed by stative suffix -yi:

(13) mà nz-yí màrbák [mà nž-í]

REL sit-STAT Marbak

'he remained at Marbak'

The palatal glide is a barrier to palatalization. Consider the complementizer that is pronounced [sì] or [syì]. We propose that the underlying form of the complementizer is syì and that the palatal glide is a barrier to the palatalization rule. Additional evidence for the proposed hypothesis is provided by the effects of the addition of the plural marker /yíì/, which does not cause the palatalization of the preceding consonant either:

Some speakers also palatalize consonants after a front mid vowel. Thus,

the underlying form fés 'small' is realized as [féš].

2.6 Affricate formation

Some speakers pronounce the underlying voiced continuant z as an affricate after a nasal stop and before a high vowel:

$$z \rightarrow dz / Vn_{V[+high]}$$

- (15) $nz \partial \rightarrow \text{nd} z \partial$ remain, be
- (16) à ndí nzà á màr6ák → [à ndí ndzà]

 3SG HAB live PRED Marbak

 'he lives in Marbak'

If the affricate is followed by the high front vowel, it is palatalized:

(17)
$$z \rightarrow j/n _{\underline{}}i$$
.

(18) $s \grave{\partial} m \grave{\partial} nz - i \qquad mb\acute{e} \rightarrow \text{[m\'o nj-\'i]}$ 1SG REL be-STAT close
'I was close'

2.7 Labialization

The back round vowel becomes a labial glide when followed by a low back vowel, i.e., the phonological sequences u + a or o + a result in labialization, viz., they both become [wá]:

(19)
$$i$$
 $l\hat{u}$ - \acute{a} $n\grave{a}n\acute{n}$ \rightarrow [\acute{i} lw- \acute{a}] 3PL say-GO 1PL.EXCL 'they tell us'

When the low vowel that caused the labialization is deleted in phrase-internal position, the underlying round vowel is realized as such rather than as a labial glide. Thus the word $\hat{\gamma}kw\hat{\alpha}$ 'goat' becomes $\hat{\gamma}k\hat{u}$ after the final-vowel deletion:

2.8 Glide realizations

Both labial and palatal glides are deleted in word-final position when following a vowel with the same values for the features [front] and [back]:

(21)
$$G[\alpha \text{ front}] \rightarrow \emptyset$$
 /V[\alpha \text{front}] ___#

The evidence for the existence of this rule, and indeed for the existence of underlying glides in word-final position after high vowels, is provided by their presence when the words receive a vocalic suffix or a suffix beginning with a glide followed by a vowel.

Thus, the verb whose phonetic form is [ti] 'see' becomes [tiyú] after the addition of the third person object marker u. We postulate, therefore, that the underlying form of this verb is tiy. An alternative analysis whereby a glide is inserted when a high vowel is followed by another vowel is not viable, in view of the rule that deletes final vowels of morphemes when a suffix is added. The fact that vowels of the verbs mbu 'give birth' and ti 'see' are not deleted indicates that these vowels are in fact not word-final.

The addition of the stative suffix yi allows us to determine that verbs that in their phonetic form have the vowel u in fact have the underlying labial glide in word-final position. The glide, when not followed by another vowel, is realized as the vowel u. The labial glide is realized as a glide when the suffix i is added. The epenthetic schwa is inserted between the preceding consonant and the glide:

The labial glide /w/ is realized as a round vowel when preceded and followed by a schwa. The new vowel assumes the tone of the preceding syllable:

The labial glide is also deleted between a consonant and the high round vowel:

(26)
$$G[+round] \rightarrow \emptyset/C_{\underline{}} u$$
.

(27) tséy hídò wàcín tàŋ z wùtá → [zútà] then man that go EE home 'So that man went home...'

2.9 Consonant clusters

There are no three consonant clusters in word initial position. Twoconsonant clusters are allowed in word-initial position, word- and phrase-medial position, and in word-final position. The phrase- medial clusters emerge as a result of the rule that deletes word-final vowels in phrase-internal position.

In word-initial position the most frequent are clusters with a sonorant, whether an obstruent followed by a sonorant, a sonorant followed by an obstruent, or a sonorant followed by a sonorant:

An affricate may be followed by a stop:

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(29) $tsk\delta\delta$ 'chew' 'evening'

tspádap 'remain crouched'

In word-medial position the following types of clusters are allowed:

Sonorant and sonorant:

(30) tèrlàn 'turn'

máŋwà 'pancreas'

Sonorant and continuant:

(31) màdìngwàrzé 'donkey'

Sonorant and stop:

(32) báldam 'sweetness, joy, happiness'

bớrgádán 'millet' bờrtìk 'dust' tờrbớs 'twist' mbárkántá 'nine'

Stop and sonorant:

(33) bìmbrív 'large mázèkléw 'shadow'

Many clusters with two stops occur as a result of the reduplication of morphemes with consonantal onsets and codas:

(34) bédbèdén 'a type of dance' bìrtídbìrtíd 'quickly'

 $d\partial d\partial kd\partial d\partial k$ 'completely'

However, there are also instances of clusters of two stops with no evidence of a composite structure:

(35) dódkùts 'constellation'

Nasal and stops are very frequent clusters:

(36) gàmták 'chicken' wántà 'mahogany tree and its fruits'

Stop-continuant clusters do not occur in intervocalic position unless they are products of reduplication:

(37) fádfád 'eight'

Continuant-stop clusters occur only as a product of reduplication:

(38) káfkáfá 'morning', with the form káf recorded as well.

When the cluster consists of a nasal followed by a stop, the nasal may assimilate to the following stop: [múnbùrkò] and [múmbùrkò] 'yesterday'.

In word-final position only a cluster consisting of two sonorants can occur:

(39) à wáŋ-r tikì
3SG sleep-D.HAB where
'where is he sleeping'

An affricate and a stop can also form a cluster, but the only cases recorded involve the reduplication of a syllable:

(40) bìbicbìbic 'all day'

No geminated consonants are allowed, except for a geminated lateral liquid. If a geminated consonant were to emerge at morpheme boundary, one consonant is deleted:

(41) án kó zôm mí → [án kó zôm í] what INF eat what 'what will he eat?'

3. The vowel system

3.1 Phonetic and underlying vowels

There are seven phonetic short vowels and at least three long vowels, aa, ii, and uu. The following figure represents the short vowels:

Figure 2.1. Phonetic Vowels

The mid vowels are lower mid rather than higher mid. The high vowels i, o, and u and the low vowel a are much more frequent than the mid vowels e and o. Moreover, the phonetic vowel e is often the product of fronting of a in the environment of a front vowel. The high central vowel, graphically represented by schwa, is the most frequent vowel in language production. We can predict only one vowel in the system, the fronted $[\ddot{u}]$. We therefore postulate that all vowels in Figure 2.1 vowels, with the exception of \ddot{u} , are underlying. However, it should be remembered that not every phonetic vowel represents an instantiation of the identical underlying vowel. Many instances of phonetic vowels represent the products of the application of various phonological rules.

3.2 Rightward vowel fronting

If a back vowel suffix follows a front mid or high vowel, with a consonant in between, the back vowel is fronted by the rule:

$$(42) \quad V \quad \rightarrow \quad [+front] \quad /V[+front]C-\underline{\hspace{1cm}}.$$

For the vowel a the nearest front vowel is [e]:

- $\begin{array}{ccc} (43) & b\acute{e}r-\acute{a} & \rightarrow & [b\acute{e}r\acute{e}] \\ & sell-GO & \end{array}$
- (44) $\lim \dot{a} \rightarrow [\lim \dot{e}]$ see-GO
- (45) i kó lìm-á nám zà →[í kó lìm-é]
 3PL INF see-GO 1DU EE
 'they saw us'
- (46) sò bér-á-ŋ gò-nàŋ skù → [sò bér-é-ŋ]
 1SG sell-GO-3SG cow-1SG NEG
 'I will not sell him my cow'

The back round vowels become front round. Thus, the third-person singular object u becomes \ddot{u} when it follows a syllable with a front vowel:

- (47) mèd-ú swear-3SG 'swear it!'
- (48) $\check{z}\check{e}\check{b}$ $\check{z}\check{e}\check{b}$ \check{a} $\check{z}\check{e}\check{b}$ - \check{u} ... follow follow 3SG follow-3SG 'He followed and followed her...'
- (49) déb- û take-3SG 'take it there!'

The vowel fronting can spread to clitics as well. Consider the following form, which consists of the verb giz 'tell', the goal orientation marker \dot{a} , the first-person singular object pronoun $k\dot{u}$, and the end-of-event marker za. All low vowels are fronted under the influence of the high front vowel of the verb:

3.3 Leftward vowel fronting

The vowel of the suffix causes the fronting of the preceding vowel a:

(51) wà-hín → [wèhíŋ]
 DEM-DEM
 'this one or those ones' (Throughout the book we represent this form, and other complex determiners, without morphemic division, viz. as wàhín)

Vowel fronting operates also across words but only within phrases:

If a back vowel directly follows a front vowel, the back vowel is fronted. In the following example, the goal orientation marker a is fronted to e following a high front vowel, and then it replaces i as a result of i deletion:

- (53) i mò si-á-yi tàtà zá
 3PL REL run-GO-STAT 3PL EE
 'they have returned running' is realized as:
 [i mò šé-y tòtò zá]
- (54) *i* kà s*i*-á-k zà → [í kà šé-k zá]
 3PL REL run-GO-1SG EE
 'they ran for me'

A slightly different type of vowel fronting involves schwa. Schwa becomes fronted when separated from the high front vowel by a sonorant. The high round vowel, in turn, becomes central:

(55) dùwón idá → [dòwíndá]
back house
'back of the house' (as a part of the prepositional phrase)

3.4 Barriers to vowel fronting

The palatal glide is a barrier to vowel fronting. Consider the behavior of the verb "to see," which in infinitive form sounds like [kɔ́ ti]. The verb must have an underlying palatal glide, which is realized as such when the verb is followed by a low vowel. The evidence for the presence of the palatal glide is provided by the fact that the low vowel is not fronted:

- (56) $k\acute{a}$ $tiy-\acute{a}$ $z\grave{a}$ \rightarrow [k\darkfiv-
- (57) kớ tìy-á-k zà → [ká tìy-á-k zà]

 INF see-GO-1SG EE

 'he looked at me'

We interpret the absence of raising in the examples above as further evidence that the verb 'to look' is in fact tiy, not ti, and that the palatal glide is a barrier to vowel raising. This property allows us to establish

that the underlying form of the plural marker is in fact yii and not i, as it is most often realized, because the addition of the plural marker never causes vowel fronting, nor does it cause palatalization of the preceding alveolar continuants:

Schwa becomes front when followed by a CV sequence where V is high and front through the following processes (only the relevant part is illustrated):

3.5 Vowel deletion

The single most important rule affecting the phonetic structure of an utterance in Mina is vowel deletion in phrase-internal positions, including the position before a suffix. Vowel deletion is a grammatical marker of phrase-internal position, and vowel retention is the marker of phrasal boundary. The consequences of this rule include not only the emergence of various consonant clusters but also the emergence of schwa to prevent a disallowed cluster from emerging because of vowel deletion. Vowels that are grammatical markers, including derivational morphemes, are never deleted phrase internally or before a suffix. First an illustration of vowel deletion:

If the final vowel of a word is a derivational morpheme, as is the case with $k\hat{i}$ 'meat', most probably derived from $k\hat{a}$ 'cow', such a vowel is not deleted in contexts in which lexical vowels are always deleted:

Vowel deletion is a means of coding phrasal boundary. Retention of the vowel is a grammatical marker of the syntactic structure of the utterance. The distinction between the predicative construction and the attributive construction, with the same element as either the predicate or attribute, is coded through the system of vowel deletion and vowel retention. In the predicative construction, the last vowel of the subject is retained, thus marking phrasal boundary. In the attributive construction, the final vowel is deleted, thus marking phrase-internal position. Compare the following examples. Equational clauses:

- (62) *ỳkwà báytàŋ* goat large 'the goat is large'
- (63) s tì nhwà báytàn 1SG see goat large 'I see that the goat is large'

In the attributive construction, the final vowel of the noun $\hat{\eta}kw\hat{a}$ is deleted:

A fronted object retains its last vowel, and thus it is coded as a separate phrase within the clause:

(65)tá hàzá sà mbál skù kì meat GEN 1SG like **NEG** dog 'dog meat, I don't like it'

Vowel retention and vowel deletion is a means of coding phrasal boundary. Focus on the adverb can be coded by setting it apart as a separate phrase through retention of the preceding vowel:

(66)lìm-é gwáká mùmbùrkó sà elephant yesterday 1SG see-GO 'I saw an elephant, just yesterday'. The relevant portion is realized as: [gwáljá můmbůrkó]

The deletion of the preceding vowel indicates that the adverb has the same information value as the other elements of the clause:

(67) mùmbùrkó] sà lìm-é [gwák elephant vesterday 1SG see-GO 'I saw an elephant yesterday!'

Word-initial vowels which are not grammatical morphemes and which do not replace preceding vowels, are deleted in phrase-internal position. In the following phrase the noun hidà 'man' in isolation has an epenthetic [h]. The glottal continuant [h] does not occur in phraseinternal position. The initial vowel i is deleted in phrase-internal position:

wàcin [tséy dò wàcin] tán (68)tséy hídà wùtá village then man DEM EE go 'The man returned home'

3.6 Vowel rounding

Schwa and i become round when followed by a round vowel or labial glide:

 $V[+high, -round] \rightarrow [+round]/$ (C) S [+round]. (69)

This rule is particularly interesting for schwa, which itself is a product of vowel insertion. Thus, the noun kà has its vowel deleted and schwa inserted when followed by a word beginning with a consonant,

and consequently becomes $\not b$ in phrase-internal position. The schwa then becomes u if it is followed by a labial glide:

Here are other examples:

Schwa may become round when followed by a round vowel in the next syllable, even if the two are separated by an obstruent:

(72)
$$k\hat{\sigma}$$
 $t\acute{o}k$ \rightarrow [kùtók]

INF finish

 $\acute{a}b\grave{\sigma}$ $\acute{a}b\acute{o}\eta$ \rightarrow [ábù hóŋ]

ASSC 2SG
'with you'

The high front vowel undergoes rounding in the same circumstances:

(73)
$$d\tilde{i}$$
 $w\tilde{u}d\hat{o}$ \rightarrow [$d\tilde{u}$ $w\tilde{u}d\hat{o}$] put food 'put food'

4. Syllabification

4.1 Syllable structures

The following syllabic structures are allowed (period marks syllabic boundary):

V a 'third singular subject', $\dot{a}.\dot{b}\dot{a}$ 'associative marker, singular' \dot{a} 'third person plural subject'

- S (S stands for a sonorant). Only nasal consonants can be syllabic peaks: ńtsà 'vulva', ńtsùr 'nose', ńvà 'excrement'
- An example of the VC syllable is the verb if 'blow', the form oc-VC curring in verb reduplication. Most VC syllables occur across a morpheme boundaries or as a result of the final vowel deletion in a VCV structure:
- [áw.tá.tá.kí.nèn] (74)wtá tá-kínèn PRED village GEN-2PL 'at your place'
- CV tá 'genitive marker' (tá in phrase-internal position) CVC dòk 'horse', tár 'month' (in phrase-internal position)
- grá 'find', trá 'month, time' CSV There are no CSVC syllables.

To prevent a disallowed syllable structure including disallowed consonant clusters from emerging as the result of vowel deletion, a schwa is inserted in lieu of the deleted vowel. Although various syllabic structures are allowed, some structures are preferred over others. Thus although there are structures of the type CSV, in the process of syllabification the structure CVS is preferred over the structure CSV. Consider the word trá 'month, time'. When it is followed by another word within a phrase, the final vowel is deleted. The syllabification process does not insert schwa after the second consonant, but rather after the first. The tone of the morpheme remains the same:

Similarly the auxiliary verb gr' 'search' is realized as $g\acute{a}r$:

The principles of syllabification make it possible to establish some phonetic sequences [nd] and [ng] as prenasalized stops rather than sequences of two underlying consonants. In the process of syllabification the underlying segments nd and ng never become * $n \ni d$ or * $n \ni g$ but rather $nd \ni or ng \ni :$

Syllable-initial sequences of three consonants are not allowed.

The schwa is inserted between words in a clause to prevent a disallowed syllable structure from emerging. In the following example, a verb borrowed from Fula, naast 'enter', is realized as nástó with final schwa because it is followed by a preposition with an initial consonant:

A schwa is also inserted to prevent a disallowed consonantal sequence from emerging. The sequence of a continuant followed by another continuant is disallowed, and consequently the schwa is inserted between the consonants:

(79)
$$k\acute{o}$$
 $nd\grave{o}$ $z\acute{a}$ $f\acute{u} \rightarrow$ $k\acute{o}$ nd z' $f\acute{u} \rightarrow$ $[k\acute{o}$ $nd\grave{o}$ $z\acute{o}$ $f\acute{u}]$ INF go EE always 'Each time she went . . . '

4.2 Syllable reduction

The problem to be discussed under syllable reduction is presented by the alternation between the forms wùtá and wtó 'village'. When this noun is phrase final, it is realized as wùtá:

When this noun is in phrase-internal position, it is realized as wtá:

(81) á wtó cíŋ
PRED village his father
'at his father's'

The explanation of the phrase-internal form [wtó] is as follows: The high vowel is reduced to \emptyset after the homo-organic glide if the syllabification conditions allow. Thus $wùt\acute{a}$ (citation form) is reduced to $wt\acute{a}$. Other examples of the application of high round vowel reduction after labial glide:

(82) à zòm-á wùdá or [à zòmá wdà]
3SG eat-GO food
'he ate the food'

Compare the non-reduced second vowel:

(83) wùdó nàn food 1SG 'my food'

5. Glide formation

There are two sources of phonetic glides. One is the underlying glide; the other is a product of phonological rules. The presence of underlying glides is evidenced by the word-initial forms, as illustrated earlier in this chapter. Here is additional evidence for the underlying glide as the initial segment of the stative marker -yi which is reduced to [y] in word final position:

(84) mò nd-à-y zá → [mò ndày] or [mù ndày]
REL go-GO-STAT EE
'he has come'

The underlying *i* becomes a palatal glide following the low vowel:

(85) á idá tùkóŋ

PRED house 2SG

'at your compound'

[áydá tùkóŋ]

can be a sidá tùkóŋ]

6. Tone

6.1 The system and the functions of tone

There are two tones, low, marked by grave and high, marked by acute. Tone has lexical and grammatical functions: $k\dot{a}$ 'cut' and $k\dot{a}$ 'a single bovine, cow, bull', $y\dot{a}m$ 'water' and $y\dot{a}m$ 'also', $v\dot{a}k$ 'river sand', $h\dot{a}y\dot{a}k$ 'country, earth'.

Tone also may distinguish between grammatical morphemes. Low tone on inherently high tone verbs codes imperative mood.

Some morphemes have inherent tone, and others have polar tone, i.e. the tone opposite to another tone. Some morphemes that have polar tone are: the end-of-event marker za, the point-of-view of subject marker ka, the dependent habitual marker ra, all occurring in verb-phrase-final position. The third person object suffix -u has also polar tone. The infinitive marker ka has also polar tone: ka da 'to marry' and da 'penetrate, ache, pain' and 'wear trousers, shoes'.

The inherent tone of a morpheme can also undergo a change to code a number of functions. Thus tones of subject pronouns that are inherently low become high to code imperative and subjunctive moods. The tones of verbs that are inherently high become low in the imperative mood and also in dependent clauses. In the following example the first instantiation of the verb $6\delta t$ 'take' has high tone in the matrix clause. The second instantiation has low tone, as it occurs in a sequential clause. The third instantiation has high tone, as it again occurs in the matrix clause:

(86)	kwáyà	ŋ	6át	gàdzàn	nbàl	ngàn	6èt	nákà
	squirre	el	take	guitar		3SG	take	ANAPH
	ká	kàp-á		nd-á		6át	dùwáŋ	
	INF	break-	GO	go-GO)	take	back	
	ngàn	ɗiy-à		zà	ngàn	ká	kàđám	
	3SG	put-G0)	EE	3SG	PREP	calaba	sh
	ábà	ndá	ngàn	á	wtá			
	ASSC	go:GO	3SG	PRED	house			

'Squirrel took his guitar, the one that he broke, he came to put it on his back, as his calabash, and then he returned home'

The tone on monosyllabic and polysyllabic words borrowed from lan-

guages without tone is not predictable. Most borrowings from Fula have high tones: gaw 'hunter' $\rightarrow g\acute{a}w$; wurt 'leave' $\rightarrow w\acute{u}rt$; mallum 'teacher' → màllúm; deft 'book' → déf 'book, Koran'; derewol 'paper' -> déréwól. But there are also low-tone borrowed words: gam 'because' -> ngàm; deftere 'book' -> déftèrè. The same word may have different tones, e.g. nástó and nástó 'enter'.

6.2 Tone and vowel deletion

If a vowel is deleted the tone of the syllable is also deleted. Consider the behavior of object pronouns. In phrase final position the first person object pronoun is kù:

(87)hídì wà mà-nd-á-kù dè6 DEM REL-beat-OBJ-1SG lead man nà kítà PREP justice(F.) 'It was this person who hit me. Take him to be judged.'

In phrase internal position the final vowel of the pronoun is deleted, and there is no tonal shift:

- (88)ká màl-á-k zà INF catch-GO-1SG EE 'He caught me'
 - í ká lìm-é-k mùmbùrkó zà 3PL **INF** see-GO-1SG yesterday EE 'They saw me yesterday'
- (89)wèhin á hìdì zá ván á n DEM 3SG **COMP** 3SG rain **PREP** man gàr nd-á-k ká ďà ká á INF **3SG** fall INF touch-GO-1SG want kàsám skù body NEG

'This man said, "Rain, when it falls, will not touch me."

6.3 Tone and vowel replacement

When a suffix is added to a morpheme ending in a vowel, and the vowel is by itself not a grammatical marker, such a vowel is deleted before suffixation. The tone that the vowel carried is also deleted. The tone of the vocalic suffix becomes the tone of the new syllable. Consider the addition of the goal-orientation marker \acute{a} . The evidence that this marker has high tone is provided by its realization after CVC verbs:

- (90) à zá ngùl-yíì gámbáy tá màcíŋ
 3SG COMP husband-PL stick GEN DEM
 lùw-á-ŋ màk
 say-GO-3SG would you
 'She said, my husband, this stick, say to it'
- (91) hà ndí dzán-á nám skèn
 2SG HAB find-GO 1DU thing
 mèná wà tíkì
 like DEM where
 'Where do you find us things like this?

Consider now addition of the goal-orientation marker to a monosyllabic verb *ndà* 'go'. After vowel deletion in phrase-internal position, the consonant of the verb and the goal-orientation marker form one syllable with high- rather than low tone:

(92)mbí ďéw tsév ká báv ndá *6àt* go:GO take 3SG like chief sit SO mámán ábà cin ASSC his father his mother 'Then he became a chief, and he came to take his mother and father.'

6.4 The operation of the polar tone

The assignment of the tone to a morpheme that has polar tone is based on the preceding or the following tone. Consider the addition of the third person object pronoun u. The tone of this pronoun is polar, opposite of the tone of the preceding verb. The evidence that the tone is polar is provided the tone of the suffix when added to CVC verbs. First examples of the third person suffix added to high-tone verbs:

- (93) mbà à g-á sáŋ sà mà káp-ù child 3SG say-GO 1SG 1SG REL break-3SG 'The child said, "It is me that broke it."
- (94) ví à mbál-ù ví à mbál-ù who 3SG like-3SG who 3SG like-3SG 'Everybody liked her'

Here is an example of the third person suffix added to a low tone verb. According to the hypothesis about the tone of the suffix being polar, it carries high tone:

(95) dzàw i dzàw-ú á dùwán màdìngwàrzé attach 3PL attach-3SG PRED back donkey 'They attached it to the back of the donkey.'

Similarly the point-of-view of subject marker ka has a polar tone, as evidenced by the following examples:

- (96) wàl màsálád í ndí gám kà woman lazy 3PL HAB chase POS 'The lazy woman is chased away.'
- (97)à zá sà táŋ tán zà nd-á 3SG COMP 1SG walk walk go-GO EE wàcin sà widin kà ták kàtàf ká POS block road snake INF DEM 1SG ndə divà táŋ **DED** beat start

'He said, "I was walking, walking, and there was a snake blocking the road, and I started to hit it."

The determining factor in assignment of the polar tone is the last preceding tone as realized in the surface structure, rather than the underlying tone. When the point-of-view of subject marker follows a verb with object pronoun and with the goal-orientation marker \acute{a} , i.e. a marker with high tone, the point of view-of-subject marker has low tone. The tone of the point-of-view of subject marker would have been high if it were to be sensitive to the tone of the object marker, which by rule should be low:

(98) mbí mà tr-á-k kà
ANAPH REL save-GO-1SG POS
'It is he who saved me!' (tár 'separate people who are fighting'; 'save')

Similarly the third person object marker added to the consonantal root, has the tone opposite of the last preceding tone:

(99)tál ká wàdá mámán màl hà hà **ASSC** try INF seize his mother 2SG food mà d-ú REL cook-3SG 'If you try to discipline [children] with food [be refusing food] it is the mother who cooks it'

If the object were to be sensitive to the underlying tone of the verb, which is low, the tone of the object marker u would have been high.

7. Conclusions

The consonantal system of Mina is characterized by the presence of prenasalized and glottalized stops in addition to oral and nasal stops. The language has a series of continuants, including voiceless and voiced lateral continuants, and it also has two affricates. There are clusters with different values for the feature voice. No geminated consonants are allowed except for the lateral liquid. Continuants and affricates are palatalized before a high front vowel. The vowel system consists of six vowels, including schwa. There is a fronting vowel harmony whereby if a back vowel follows a consonant that is preceded by a front vowel, the back vowel is fronted. A palatal glide is a barrier to vowel harmony. There is also a very limited leftward vowel harmony, whereby the vowel a undergoes fronting when followed by a consonant and a front vowel. An outstanding feature of the phonological system of Mina is interaction between syntax and phonology whereby all word-final vowels other than grammatical morphemes are deleted in phrase-internal position. Vowel retention is a marker of the phrase-final position, and vowel deletion is a marker of the phrase-internal position. The language has two tones, high and low. The tone has lexical and grammatical functions. Some morphemes have inherent tones and others have polar tones, determined by the following or preceding tone. When the final vowel of a word is de leted, the tone of the vowel is deleted as well.

We describe the operation of tone in various sections, where the tone plays the grammatical role or when the underlying tones of morphemes are affected.

Chapter 3

The structure of the noun phrase

1. Introduction

The noun phrase may have the following structure: Head (Number) (Modifier) (Determiner) (Number). The head of a noun phrase is that element that can occur alone in lieu of the noun phrase. The head of the noun phrase may be a noun, a pronoun, or a demonstrative.

There are four types of modifying constructions: (1) appositional constructions with no morphological marker; (2) constructions consisting of a noun, the preposition $t\dot{\partial}$, and either a noun or an adjective as a modifier; (3) constructions consisting of a noun and the relative clause marker $m\dot{\partial}$, which can be followed by either nouns or verbs as modifiers; (4) constructions of the form (Noun) $l\dot{\partial}$ Noun. The plural marker may be added either to the head noun or at the end of the noun phrase, or it may appear in both positions at the same time. The noun phrase may also consist of two noun phrases joined by the associative preposition b.

In what follows we describe various components of the noun phrase and the way they interact with each other. In Chapter 16 (Reference system) we discuss the system of reference, which includes the coding of previous mention, deixis, definiteness, coreference, and switch reference. These functions involve the use of the nouns followed by determiners.

2. The defining features of the category noun

The defining characteristic of the category "noun" is its ability to function as an argument of a proposition without any morphological modifications. This characteristic distinguishes nouns from verbs, adjectives, and adverbs. Verbs and adjectives cannot serve as arguments without some modification, and this characteristic distinguishes them from nouns. Nouns cannot perform the adverbial function without some previous modification or without prepositions, and this characteristic distinguishes them from adverbs.

3. Noun stems

The noun stem may have any of the following forms (phrase-final forms are quoted):

CV kà 'cow', mbù 'child'

CVC $d\partial k$ 'horse'

VCV iná 'Hina' (place name)

CCV *ndrì* 'sorghum'

CCVC kràm 'dry season', vràts 'mosquito'

CVCV dámù 'bush'

CVCCV mánwà 'pancreas'

CVCVC kàtàf 'road', zàvày 'hump, humpback'

CVCVCV nèwéné or nèwéní 'salt'

CVCCVCV mágtàgà 'cloth'

CVCC(C)VC dúngùr 'animal hump', wirnjik 'ashes'

CVCVCVC tsìtsélém [cìcèlém] 'wood'

More-complex lexical structures appear to be composites of several morphemes, lexical, derivational and inflectional, described in the next section.

Some nouns have initial consonant n, which in other Chadic languages is probably a borrowed marker (Frajzyngier and Ross 1991). The evidence that the initial nasal is a prefix, even if an old one, is provided by the fact that some of these nouns have variants without the initial n. Frajzyngier and Ross note that nouns with a nasal prefix in Chadic languages often denote animals or parts of animals, and this appears to be the case in Mina as well.

(1) ŋkwà 'goat' nkw-yíì kwà 'goat' kw-yíì

For the following nouns only the forms with initial nasals were recorded. The examples (2a) have non-syllabic nasals and (2b) contain initial syllabic nasals:

(2a) 'ram' ndùrúk ndàgwáŋ 'brain' 'the bottom; the back' ndòn ngáŋ 'torso' 'co-wife' ngàwàlà 'foot; leg; paw; wheel' ngàz 'herd; flock; crowd' ngàb ngàbár 'rooster' 'feather' ngèf ngùl 'husband' (2b) ńtèk 'sheep' 'vulva' ńtsà 'nose' ńtsùr

'excrement'

4. Derivational morphemes

ńvà

Our data show only three derivational morphemes for the formation of nouns, two of which are productive, $m\hat{\partial}$ and $l\hat{\partial}$. The noun-final morpheme -i is not productive. The only example containing this morpheme is $k\hat{\partial}$ 'meat', derived most probably from $k\hat{\partial}$ 'a single animal of bovine family, undetermined for sex', glossed further in this work as 'cow'. The lack of other examples prevents us from postulating an underlying tone of this morpheme. The evidence that i is a morpheme rather than part of a root is provided by the fact that, unlike a lexical word-final vowel, it is not deleted in phrase-internal position:

- (3) gì tó góldàm meat GEN pig 'pork'
- (4) gì tớ ŋkù-dámù meat GEN goat-bush 'gazelle meat'

The marker i may well be a lexicalization of the form that results from the addition of the plural marker yii to the noun ka, with the ensuing final-vowel reduction.

4.1 The agentive prefix mà

The prefix $m \partial$, identical with the relative clause marker, can derive nouns from other lexical categories, more specifically, from verbs and numerals.

When a noun is derived from a verb, the marker $m \ge 0$ precedes the simple or the reduplicated form of the verb. The verb has the simple form if it is followed by the object. If the verb has inherently low tone, it has high tone in the nominalized agentive form:

- (5) mà lám bíŋ

 REL build room

 'The one who builds a room . . .'
- (6) ká làm bíŋ zà
 INF build house EE
 'He built a room.'

Disyllabic low-low verbs become high-low in the nominalized agentive form:

(7) mà téwèl gámbáy

REL twirl stick

'the one who twirls the stick'

Cf.:

(8) kó tèwèl kámbáy zà
INF twirl stick EE
'He twirled the stick'

The low-high verbs stay low-high in the nominalized agentive form:

(9) mà pàdák njûl

REL split grass

'the one who splits grass'

Cf.:

(10) kớ pàdák njûl zà INF split grass EE 'He split grass'

The verb has the reduplicated form when it is not followed by the object. The same tonal rules apply, low tone verbs become high, and low-low verbs become high-low. Compare the tone on the verb $ng \partial d$

when used in a nominalized expression and when used in a predicative expression:

- (11) mà ngád ngád pàl á pàl bàtákàr
 REL count count detach 3SG detach bag
 ngàd ngàd
 count count
 'The one who was good at counting detached the bag and counted [the seeds].'
- (12) mà mbír mbír REL jump jump 'the one who jumps'

Cf.:

- (13) ká mbìr zá
 INF jump EE
 'He jumped'
- (14) mà gim gim

 REL listen listen

 'the one who is a listener'

Cf.

- (15) ká gìm zá
 INF listen EE
 'He listened'
- (16) mà tíy tíy

 REL look look

 'the one who looks'

Cf.:

(17) ká tìy zà INF look EE 'He looked'

High tone verbs stay high in the nominalized agentive form.

While it may be claimed that the nominalized agentive forms are simply varieties of relative clauses, nevertheless, the marker $m \hat{\partial}$ is a derivational morpheme, and it can be used with nominal stems:

(18) mà-bám 'side, border' mà-dzàlbán 'river shore, steep'

We consider the marker $m \ge 1$ to be a derivational morpheme even in

words for which no form without $m \ge a$ has been recorded. Some of them are names of body parts and animals:

```
(19) mà-núnúk 'forehead'
mà-dìŋwàrzé 'donkey'
mà-námnám 'liver'
mà-ndàváŋ 'rabbit'
mà-kàbám 'face'
```

Quite possibly, the noun *mòmóŋ* 'mother of a third-person' is also a derived form, through the addition of the prefix *mò*. Other semantically related items display a different form: *màtsàh* 'your mother', *mànàŋ* 'my mother'.

A form that is probably unrelated, $m \hat{\sigma}$ 'mouth' derives names of languages from nouns:

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(20) mà-dzùndzùn [mà jùnjùn] 'the language of the dzùndzùníyì' 4.2 The singulative prefix là
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The prefix $l \geq 0$, whose tone is low with a few exceptions, is added to nouns and to property concept words to mean "one who belongs to X" or "one that has the property X". Nouns derived with the prefix $l \geq 0$ are always [+human]:

```
(21) là-dábà 'a Daba person' (PL dáb-íi)
là-márwà 'a Maroua person'
là-káftákà 'a Kaftaka person'
là-násárá 'a white man' (PL násár-íi) from Arabic via Fula
nasaara)
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The high tone exceptions are:

```
lá-máts 'sick person' (cf. máts 'die', 'sickness')
lá-nyáw 'sick person' (ŋyáw 'sick' in Fula; Mina ádállà)
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5. Modifying constructions

Modifying constructions have different forms, depending on the inherent semantic and categorial properties of the modifier. Property concept words have a variety of subclasses, which determine the way they are used as modifiers. Use of a noun as a modifier requires a still different means. The present section is organized according to the class of the modifier, and this in turn is determined by the coding means required for its use.

5.1 Property concept words

There are three classes of lexical items that are referred to as "property concept words" in the present work. The three classes share the defining characteristic of adjectives, viz., they have an inherent modifying function. All classes of property concept words follow the heads they modify. For all classes the head and modifier are one phrase, as evidenced by the phonological changes on the head noun, viz. deletion of the final vowel of the noun and insertion of the epenthetic schwa if so required by the syllabic structure. The three classes differ in the way they are used in the attributive function.

The first class consists of lexical items that can modify a noun without use of additional syntactic or morphological means. This class is exceedingly small. We were able to identify only the following items as belonging to this class: $b\acute{a}yt\grave{a}y$ 'large', $p\acute{a}r$ 'another'. The form $b\acute{a}yt\grave{a}y$ appears to have the suffix n, the same suffix that is added to pronouns and deictics in phrase-final position. The evidence for this hypothesis is the distribution of the form $b\acute{a}yt\grave{a}y$, which occurs only in phrase-final position. In phrase-internal position the form is $b\acute{a}yt\grave{a}$. (The examples that follow each adjective are provided as evidence of the inherent modifying function of the class of adjectives.)

Compare the phrase above with the predicative construction, which consists of two phrases, the subject phrase and the predicate:

(23) ŋkù wà báytàŋ goat DEM large 'That goat is large.'

The form pár 'another' is an adjective:

- (24) skàŋ pár thing another 'another thing'
- (25) vì pár rainy season another 'another rainy season'

The adjectival modifier may be reduplicated, for the coding of plurality of the attribute:

(26) <u>kámbáy làkwid làkwid làkwid</u> stick straight straight straight straight straight straight

The second type of property concept words must have the relative marker $m\grave{\partial}$ preceding them. The attributive construction is therefore quite similar to the attributive construction where the modifier is a relative clause. The construction forms one phrasal category with the head noun, as evidenced by the phonological reduction of the head noun:

- (27) ŋkùm fés
 goat REL small
 'a small goat'
- Cf.:
- (28) *ỳkwà fés*goat small
 'The goat is small.'

Some of the lexical items in this class are jín 'tall', dùk 'short', cèrcèr 'narrow', p'úm or p'óm 'deep' (p is ejective), tàtàdáy 'shallow, exposed':

- (29) hìdò mò jíŋ man REL tall 'a tall man'
- (30) hìdà mà dùk man REL short 'a short man'

- (31) làkwát mò p'óm river REL deep 'a deep river'
- (32) làkwát mà tàlàdáy river REL shallow 'a shallow river'

We also have in our records what appears to be a compound, mbir deded 'multicolor':

(33) rùkùt mà mbír đềđềđ dress REL multicolor 'a multicolored dress'

The lexical items of types one and two are not verbs. They do not allow morphemes that are otherwise associated with verbs, such as aspectual markers and tense markers. Although they form predicative constructions through linear order, unlike verbs in topicalized constructions, the property concept predicates do not allow the third-person subject pronoun \grave{a} :

- (34) hìdù wà jín man DEM tall 'The man is tall.'
- (35) làkwát wà p'úm river DEM deep 'The river is deep.'
- (36) rùkùt wà mbir dêdêd dress DEM multicolor 'The dress is multicolored.'

The lexical items from classes one and two are not nouns because they cannot serve as arguments. Lack of the usual morphological and syntactic characteristics of verbs and nouns sets apart these two classes as a separate lexical category from both nouns and verbs. These two classes represent inherent adjectives.

The third type is similar to nouns with respect to its attributive and predicative functions. To this class belong many property concepts derived through the suffix -ék: kwèdék 'white', gùžék 'red' (covers the

range of red, orange, yellow, brown), délék 'green, blue'. Other color terms are: ùzón 'dark' (e.g. about a cloud-covered sky), kùlóh 'gray'. The adjective nék 'good' appears to be one of those derived forms. We do not, however, have independently attested base forms without the ending -ék. Modification for these property concepts is realized by a construction consisting of the head noun, followed by the genitive marker $t\dot{\delta}$, followed by the modifier. Color terms belong to this type of modifier. The lexeme $y\dot{\delta}m$ 'water' partially overlaps with the term "color" and is often used in the description of colors:

- (37)máłtàgà tá vàm gwàr tú cloth GEN water GEN cola nut (F.) 'orange cloth'
- (38)rùkùt tá lvèn shirt GEN black 'a black shirt '

Property concept words belonging to this group have to be reduplicated in the predicative construction, a property that is not shared by any other class of lexical items:

6àt 6ám dídek dídek (39)wìží báy-yíi chief-PL take children eat sweet sweet 'The chief's children took it and ate it. It was sweet.'

For the concept "transparent" an ingenious periphrastic construction is used:

(40)tìy tóŋ pass 'transparent'

The reduplication of the adjectival phrase codes intensification of the adjectival concept:

kámbáy làkwid làkwid làkwid (41) stick straight straight straight 'very straight stick'

Color terms can also be formed through true relative clause constructions. The word sigine (no palatalization of s) 'indigo plant', borrowed from Fula, forms a modifying construction through the relative marker $m \hat{a}$ and the verb $n \hat{a}$ 'to be like':

(42) rùkùt mò nà sigìné dress REL like indigo plant 'the dress like an indigo plant' (blue)

5.2 Connecting modifiers by the preposition tá

Several types of expressions are formed through the use of the preposition $t\acute{a}$, glossed as GEN for genitive. We use the term 'genitive marker' as an identifying term rather than as a product of analysis. The modifying constructions coded by this marker include possessive expressions, some attributive modifications, and modification by adverbial expressions. Structurally there is no difference among them, but for a linguist looking for data for typological research, it is useful to divide the section into various semantic concepts that in other languages may have separate formal representations. Hence the subsections below are intended to facilitate reading rather than to represent different structures of the language.

The head noun has final vowels deleted, as amply illustrated in examples below. This indicates that the head noun forms one phrase with the following modifying construction.

5.2.1 The modifying construction with a noun as a modifier

The modifying construction using the preposition $t\delta$, has the form Noun phrase $t\delta$ Modifier. The modifier must be a noun, but the range of functions coded by such modification is quite wide, at least as reflected by the number of categories that cover the same range in other languages. No distinction is coded between alienable and inalienable possession. As per the rule of vowel rounding, the schwa of the marker $t\delta$ is rounded before a round glide or a vowel.

The construction is used to code relationship between the whole and a part:

(43) ngàzù wá tú wàl nàn foot DEM GEN wife 1SG 'That is my wife's foot.' (44) tàlàn tá záváŋ-yíì
head GEN guinea fowl-PL
'the heads of the guinea fowl'

It is also used for family relations, e.g. wife of X:

(45) wàl tá kwáykwáy mèsáw mèsáw woman GEN hyena grill grill tók zà finish EE 'The wife of the hyena finished grilling.'

The construction is used to code the purpose of an object:

- (46) mívàn tá tápá stone GEN tobacco 'tobacco stone'
- (47) tèbén tá ndìr dáhà granary GEN sorghum exist 'There is a granary of sorghum'
- (48) tèbén tá kàkàs dáhà granary GEN beans exist 'There is a granary of beans'

The construction is also used to code an attribute of an object:

- (49) hál tó gámbáy ngờn limit GEN stick 3SG 'the area delimited by his stick.'
- (50) cìkid tá gwidiŋ sesame GEN single 'a single sesame seed'

láy tá mìtís time GEN hunger 'time of hunger'

The construction is used to modify an object by its place:

(51) hìd tá nfád-yíì man GEN palace (F.)-PL 'the men of the palace'

The construction with the genitive marker may also be used to code modification through a demonstrative pronoun in topicalization constructions:

kámbáy (52) à zá ngùl-yíì tá màcin COMP husband-PL stick GEN **DEM** 3SG màk lùw-á-ŋ say-GO-3SG would you 'She said, my husband, this stick, say to it,'

The preposition $t\dot{a}$ is derived from the determiner $t\dot{a}$, which otherwise codes deduced reference. The evidence for the identity of the two forms is provided by emphatic genitive constructions, when the form $t\dot{a}$ is expanded to the phrase final form $t\dot{a}\eta$. The importance of this form is that it is identical with the phrase final form of the deduced reference marker $t\dot{a}$:

(53)màl íi màl-á-ŋ kà báytàn kà tán seize-GO-3SG cow seize 3PL large cow **GEN** nd-á рá vàl-á-n kàďám ngùl give give-GO-3SG calabash 3PL male go-GO 'They caught a large cow, a bull, for him, and they gave him a calabash [to fill it with the milk from the bull].'

5.2.2 Multiple modifying constructions

Multiple modifying constructions can be formed through the multiple use of the genitive marker $t\acute{a}$:

(54)báv 6àt zánà tá mìč sév cloth wrap chief take **GEN** SO corps рá té. gwidin nà wàl á single GEN give PRED PREP woman wàciŋ DEM

^{&#}x27;The chief took a single shroud and gave it to this woman.'

6. Possessive pronouns

The modifying structure with pronominal possessors is Noun $t\delta$ Pronoun. The marker $t\delta$ does not occur with the first- and third-person singular, because the preposition t assimilates completely to the initial nasal consonant of the first and third person pronouns. This fact is an argument against a potential analysis of schwa being a product of vowel reduction rather than vowel insertion. If it were a product of vowel reduction it would not be deleted. Possessive pronouns have low tone:

- (55) bàt á bàt déftèr ngàn take 3SG take book 3SG 'He took out his Koran.'
- (56) wàl nàn wife 1SG 'my wife'

A phonetic realization of the genitive marker in these constructions results in ungrammatical phrases:

(57) *wàl tớ nàn wife GEN 1SG for 'my wife'

The evidence that the consonant t of the genitive marker is deleted before an alveolar nasal is provided by the fact it does occur before suffixes beginning with other consonants, including the labial nasal.

If a noun is modified by an adjectival modifier in addition to a possessive pronoun, the order of modifiers is Possessive Adjective:

(58) wàl ngòn màdáràf wife 3SG favorite (the most loved) 'His favorite wife'

Possessive pronouns, except for the third-person singular, like other pronouns in Mina, have different forms in phrase-internal and phrase-final position. In phrase-final position all pronouns have the nasal suffix. In phrase-internal position there is no suffix. The following is the set of possessive pronouns in phrase-final position:

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	Singular	Dual	Plural
1	nàŋ	tá-mù	t-inén EXCL
	· ·		t-òkóŋ INCL
2	tá-kóŋ		t-ikinėŋ
3	ngàŋ̈		tètàŋ

Illustrated on the noun gàdûrì 'pot':

	Singular	Dual	Plural
1	gàdûr-nàŋ	gàdûr-tá-mù	gàdûr-t-ínéŋ EXCL
	•	C	gàdûr-t-òkóŋ INCL
2	gàdûr-t-kóŋ		gàdûr-t-ikinéŋ
3	gàdûr-ngàŋ		gàdûr-t-ít-yíì
			gàdûr tá-táŋ

The final vowel of the noun, if any, is deleted before the possessive suffix, as illustrated by the following partial paradigm for the possessive form of the noun $r\acute{a}$ 'hand', which becomes r in phrase-internal position:

(59)	r	t-òkóŋ	'our hands INCL'		
	r	t-ìkíníŋ	'your hands' [r-t-ikinén]		
	r	tà-mú	'our hands DUAL'		
	r	t-ìníŋ	'our hands EXCL'		

In phrase-internal position possessive pronouns do not have the nasal suffix, and the underlying final vowel of pronouns is deleted. The epenthetic schwa may be added if required by syllabification conditions. The third-person singular possessive pronoun has the same form in phrase-internal and phrase-final position:

Possessive pronouns (phrase internal)

	Singular	Dual	Plural	
1	n	tá-m	t-ín	EXCL
			t-òk	INCL
2	tá-k		t-íkín	
3	ngàŋ		tàt	

Here is an example of the first-person singular pronoun in phrase-internal position:

(60)áá wàl nà ká dzán-á wife 1SG find-GO ah INF skàn pár zà bàdàp EE again thing another 'Ah, my wife found another thing again.'

The nominal plural marker follows the possessive pronoun. The possessive pronoun occurs then in phrase-internal form:

- (61) ngùl nà dáhà wàží
 husband 1SG exist children
 n-yíì dáhà
 1SG-PL exist
 'I have a husband, I have children.'
- (62) ngwáy á wàží túk-yîi
 'say' PRED children 2SG-PL
 dáy dáy á tán fis
 much much PRED 1SG small
 'Say, for your children it is a lot, for me it is little.'
- (63)6àt 6àt kámbáy á ngàn 3SG stick 3SG get get ďivà žéb tàn follow DED put 'He got his stick and went to follow her.'

Possessive pronouns may be followed by the determiner tá:

(64)ká sév má ngùl ngùl wà REL husband husband INF start SO ngàn zà kédén bádàp tá stupidity 3SG DED EE again 'Then the husband started again with that stupidity of his.'

The third-person plural possessive pronoun also has two variants, a phrase-internal form $t \partial t$, which also occurs before the plural marker $y \hat{u}$, and phrase-final form $t \partial t \partial y$:

(65) hàz tàt-yíi dog 3PL-PL 'their dogs'

- (66) hàz tàtàŋ dog 3PL 'their dog'
- gómbòk-yíì fat fat (67)cìbéw á páláh nà PRED outside skin skin frog-PL all go kì fat tàtàn skin 3PL 3PL meat 'All the frogs went outside and skinned their meat.'

7. Possession, kinship terms, and the addressee

Some kinship terms have a different possessive form from the one that would be productively derived through the suffixation of possessive pronouns. The form of the word for "father" differs, depending on whether the reference is to the father of the speaker, the father of the addressee, or the father of a third-person: $v\hat{a}i$ 'my father, daddy' (reduced to $v\hat{a}$ in phrase-internal position) followed by the first person possessive pronoun, $c\hat{e}h$ 'your father', cin 'his father'. The second-and third-person possessive forms are not followed by a pronoun if the possessor is singular:

- (68) tsú (á) r vá này went (PRED) PREP father 1SG 'He went to my father.'
- (69) $ts\dot{u}$ (\dot{a}) r ciy went (PRED) PREP his father 'He went to his father.'
- (70) $ts\dot{u}$ (\dot{a}) r $c\dot{e}h$ went (PRED) PREP your father 'He went to your father.'

The plural pronominal possessors of the noun 'father' is marked by the plural possessive pronouns following the person-marked form of the noun 'father':

- (71) $ts\dot{u}$ (\dot{a}) r $c\dot{e}h$ $t\dot{a}kin\dot{e}y$ went (PRED) PREP your father 2PL 'He went to your father.'
- (72) váì tòkóŋ 'our father'

The term *cin* 'father of a third-person' can be used with a nominal possessor:

(73)nkwà pà vl-á-ŋ 6èt á nà give-GO-3SG PREP goat give 3SG take ngàŋ nákà ngámbù wàciŋ cin father.3SG friend 3SG REM DEM 'He took a goat and gave it to the father of a friend of his.'

Similarly the noun for 'mother' mái takes second- and third-person possessive pronouns different from the ones occurring with other nouns. The first-person pronoun is the same as with other nouns:

(74) máì 'mother'

má nàŋ 'my mother'

má tsáh 'your mother'

mà máŋ 'his mother'

Similarly with the terms for "grandmother," the first person is most probably derived through the suffixation of the first person singular possessive pronoun to the noun didi 'grandmother'. The argument for suffixation is provided by the fronting vowel harmony affecting the pronoun náŋ. Note that the pronoun has high tone, although in other possessive constructions it has low tone. The second- and third-person singular forms are not derived through suffixation, at least not in contemporary language. All plural possessive constructions are formed through the addition of the plural possessive pronouns:

'my grandmother' (75)dìnéŋ 'your grandmother' dàkwáh 'his grandmother' dàkúŋ 'our (DU) grandmother' dìdí tàmú 'our (EXCL) grandmother' dìdí tìniŋ dìdí 'our (INCL) grandmother' tòkóŋ 'your grandmother' tìkínèŋ dìdí 'their grandmother' tàtàn dìdí

Some possessive kinship terms have a different form depending on the relationship between the speaker and the addressee. When a wife is addressing her husband or the husband is addressing his wife, each has the option of using either the first-person singular possessive pronoun or the plural nominal suffix without the possessive pronoun:

First-person singular pronoun used:

(76)ngùl ngàn zá wàl nàn 3SG COMP 1SG husband wife hà ndí dzán-á skàn nám 2SG HAB find-GO thing 1DU tíkì màná wà DEM where like 'Her husband said, "My wife, where do you find us things like this?"

Plural suffix used:

- (77) hà tsáf skù syì wàlí-yíì
 2SG lie NEG COM woman-PL
 'You're not lying, my wife?'
- (78)ngùl-yíì à zá kámbáy tá COMP husband-PL stick **GEN** màcin lùw-á-ŋ màk say-GO-3SG would you DEM.L 'She said, "My husband, this stick, say to it,"

The possessive pronoun, not the plural nominal suffix, is used with nouns "wife" and "husband" when one is not addressing one's own spouse:

(79) áwwá ngwáy wàl nò dò
INTERJ people wife 1SG cook
ksóm ngòn vàngáy
body 3SG how
'The man screamed, "How did my wife cook herself?""

The pronominal plural possessors have the genitive marker tá following the lexicalized forms:

(80) máy tòkóŋ 'our (INCL) mother' mán tìnéŋ 'our .(EXCL) mother' our (DU) mother'

mátsáh tá kínèŋ 'your (PL) mother' 'their mother' 'their mother' 'their mother'

8. Attributive functions through the genitive marker

Several types of property concept terms modify a noun through the genitive particle $t\dot{\delta}$. Most lexical items formed by the suffix $-\dot{\epsilon}k$ belong to this group:

- (81) gàmták tá kwèd-ék chicken GEN white 'white chicken'
- (82) máłtàgà tá gùž-ék cloth GEN red 'red cloth'
- (83) mátagò tó dél-ék cloth GEN green 'green/blue cloth'

But also other property concept terms require the genitive construction:

(84) mbà tá bílèn child GEN strong 'a strong child'

(85) bà tá lìvèn cow GEN black 'a black cow'

A number of adverbial expressions of place may serve as modifiers of a noun if they are connected by the genitive marker $t\acute{o}$. One such expression is the locative deictic adverbial $ng\acute{o}d$ 'there'. The schwa of the genitive marker assimilates to the following vowel and becomes [tí $ng\acute{o}d$]:

(86) dòk tá ngid horse GEN DEM 'the horse far away' (can be seen with difficulty)

9. Headless genitive constructions

Headless genitive constructions, viz. constructions consisting only of the genitive marker $t\dot{\delta}$ and modifier, are very frequent. Recall that the pronominal object is not coded with a finite transitive verb. Nevertheless, if such an object is modified, the modifying construction alone is used. In the following example, the genitive marker $t\dot{\delta}$ is followed by a locative prepositional phrase:

- (87) if á if-é tó n fòróm wà dàp blow 3SG blow-GO GEN PREP horn DEM only 'She blew that which was in the horn.'
- (88) hà gàk-á tá r
 2SG plant-GO GEN PREP
 gálcéh tà vú
 paternal relative DED Q
 'Did you plant that one which is at your paternal uncle's?'

The expression tá ngid 'GEN DEM' can function as a noun phrase, e.g. as an argument of a clause:

(89) tá ngid wà mí GEN DEM DEM what 'What is that thing there?'

- (90) tá ngid wà ví GEN DEM DEM who 'Who is that person there?'
- (91) tá ngid mí
 GEN DEM what
 'What is there?'
- (92) tá ngid ví
 GEN DEM who
 'Who is there?'

10. Grammaticalization of the preposition

The preposition $t\delta$ is a phrase-internal form of the determiner ta, whose phrase-final form is $ta\eta$. The evidence for this hypothesis consists of the fact that the tone of the determiner is the same as that of the genitive marker, and of the fact that the genitive marker has the same segmental structure as the determiner in phrase-internal position. Both have the expected schwa. There is considerable comparative evidence within Chadic that some genitive markers derive from demonstratives and anaphors (cf. Schuh 1981, Frajzyngier 1997).

11. Modification through juxtaposition of two nouns

One way of modifying one noun by another is through juxtaposition. The product of such juxtaposition is a lexicalized item, i.e. an item whose meaning is not fully preditable from the meaning of the components, and where any single item cannot felicitously replace the two items. Hence, the question of which item is the head and which is the modifier cannot be resolved through a synchronic analysis:

The two components of the modifying construction form one phrase as evidenced by the fact that the head noun undergoes vowel reduction:

(94) tár láy tá mìtáš month time GEN hunger 'the year of the hunger.'

The first noun trá 'month, moon' becomes tár through the vowel reduction and subsequent schwa insertion required by the syllabification rules. Juxtaposition without vowel reduction is a coding means for an equational clause. Structures made through juxtaposition can yield compounding, whereby two nouns are lexicalized as one. The term for 'caterpillar' is wàdá gàmták, literally "food chicken":

(95) séy bàt wàdá gàmták so take caterpillar 'Then he took the caterpillar.'

The nouns $m\grave{a}$ 'mouth' and $ji\emph{b}$ 'hole' when juxtaposed produce $m\grave{i}$ - $ji\emph{b}$ 'entrance to the hole'. Kinship terms "brother" and "sister" are coded by the juxtaposition "son--your mother" and "daughter--your mother":

- (96) mbà mátsáh son mother.2SG 'your brother'
- (97) hágàm mátsáh daughter mother.2SG 'your sister'

Our data have a gap with respect to the expressions corresponding to 'his brother' and 'his sister'.

The genitive construction can be used between $mb \partial /h \dot{a} \dot{b} \dot{a} m$ and $m \dot{a} t s \dot{a} h$, but its meaning is quite different. It means "son/daughter of your mother." Such an expression has a strong pejorative meaning and cannot be used in reference to friends' relatives:

(98) mbà tá mátsáh son GEN mother.2SG 'son of your mother'

12. Modification through the relative marker

If the property feature has been lexicalized as a verb, the modification of the noun is coded through the relative marker $m \hat{o}$. If the verb is not followed by its object, it is reduplicated:

(99) bà mà dál-dál cow REL sick-sick 'sick cow'

The negation of a property that has been lexicalized as a verb is coded through the relative marker followed by the negative perfect marker ták 'prevent, forbid, decline' and the main verb:

- (100) láy mò ták dîš field REL NEG cultivated 'the field which is not cultivated '
- (101) gì mò ták mòsár/mòsáw meat REL NEG fry/grill 'the meat that is not fried/grilled (raw meat)'
- (102) yèm mè ták đếf water REL NEG boil 'water that is not boiled (fresh water)'

13. Modification by intensifiers

The nominal (as opposed to pronominal) intensifier function is coded by the noun $t \grave{a} l \grave{a} \eta$ 'head' plus a possessive pronoun, occurring after the verb. The form codes that the noun X, and only the noun X, is the argument of a given verb.

(103)kwayaŋ ďа za tapu Sa squirrel climb COMP go? 1SG məsau talan kə kә nan nga INF break INF grill head 1SG 'The squirrel said, I will climb, break, and grill it myself' (written sources, hence no tonal notation).

skàm dòk nà tàlàn tàkón buy horse PREP head 2SG 'Buy yourself a horse.'

14. Modifying constructions and the preposition lá

There are modifying constructions where the marker $l\acute{o}$, glossed as 'of', occurs between the head and the modifier. In such constructions, the head is the owner of the modifier (schwa may undergo rounding when followed by syllable with a labial glide):

- (104) séy hìdò ló skòn wàciŋ so man of thing DEM 'so the man who has the thing'
- (105) báy lá dálà chief of money 'the rich chief'
- (106) hìd lú nkwà man of goat 'the owner of the goat'
- (107) séy hìd ló skòn wàciŋ so man of thing DEM 'so the owner of that thing'

bín ló wòdá room of food 'the room where food is'

The form $l\acute{a}$ can be the first element of a construction, i.e. with no head preceding it. Such a distribution is in agreement with the analysis proposed earlier in the present chapter where $l\acute{a}$ is considered a derivational morpheme, a form meaning, "having the property X."

(108) *ló násárá* 'It is a white man'

ló násár tó wàlà of white man GEN woman 'It is a white woman'

lá wàndálàŋ 'He is Mandara'

A potential source of the marker could be the verb lá 'to pull'.

15. Plural formation

There is only one plural marker in Mina, suffix yîî. The domain of nominal plural marker is phrasal, not lexical. The plural suffix occurs at the end of the noun phrase. If the noun phrase happens to consist of a noun only, then the plural marker is added to the noun. We have only a few cases when the category plural is marked on the head noun and at the end of the noun phrase at the same time.

15.1 The form of the plural suffix

When the plural marker, phonetically realized as [\hat{i}], is added to the noun, it is suffixed to the root rather than to the stem. The final vowel of the singular stem is deleted before the addition of the plural suffix. The plural suffix does not cause the fronting of the preceding vowels nor does it cause palatalization of preceding consonants. Since the morpheme is suffixed and since it does not cause the predictable phonological changes, we postulate that, the underlying form of the morpheme has an initial palatal glide, which constitutes a barrier to the leftward spread of the feature front. Thus, we postulate that the underlying form of the plural marker is $-y\hat{i}$.

(109)	Singular		Plural
` ,	hàzá	'dog'	hàz-yíì [hàzíì]
	dòk	'horse'	dòk-yíì [dòk-íì]
	<i>ţà</i>	'cow'	ゟ-yíi [gíi]
	wùtá	'house'	wùt-yíì
	wúlà	'neck'	wúl-yíì
	'nkwà	'goat'	nkw-yíì
	kwà	'goat'	kw-yiì

If the final vowel of the singular stem is i, then the difference between singular and plural is marked only by the vowel length and tone. The tone of the penultimate syllable of the noun becomes low when followed by the plural suffix:

15.2 The function of the plural suffix

Unlike in some other Chadic languages (cf. Frajzyngier 1997), the nominal plural in Mina is a productive category, used independently of the verbal plural, and used with nouns in all grammatical functions, including prepositional phrases. Since in various Chadic languages the coding of nominal plurality is far from predictable, the present section provides a reasonably full description of the functions of plural coding in Mina.

The plural suffix is added to noun phrases in the subject function. The plural suffix is added before the topic marker wà:

- (111) *hìd-yíì* tàtà màkáď wà DEM 3PL 3PL man-PL three 'There were three men.'
- nfáď (112) hìd-yiì wècin i tàtà man-PL DEM 3PL 3PL four 'There were four men.'
- záváŋ-yíì (113) ká ndà fú dzáŋ zá ndà always go guinea fowl-PL INF find EE go màr rà graze D.HAB 3PL 'Each time she went she found guinea fowl grazing.'

If the subject noun phrase has a modifier, the plural marker may occur at the end of the noun and at the end of the noun phrase, or only at the end of the noun phrase:

(114) hìd tá nfád-yíi zàm zàm fák-á GEN palace (F.)-PL eat leave-GO eat 'The men of the palace all ate and left the remains.'

Coding plurality on the head and at the end of the noun phrase:

(115) hà tós hìd-yíì tùk-yíì
2SG gather man-PL 2SG-PL
'You gather your neighbors . . .'

The plural marker follows the possessive pronouns:

(116) kwáykwá-yíì wà í tsú kớ tàl-á
hyena-PL DEM 3PL went INF walk:GO
kó tàl-á ŋkù-ngòn-yíì syì
INF walk goat -SG-PL COM
'When the hyenas went to tend their goats, . . .'

The plural marker also follows determiners:

(117) ndò dzáŋ á dzáŋ dàkáy t-yíì dámù go find 3SG find other DED-PL bush 'He went to search for others in the bush.'

The plural marker is added to the noun phrase even if the head noun is inherently plural. This is the case with the noun $w \grave{\partial} \check{z} i$ 'children'. In the following examples the noun is followed by a possessive pronoun:

- (118) ngùl nà dáhà wàží
 husband 1SG exist children
 n-yû dáhà
 1SG-PL exist
 'I have a husband, I have children.'
- (119) ngwáy á wàží tùk-yíì
 'say' PRED children 2SG-PL
 dáy dáy á tán fĩs
 much much PRED 1SG small
 'Say, for your children it is a lot, for me it is little.'

We have no instances of the plural marker added directly to inherently plural nouns.

The plural marker is added to the object regardless of whether the verb is marked for plurality. Here is an example of the plural aspect and the plural coding of the object in the same clause:

kiringil-yiì (120) ndá tsàm tsàm tsàm á tsàmá gather gather gather:GO gather:GO bone-PL 'and she gathered bones'

The plural marker used with kinship terms is a first-person possessive polite marker:

- (121) ngùl-yíì dzáŋ-á kà husband-PL find-GO 1SG INF skàn nám zá thing EE 1DU 'My husband, I found us something.'
- tsàf wàl-yíì (122) há n skù svì PREP lie COM woman-PL 2SG NEG "You're not lying, my woman?"

If the head of the possessive construction is plural, the plural marker is added to the end of the possessive phrase or added to both the head and the possessive marker:

(123) hàz tá bíts-yíì Bitsi-PL dog GEN 'dogs of Bitsi'

The plural suffix is identical with the third-person plural independent pronoun, and we assume that in Mina, as in many other languages (Fraizyngier 1997), grammaticalization involved the addition of the thirdperson plural pronoun to the preceding noun phrase.

16. Coordinating construction through the associative

The singular form of the associative preposition has been recorded as $\dot{a}b\dot{a}$, $\dot{a}b$, \dot{b} , and the plural form of the preposition has been recorded as ibà and ib. The alternation between the forms ab and ib and the existence of the pronouns \dot{a} for the third-person singular and \dot{i} for the third-person plural point to a composite structure of the preposition, consisting of the third-person singular or plural pronouns plus the marker b. The final schwa of the preposition can be interpreted as epenthetic, inserted when the syllable structure requires it. The form ábà occurs when the first component is singular and when the second component begins with a

segment that cannot follow b directly:

(124) wàdá ábà yàm food ASSC water 'food and water also'

We conclude that the underlying form of the associative preposition is b. We gloss the singular form ab as ASSC, and the plural form ab as PL-ASSC.

The associative marker indicates that the two nouns belong to one set:

- fiàt mbí déw ká báv ndá (125) *tséy* go:GO take chief 3SG sit like SO ábà mámán cín ASSC his father his mother 'Then he became a chief, and he came to take his mother and father.'
- (126) wàl wàcin bớt ndrì kàď kàď cíkè sorghum gather gather all DEM take woman tán ábà ngùl tán ábù wùzi-yiì ASSC children-PL DED ASSC husband DED 'That woman gathered all the sorghum, and gathered her children and her husband.'

The plural form of the associative is used only when the associative phrase has the role of subject. In most cases the verb also has the plural subject pronoun. The use of associative plural appears to be obligatory is the subject is plural:

- wàcin i-bà wàl ngàn (127) hìdì DEM PL-ASSC 3SG wife man mbù gwád mbù í mbù wàží birth 3PL children give give birth many "This man with his wife had many children."
- (128) ngàlámbrà wàciŋ gàmták í-bà kwáyàn story DEM chicken PL-ASSC squirrel ndà kà ďál-á jáŋaàl í INF voyage (F.) 3PL go do-GO 'This story: The chicken and the squirrel go on a trip.'

The plural associative is used even if the associative phrase follows the verb. The necessary condition for the use of the plural associative is that the participant is controlling. In the following example, the participants are singular, as evidenced by the singular possessive pronoun on the second conjunct:

As explained in Chapter 7 on Adjuncts, instrumental and other non-controlling participants have the singular associative rather than the plural associative form.

The plural form of the associative is also used in noun phrases that serve as titles of stories, where the protagonists will presumably be the subjects:

17. Modification by quantifiers

Quantifiers are inherent modifiers and as such, they do not have to be marked by a preposition or a relative clause construction. Some quantifiers are $f\acute{e}s$ 'little, a few', $t\acute{u}w\grave{o}d$ 'all', $f\acute{u}(u)$ 'all' (probably borrowed from

Fula), diyà 'many', gwád 'many', and all numerals. These quantifiers do not require plural coding on the noun phrase:

- (133) báy tsók rùkùt fúu kà chief take off cloth all POS 'The chief took off all his clothes.'
- (134) dár wàcín géebì gwád dance DEM sort (F.) plenty 'This dance has many varieties.'
- (135) kà á k-á-ŋ wìnjíd fés á
 cut 3SG cut-GO-3SG intestine little PRED
 nò mòŋ
 PREP LOC.ANAPH
 'Then he cut a small piece of its intestine.'

If there is a determiner, it follows the quantifier:

(136) kitètàŋ fű tàŋ déß dé6 meat GEN:3PL all DED take 3PL take ká vàm n PREP PREP water 'They brought all their meat into the water.'

The notion of everyone and everything is coded by the quantifier $k\dot{o}(o)$ followed by the marker vi for human participants and the marker $m\dot{o}$ for non-human participants:

(137) kóo νí zá sà dév á kì **QUANT** COMP 1SG PRED like who also mbén ANAPH 'Each one of them said, "Same with me."

The nominal plural marker does occur in negative clauses with the quantifier $k\delta$, corresponding to the English expression 'not any':

(138) kó mà láb-yíì đá skù QUANT REL wet-PL exist NEG 'Not even one [page] was wet.'

Measure terms and numerals are also modifiers. When both measure terms and a numeral modifies a noun, they occur in the following order: Noun Measure term Numeral:

(139) cìkid bùhù ntá sesame bag (F.) one 'one bag of sesame seed'

The reduplicated quantifier has an adverbial function, coding the manner of the event:

(140) báy zá á z-ú á dámù chief COMP PRED go-1DU PRED bush cíké cíké all all

'The chief said: let's go to the bush together'

(Some speakers consider this sentence ungrammatical, because they interpret the form cikè cikè as meaning "all" and therefore inapplicable to just the dual number. The fact that this sentence was used in natural discourse overrides other speakers' judgments.)

mbígìn (141) *i* kà ďál ká dà n 3PL PREP INF mbiguin INF cook do mávù cíké cíké beer all all

'They will organize a mbiguin [a festivity]; they will make a lot of beer.'

If a quantifier serves as an argument rather than modifier of a noun, it occurs in the position appropriate for its function. If a quantifier serves as the subject, it occurs in clause-initial position. The clause that follows such a quantifier is, however, a relative clause, rather than an indicative clause:

- (142) kó mà ták bál pày đá skù QUANT REL decline cut tree exist NEG 'Everybody cut a tree' (there was no one who did not cut a tree).
- (143) kó mà bál pày dá skù QUANT REL cut tree exist NEG 'Nobody cut a tree.'

In negative clauses, the quantifier may be omitted on the condition that the relative clause marking is retained, a logical possibility given the unambiguous reading of the negative relative clause:

- (144) mò ták dár dá skù REL decline dance exist NEG 'Everybody danced.'
- (145) mò dár đá skù REL dance exist NEG 'Nobody danced.'

A numeral can be used alone, without a noun, serving thus as the head of a noun phrase:

(146) sév tàkár á til nà yàm PRED PREP turtle leave water SO dzàbán màl màl màl-á seize 3SG seize seize-GO five 'So, the turtle went in the water and caught five.'

18. End-of-event marker and quantifiers

Quantifiers have relative freedom of occurrence with respect to the endof-event marker za, glossed as EE. The quantifiers may follow the noun phrase they modify and precede the end-of-event marker za, as illustrated in the preceding examples. Elicited data indicate that quantifiers may also follow the marker za and be thus separated from the noun they modify:

- (147) kà bám gwàr zá **ýtá** gwidiŋ INF eat cola nut EE one only 'He ate only one cola nut.'
- (148) ká zàm kì ngàn zá túwàd INF eat meat 3SG EE all 'He ate all his meat.'

- (149) kà 6ám gì zá fés

 INF eat meat EE some
 'He ate a little meat.'
- (150) tìtiì i n ká dzà kódôbôk-yiì zá
 3PL 3PL PREP INF kill wild mouse-PL EE
 dià
 many
 'They killed many wild mice.'
- (151) kó bèr-é-k wú z **fés**INF sell-GO-1SG milk EE small
 'She sold me a little milk.'
- (152) kớ bèr-é-k wú z **fú** tàŋ
 INF sell-GO-1SG milk EE all DED
 'She sold me all the milk.'

19. Coding of the exclusion of other participants

The adverb $t\acute{a}t\grave{a}$ 'alone' used with the third person independent pronoun $mb\acute{i}$, (phrase-final form $mb\acute{e}\eta$) excludes all participants from a given role:

(153)mbén mà à gàr nzà mbí tátà ngàm 3SG 3SG REL he 3SG alone because want gàr mà már ngùl á 3SG husband REL want control á mbí tátà 3SG **ANAPH** alone 'She wants to stay by herself, because she wants to control her

20. Conclusions

husband herself.'

The noun phrase in Mina has the structure Head Modifier. If the modifier is an inherent adjective, the modifying construction is coded through juxtaposition alone. Otherwise, the modifier is marked by one of a set of markers, which includes the genitive marker $t\dot{\delta}$, and the relative marker $m\dot{\delta}$, for modifiers that are inherently verbs.

The plural marker yîi is added to the end of the noun phrase, to the

end of the noun or to both.

Quantifiers do not form part of the noun phrase in that they can be separated from the head noun by the end-of-event marker za.

Chapter 4 The verb and its forms

1. Introduction

The defining characteristic of the category "verb" is its ability to function without any additional marker as the predicate of a proposition in a non-equational clause. There are additional morphosyntactic criteria that allow one to distinguish the category "verb" from all other categories: verbs can have affixes that other lexical categories cannot have. These are subject pronouns, goal orientation suffix, object marker, and object pronouns. Some intransitive verbs may be followed by pronouns coding the person and number of the subject. Verbs, unlike other lexical categories, have a citation form, which consists of the clitic $k\partial$ followed by the verb stem. This clitic also occurs in purpose complements and in dependent aspects and tenses. Its function partially overlaps with infinitival forms of verbs in many languages of the world.

The verb in Mina is important for a number of reasons. It serves as a configuration center with respect to its arguments. The inherent properties of the verb determine the number of arguments it can take. The verb is a central piece in the coding of the aspectual system. The aim of this chapter is to describe the inflectional and derivational forms of the verb.

2. Verbal stem

The category "verbal stem" has been obtained from the quotation form of the verb readily given by speakers, who, it must be remembered, never had any education in Mina or about Mina. We take the verbal stem to be the element that follows the prefix ka. The prefix in phrase-initial position has the tone opposite to the tone of the verb. Thus, it is a convenient means of establishing the underlying tone of the verb. The tone is part of the underlying structure of the verb, which in addition must have one of the following segmental structures:

CV: The majority of verbs in this class have high or low vowels. For monosyllabic verbs, we quote the forms with the infinitive marker to illustrate the value of the underlying tone of the verb: $k\acute{o}$ sà 'drink'; $k\acute{o}$ wà 'start'; $k\grave{o}$ ndá 'go'; $k\grave{o}$ tsá 'put fire into something'; $k\acute{o}$ lù 'say'; $k\grave{o}$ sí [ší] 'run'; $k\grave{o}$ rá 'dig a hole'. Further in this work, we cite verbs without the infinitive marker, since the form of the infinitive marker is fully predictable from the form of the verb.

CVC: All vowels are represented in the CVC structures. The last consonant may be a stop, a continuant, a nasal, or a glide: wáy 'forget'; wáŋ 'sleep, lie down'; bák 'pour'; yíp 'rest'; zìn 'return'; gìz [gìž]'tell'; bér 'sell'; déb 'take somewhere'; tsòr 'make facial marks' (scarify); tók 'finish'; bán 'wash body'; zàr 'whip (an animal, person)'; kàh 'bury'; bòh 'break off a branch of a tree'; tìy 'see'; zàm 'eat'; tsár 'climb'; lám 'build'; màts 'die'; dàm 'marry', ká mbùw 'give birth, beget'; kà dĩy 'put'.

CCV(C): skòm 'buy'; ndá 'hit'; gwòh 'wash cloth, dishes'.

CVCVC: Some disyllabic verbs have low-low tone pattern: kàmàl 'unite'; mòsàr 'fry'. Other verbs have low-high tone pattern: mòsáw 'grill'; gùrát 'scratch body'. There are verbs that have schwa in their citation forms: ndòròm 'please (about foods)'; kòdáw 'burn'; kòròd 'approach'.

3. The stative form of the verb

The stative suffix -yi is added to the root of the verb. The suffix has high tone. After stems ending in a consonant the suffix is realized as the vowel [i] without palatalization of the preceding consonant. If the verb is monoconsonantal, the high tone of the suffix becomes the tone of the stem:

(1) máv mò s-í zà beer REL drink-STAT EE 'One has drunk a lot.'

láy mò ts-í zà field REL clear-STAT EE 'The field has been cleared with fire'

There are a few exceptions with respect to the tone of the stative suffix. One of them is with the verb $b\acute{e}r$ 'sell' where the stative suffix has low tone. We had no opportunity to re-check this item:

The addition of the stative suffix -yi reveals that verbs that have the vowel u in their phonetic form have in fact an underlying labial glide in word-final position. The labial glide is not realized word-final position, but is realized when the suffix -yi is added:

The stative suffix does not cause fronting vowel harmony, which is the evidence that it does contain the palatal glide. Here are a few CVC structures without the vowel harmony effects. Given the absence of vowel harmony we represent the stative suffix as -yi with all verbs that have at least the CVC structure:

- (4) mà kàh-yí zà REL bury-STAT EE 'He is buried.'
- (5) mà bòh-yí zà
 REL tear out-STAT EE
 'It has been torn from the tree' (about a branch).
- (6) rùkùt mò gwàh-yí zà cloth REL wash-STAT EE 'The clothing is washed.' or 'One has washed a lot of clothing.'

Here are examples of polysyllabic verbs with the stative suffix. These examples provide additional evidence for the high tone of the suffix, since the suffix does not fuse with the verb:

(7) kàdáw-yí 'burn' màsáw-yí 'grill'

One can also derive the stative forms from intransitive verbs, but the complete clause must include the verb in subject position as well:

- (8) ší mò ší zà run REL run:STAT EE 'One has run a lot.'
- (9) ndò mò nd-í zà walk REL walk-STAT EE 'One has walked a lot.'

4. Verb reduplication in the relative clause

The reduplicated form of the verb preceded by the relative marker $m \ge i$ is used as a modifier in attributive constructions. Both transitive and intransitive verbs can be reduplicated for the modifying function.

The process of reduplication is leftward, whereby the new syllable precedes the old syllable. The tone of the reduplicated syllable is the same as the tone of the verb. If the verb ends in a vowel, the reduplication involves the reduplication of the consonant alone and insertion of schwa, as required by the constraints on geminated consonants:

- (10) ndùrúk mà làlà ram REL take out 'a castrated ram' (là 'to take out')
- (11) hídò mò nzònzà man REL sit-sit 'a seated man' (kó nzà 'sit')

If the verb ends in a consonant, the reduplication involves the whole verb:

(12) \$\delta \delta m\delta f\deltatfat\\ cow REL slaughter-slaughter\'a slaughtered cow' (k\delta f\delta t 'slaughter')

(13)gàrgàr hídà mà REL stand-stand man 'a standing man' (kớ gàr 'to stand')

Bisyllabic verbs, which all end in a consonant, are also reduplicated in their entirety. The tonal structure of the simple form is preserved in the reduplicated form. The pause between the reduplicated parts appears to be longer than the pause between reduplicated monosyllabic verbs:

mèsàr 'grill' (14)

kì mò mòsàr mòsàr 'grilled meat'

ndàràm 'please (about foods, feelings)'

ndàràm ndàràm (15)wùdá ma mush REL good good 'good, tasty mush'

kàdaw 'hurn'

kàđáw kàđáw (16)láy mà REL filed burn burn 'a burned field'

gùrát 'scratch'

pày (17)gùrát gùrát mà REL. scratch scratch tre 'a scratched tree'

In predicative constructions, one uses the form with the stative marker and the auxiliary za at the end:

(18)kàdáw-yí láv mà zà REL. burn-STAT EE 'The field has burned.'

5. A non-productive suffix \dot{u}

The verbs nza 'to sit, leave, be' has a form with final u. The verb tsu'departed' occurs only with word-final u:

- (19) *i* nz-ù *i* nz-ù *i* nz-ù *i* nz-ù 3PL stay-? 3PL stay 3PL stay-? 3PL stay-? 'They stayed there a long time.'
- (20) sò nz-ù sò nz-ù sò nz-ù 1SG stay-? 1SG stay-? 1SG stay-? 1SG stay-? 'I wait, and wait, and wait.'

The final u cannot cooccur with the infinitive marker ka:

(21) *sè ká nz-ù zá mórà žìn gwád 1SG INF be-? EE Mora times many for 'I have been many times in Mora'

The fact that this morpheme appears with a few verbs only and that for one of these verbs the form with -u is the only form attested indicates that it is a remnant of a form that was once productive in the language. Comparative data indicate the presence of such a morpheme in other Chadic languages, e.g. Hausa (West Chadic) and Hdi (Central Chadic), where it codes point-of-view of subject. There are not enough examples in Mina to discover what the function of this morpheme is or might have been.

6. Conclusions

Verbs are characterized by a very limited number of underlying forms: CV, CVC, CC, CCVC, and CVCVC. The tone constitutes part of the underlying representation of the verb. There are two productive morphological processes operating on verbal forms: derivation of the stative form through the suffix yi and reduplication. The reduplication of the verbs ending in a vowel involves reduplication of the consonant alone and schwa insertion. Verbs ending in a consonant are reduplicated in their entirety. The language has traces of a suffix -u, whose function cannot be determined due to the paucity of relevant examples.

Chapter 5

Argument coding

1. Introduction

The present chapter deals only with argument coding in verbal clauses. An argument is a noun phrase that is coded by configuration with respect to the verb. The number of arguments allowed and the semantic roles of those arguments depend to a large degree on the properties of verbs. It is important, therefore, to describe first the properties of verbs and the way a verb can be identified, and then describe how different arguments are marked.

2. The category subject

The existence of the syntactic category "subject" is justified by the following facts: if a clause has only one argument, this argument occurs before the verb. When single arguments, whether nominal or pronominal, occur before the verb, they do so without a preposition:

(1) vènjéh tûl pepper spread 'Pepper spread . . . '

There exists a set of subject pronouns (see section 4 of the present Chapter) that do not have any other function in the language. There also exists a set of subject possessive pronouns that code the single argument that undergoes movement or is otherwise affected (see section 5 of the present Chapter). The subject may be separated from the verb by other constituents, including fronted objects and adverbial phrases. The second case is illustrated in the following example:

(2) 6àt gómbòk-yíì ká šì wèhin zá frog-PL EE **DEM** INF take run fədáh ábà dùwán tètàn ASSC back wake-up 3PL 'It took flight, and afterwards these frogs woke up'

If the subject consists of an associative noun phrase, the preposition used has the plural form $i-b(\grave{\partial})$. If the associative noun phrase is used in any other function, it has the singular associative form $\acute{a}b(\grave{\partial})$.

The category "subject" does not code a specific semantic function. In example (1), the subject is pepper and is not controlling but affected. In example (2), the subject is controlling. Compare also the following example, where the subject is not controlling and not affected:

(3) áb lé wá ndìr báràŋ
ASSC year DEM sorghum lack
'This year there is little corn.'

The semantic function of each subject may be computed from the inherent meaning of the verb, morphological markers added to the verb, other arguments present in the clause, or the discourse and speech context.

3. Existential predicates

Existential propositions state the existence of an object in general, not in a particular place or at a particular time. One of the properties of existential predicates is that they cannot take deontic modal markers. There is only one productive existential verb: dáhà 'exist'.

The verb $d\acute{a}h\grave{a}$ is used with indefinite nouns. The subject constitutes one phrase with the predicate $d\acute{a}h\grave{a}$, as evidenced by the fact that the word-final vowel of the subject is deleted. The evidence that $d\acute{a}h\grave{a}$ is not a locative verb is provided by the fact that if there is a locative complement, the verb $d\acute{a}h\grave{a}$ must be followed by the locative predicator \acute{a} , the predicator that marks locative complements with non-locative verbs:

(4) hágàm dáhà á bín ngàn girl exist PRED house 3SG 'There is a girl at her house.' (hágàmà 'girl')

Existential predication does not distinguish between pragmatically

dependent and pragmatically independent clauses. Here is an example of the use of the verb dáhà in a relative clause:

(5) mà sà tápá ďáhà á sév hìdì **PRED** REL drink tobacco exist man SO nà mán màcin ANAPH DEM PREP 'So there is a smoker among them.'

The verb dáhà has also a function in the domain of reference in that it explicitly codes that the argument as unknown and unspecified. This in fact appears to be the main function of the existential verb in natural discourse. The existential verb occurs in clause-final position:

- ángà (6) dòktér à mìnjé hìdì séy zá doctor 3SG COMP if now man SO dé6-é-k ďáhà nà mà ká sà n REL. PREP INF take-GO-1SG exist 1SG go mhál wàl ká ká wà kà PURP PREP INF revive woman DEM POS 'The doctor said, "If there is a man who can take me there, I will go to cure that woman."
- **(7)** wàzám kéké tá mbk-iyì long time ago mountain GEN blacksmith-PL ďáhà . . . exist 'There was once a mountain inhabited by blacksmiths . . .'

The existential verb has also acquired the function of making an explicit assertion. This function is represented by the use of the verb dáhà when it has in its scope a proposition that already has a predicate. In the following sentence, the predication is locative, coded by appropriate prepositions, and the verb dáhà occurs in clause-final position:

(8) dáy skàn fú hàyák tà mìď much thing all PRED PREP village 3PL wind ďáhà exist

'There is a lot of wind, there are many things in their village.'

In the following example, the verb dáhà has as its scope the ensuing

proposition:

(9)yàdirì kéké ďáhà ndí í kàk millet long time ago exist HAB plant 3PL **PRED** kúlmbòn-yíì nà mà PREP mouth black ant-PL 'A long time ago they used to plant millet around the black ants' nests '1

The existential predicate dáhà may be used in questions about possession:

(10) báskùr túk dá vù bicycle 2SG exist Q 'Do you have a bicycle?'

However, the existential dáhà may not be used in specific interrogatives:

- (11) báskùr túk fəkáy bicycle 2SG where 'Where is your bicycle?'
- (12) *báskùr túk đá fəkáy bicycle 2SG exist where for 'Where is your bicycle?'

This constraint provides further support for the hypothesis that the existential verb is used only with indefinite, unspecified nouns, and that its function is to code the noun as unspecified, indefinite. The existential verb dáhà may not be used with a definite noun:

(13) ŋkù wà *dá á kàcín goat DEM exist DEM here 'The goat is here'

^{1.} This practice, intended to take advantage of the favorable chemical content and physical structure of the soil, exposed plants to the risk of being devoured by ants. The only way one can grow plants around an anthill is to transplant them after they have already grown a little. Sorghum is one of the few plants that is able to survive the transplantation (Arnaud de Boissy, p.c.).

The existence of an indefinite object may not be stated without the verb dáhà, and the following is ungrammatical:

(14)*nkù á kàcín PRED here goat for 'here is a goat'

Cf.:

(15)'nkù ďá kàcín exist PRED here goat 'A goat is here'

The fact that the verb dáhà is an existential predicate rather than a locative one is interesting because in many languages the existential verbs have developed from all kinds of locative verbs. In contemporary Mina, there is no evidence for such a development. The verb dáhà can only be used with indefinite subjects. The existential verb has also acquired the function of explicitly marking assertion.

4. Subject pronouns

Subject can consist of a pronoun alone. Pronominal subjects precede the predicate or tense and aspect markers.

Subject Pronouns

1	Singular sə	Dual nám	Plural na (EXCL) nók (INCL)
2	ha		hi (II (E2)
3	Ø, a		i

Pronouns are not prefixes, because the low vowels in the first-person dual and plural and the second- and third-person singular do not undergo vowel fronting. Moreover, subject pronouns can be subjects of nonverbal predicates, e.g. locative, nominal and adjectival predicates. When that is the case, pronouns have high tone (elicited examples):

(16)sə/há/á nà lúmò 1SG/2SG/3SG PREP market 'I am/you are/he is at the market.'

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(17) nók/hí/í nà lúmò 1PL.INCL/2PL/3PL PREP market 'We/you/they are at the market.'

When singular pronouns occur before a verb, they have low tone in the indicative mood, regardless of the tone of the verb:

(18) sə/ha/a dàr-á nə lúmo 1SG/2SG/3SG dance-GO PREP market 'He danced at the market'

> sà/hà/à nz-á nà lúmò 1SG/2SG3SG stay-GO PREP market 'I was/you were/he was at the market.'

In expressive speech, when the speaker wants to emphasize some aspect of event that has not been otherwise grammaticalized, the singular pronoun may have high tone. This is the case in the following fragment, sentences (19a and 19c), where most likely the raised tone aims to convey the intensity of the event:

- (19a) á šì dàp á šì dàp 3SG run only 3SG run only 'He runs, he runs.'
- (19a) gómbòk òhók frog yes "Frog?" "Yes."
- (19c) á šì dàp á šì dàp 3SG run only 3SG run only 'He runs, He runs.'

Plural pronouns have high tone when occurring before the verb:

(20) nók/hí/í dàr-á nà lúmò 1PL/2PL/3PL dance-GO PREP market 'They danced at the market.'

nà lúmò nók/hí/í nz-á 1PL/2PL/3PL stay-GO PREP market 'We/you/they were at the market.'

The first person dual pronoun is not inherently either inclusive or exclusive. Here are two examples of the first person dual pronoun used excluding the addressee (21a) and including the addressee (21b):

- tá (21a)tó mìsíl nà nigeria wàciŋ well (H.) PREP Nigeria thief **DEM** GEN séy ká bàm-á ţá ná à PREP INF meet-GO 3SG say then 1DU mìsíl tá wàcin ábà cameroun PREP Cameroon ASSC thief GEN DEM 'The Nigerian thief said, "I have to go to meet the Cameroonian thief."
- (21b) tséy bákà gràb ná η-kə́ wàŋ ná PREP-INF sleep today DU 1DU together 'So we will sleep together today.'

The third-person plural pronoun i is also used to code the unspecified human subject, which may include the speaker:

(22)hákèm ngàn zá á kàcin PRED here daughter 3SG COMP mvà rà bà tá **ASSC** defecate feces D.HAB 3PL nzàď skù night NEG 'His daughter said, "Here one does not defecate at night."

The third-person singular subject pronoun a occurs only in some aspects and moods. More specifically, it occurs in the unmarked aspect, dependent and independent habitual, future tense, and in indicative clauses, whether affirmative or negative. In other aspects and moods, the third-person singular is unmarked. If the subject is nominal, the thirdperson singular pronoun may still be used, but such use has the pragmatic function of coding the topicalization of the nominal subject. The example below is given just as an illustration of the arrangement of morphemes, rather than of the actual usage in discourse. The natural discourse examples are given in Chapter 18 on topicalization:

(23) kònáy à nz-á nà lúmò
Konay 3SG be-GO PREP market
nákà kàfkàfá
REM morning

'Konay was at the market this morning' (and he has returned).²

If the subject noun phrase consists of conjoined nouns, then the subject pronoun, if used, must be third-person plural:

(24)í-bà dáwày tàdú (i) zà tsú Daway Tadu PL-ASSC 3PL EE go nà lúmò PREP market 'Tadu and Daway went to the market together.' (Tadu 'sixth born', Daway 'seventh born')

When the predicate is $ts\dot{u}$ 'went', the third-person singular subject pronoun does not occur, even if there is no overt nominal subject:

(25) tsú zà á r ngámbù ngòn departed EE PRED PREP friend 3SG 'He was at his friend's.'

Other grammatical markers that occur before the verb, such as the infinitive $k\partial$ and the relative marker $m\dot{\partial}$, share with $ts\dot{u}$ the absence of overt third-person singular subject coding.

Not every clause must have a subject. If a subject is mentioned in the previous narrative, it may be omitted from subsequent clauses. In the following fragment, the subject is overtly coded in the first clause through a nominal and pronominal expression, a different subject is coded by a nominal expression in the second clause, and the subject, identical with the subject of the first clause is omitted altogether in the third clause:

^{2.} Konay the fourth born to a mother. The name can be given to a boy or to a girl. A father may have several children bearing the same first name, because the name indicates the order of the birth to a mother. In order to distinguish between children having the same name because they were born in the same order, the mother's name is given, which also indicates the order of the birth. There is an expectation of 12 children to a mother, and accordingly there are twelve names for the place in the order. A child born beyond twelve receives the name káfkày 'for nothing', i.e. not planned, predicted).

Fragment (1)

- (26) mà ngád ngád pàl á pàl bàtákàr
 REL count count detach 3SG detach bag
 ngàd ngàd
 count count
 'The one who was good at counting detached the bag and counted [the seeds].'
- (27) mà té gwidin dá skù REL GEN single exist NEG 'One grain was missing.'
- (28) pèl míndén dámdámà detach another normal 'He detached the other—[it was] normal. (i.e. no grain was missing)'

In the following fragment, the first clause has the pronominal subject \dot{a} , but the second clause does not have an overt subject:

(29)kámbáy sév čáp à màl wà ká dàp chap! stick DEM POS 3SG only then catch skàn ndàɗ ká ngàn 6àt n down PREP thing 3SG take 'Then she chap! stopped the stick, put it down, took her thing'

The subject does not have to be overtly coded even if there are intervening clauses with different subjects. In the following fragment, the first sentence has a different subject from that of the second sentence, whose subject is unmarked:

- (30) ngwáy skòn-yíì gògám rò dáhà 'say' thing-PL talk D.HAB exist 'There is something talking there.' (a hyena is talking)
- (31) lù wàží diyà tá dàp tùkíi á PRED children GEN only put 2SG say dáy dáy dày á tán fés a lot PRED 1SG little 'He [the man] kept on saying: for your children it is a lot, for me it is little.'

5. Possessive subject pronouns

A characteristic feature of some intransitive verbs is the presence of possessive subject pronouns, sometimes referred to in the literature as "intransitive copy pronouns", Newman 1974). These pronouns appear to have different functions in different languages (Frajzyngier 1977). The term "intransitive copy pronouns" is not particularly felicitous, as in a number of cases, these pronouns are not copies of anything and they are not characteristics of or triggered by intransitivity. Here they are called possessive subject pronouns because they are identical with possessive pronouns and they code the subject of the clause. The third-person possessive subject pronouns may be the only markers of the third person subject in the clause:

(32)ngàn kílvíď-yíì ábà ndà n 3SG:POSS PREP trash heap-PL 'She went to the trash heaps.'

> ngàŋ mà nd-à-y màrbák zà go-GO-STAT 3SG:POSS Marbak EE 'He has come from Marbak.'

Possessive subject pronouns for the other persons share the feature of person and number of the pronominal subject:

(33)sà nàŋ tsú 1SG.POSS departed 'I am gone' (metaphorical, when somebody announces his departure).

The possessive subject pronouns can occur in the imperative singular, i.e. in the form without an overt preverbal subject:

(34)ndà tàkóŋ 2SG:POSS 'Go!'

5.1 The form of possessive subject pronouns

The possessive subject pronouns are phonologically identical with the possessive pronouns. Here is the complete set of possessive subject pronouns in phrase final form with their use illustrated on the verb tsú 'departed':

	Singular	Dual	Plural
First	nàŋ	tàmú	tòkóŋ INCL
	· ·		tìnén EXCL
Second	tàkóŋ		tìkìnéŋ
Third	ngàŋ		tètàŋ

Here are examples of the use of possessive subject suffixes:

- (35)tàtàn tsú 3PL 3PL went 'They went away.'
- (36)tòkóŋ nók tsú 1PL.INCL 1PL went 'We went away.'
- (37)ná tsú tìnén 1PL.POSS 1PL.EXCL went 'We went away.'
- (38)hí tìkìnéŋ tsú 2PL.POSS 2PL went 'You went away.'
- (39)hà tàkón tsú 2SG.POSS 2SG went 'You went away.'

Like all pronouns, except for the third person singular, the possessive subject pronouns have different forms in phrase-internal and in phrasefinal position. The final nasal and the preceding vowel do not occur in phrase-internal position. The possessive subject pronouns in phrase internal position are as follows (schwa may be added for syllabification purposes):

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		Singular	Dual	Plural	
	First	n	tàm	tòk INCL	
				tìn EXCL	
	Second	tàk		tìkì	
	Third	ngàŋ		tètè	
(40)	í-bà	nd-á	tàt	wùtá	
	PL-ASSC	go-GO	3PL	village	
	'They went home.' (tàtà instead of tàtàn)				

The following examples illustrate the forms in both functions, as possessive subject pronoun and as possessive pronouns:

- (41) số ndò này á wtố tá này 1SG go 1SG PRED village GEN 1SG 'I go to my village' (i.e., I am about to go).
- (42) nám ndà tàmú á wtá tàmú 1DU go GEN-1DU PRED village GEN:1DU 'We are about to go to our village'

5.2 The function of possessive subject pronouns

Possessive subject pronouns are not obligatory markers:

(43) tsú ngíd departed somewhere 'He went somewhere' (when answering the question "Where is X?").

Since possessive subject pronouns are not obligatory, they must have some function. The function of the possessive subject pronoun is to code a change in the event:

(44) tsú ngàn ngid departed 3SG.POSS somewhere 'He up and went somewhere' (answer to the question "What did X do?"). (45) séy mò tábú ábò sí ngòŋ except REL last born ASSC flee 3SG 'Except for the last-born: he fled.'

Possessive subject pronouns can be used with borrowed verbs:

(46) séy nástà ngàn tsákà pár-yíì then enter (F.) 3SG inside (F.) other-PL 'He entered among others'

Possessive subject pronouns are added mostly to intransitive verbs, but they are not markers of intransitivity, since not all intransitive verbs require possessive subject pronouns. Moreover, the inherent intransitivity of the verb is not affected. The types of verbs with which possessive subject pronouns occur are those in which the subject is undergoing movement, a change of posture, or a change of state. Thus, for describing somebody's behavior, the following clause was used:

(47) mbí bák ngàŋ á nà mà
3SG die 3SG PRED PREP REL
gáy gáy ngàŋ
spoil spoil 3SG
'She died because of her nasty behavior.'

If one simply describes the cause of somebody's death that did not occur while the person was engaged in some event, one would not use a possessive pronoun:

(48) mbí bák á nà mà gáy gáy ngày 3SG die PRED PREP REL spoil spoil 3SG 'She died because of her nasty behavior.'

If one describes some people's getting up and leaving, one would say:

(49) *i* tsú tètè á wté tètàŋ 3PL go 3PL PRED village 3PL 'They went home.'

To the question "Where are they?" one would just say:

(50) i tsú á wtó tètàn 3PL go PRED village 3PL 'They went home.'

Talking about guinea fowl that "up and flew away," one would say:

(51) záváŋ-yíì í-bà fir tàtàŋ guinea fowl-PL PL-ASSC fly 3PL 'And the guinea fowl up and flew away.'

Seeing the flight of guinea fowl, one would say:

- (52) záváŋ-yíì fir guinea fowl-PL fly 'And the guinea fowl are flying.'
- (53) káyéfi í-bà nd-á tàtàŋ strange (F.) PL-ASSC go-GO 3PL 'Never seen before, they up and left [the room].'
- (54) wàl nákà báf ngèŋ woman REM jump 3SG 'The woman jumped out.'
- (55)hìd-yíì í-bà yàŋ èе wá tàtà man-PL DEM 3PL-ASSC 3PL:POSS ah. move á màcin PREP there 'Those people moved over there.'

The equivalent of the verb "wake up" requires a possessive subject pronoun because it codes a change in the previous event, which is "to sleep":

(56) gómbòk-yíì wàhín ábà dàwán fadáh frog-PL DEM ASSC after wake-up tàtàn 3PL.POSS 'Afterwards these frogs woke up.'

Possessive subject pronouns may also be used with potentially transitive verbs, and the resulting construction has intransitive function:

6áh (57)ngàn séy ndà ká á màkám hide 3SG POS PRED bank SO go vàm water 'And he hid on the bank of the water.'

6. Pleonastic subjects

The semantic function 'remain', coded by verbs *fin* and *min* 'remain', requires the third-person singular subject regardless of the person and number of the actual entity that the predication is about:

- (58)bìkáf dàkàytíy sá n kà ká ká dzà 1SG PREP INF God INF kill others say tátà tsáv mín sà zà 1SG finish EE 3SG remain alone 'I will say that God has killed all the others and that I alone remain.'
- (59)bìkáf ká dzà tàtà cíké' kà kill 3PL all **POS** God INF fín ká nàmú nám tì à tàŋ **DED** 1DU **INF** 1DU 3SG remain see 'God has killed them all, there remains only us, we will see.'3
- (60) à gá káy à fin nám tátà
 3SG say INTERJ 3SG remain 1DU only
 'He [the frog] said, "Look, there remains only us . . ."

^{3.} Our language assistants suggested that the name bìgáf is derived from bày wùgáf 'chief sky', 'the chief in the sky'. The term bígdaf is given an etymology as meaning 'chief in the sky'. The term wùdàf báytàŋ is the kuli (representation) of bígaf. When one prays to bígaf, people pray to wùdàf báytaŋ. The praying is done in a special house dedicated just for this purpose. And it is only the head of the household who is allowed to enter the prayer house and pray to wùdàf báytaŋ. Offerings of cooked animals can be made to wùdàf báytaŋ. The offerings are placed on a kuli, a clay pot. If the dish with the offerings falls down, it means that either the God or the ancestors did not accept the offering. The God bígaf is imagined as transparent, clean, white, bìgáf tá kwèdék 'white God', as opposed to a human being which has the attribute of being black.

The choice of the third person singular pronoun as the pleonastic subject indicates that the third person singular is the least marked subject in the pronominal system in Mina.

7. Arguments of the transitive verb: coding the direct object

If a proposition has two arguments, there are two means of coding them: One is through the relative position with respect to the verb, with the first argument, which we call the "subject," preceding the verb and the second argument, which we call the "object," following the verb, resulting in the SVO order. The second means is through position preceding the verb and the preposition n. The configuration SVO occurs in pragmatically neutral clauses:

(61) à gòr góng sk-á
3SG want truth NEG-Q
'He wants the truth, doesn't he?' (góngà 'truth')

Not every noun that follows a verb is its direct object. Inherently locative nouns follow inherently locative verbs without any prepositions, and yet they are not direct objects. The test for the categoriality is provided by the syntax of the complement with respect to the end-of-event marker za and its negative counterpart $d\hat{a}$. These two markers follow the direct object, but precede non-direct object complements, such as locative complements of movement verbs, which are not marked by a preposition, as well as all complements marked by prepositions.

- (62) hà kớ r hìdì-yíì zà
 2SG INF insult man-PL EE
 'You have insulted people.'
- (63) bíčì kà fát bà ká
 Bitsi INF skin cow POS
 'Surprisingly, Bitsi slaughtered the cow.' (the speaker disapproves).

The object follows a reduplicated verb when the subject occurs between the two parts of the verb: (64)kámbáy *6àt* 6àt ngàn . . . á 3SG stick 3SG get get 'He got his stick and . . . '

Both subject and object can be coded by full noun phrases:

(65)gáw séy dàɗ ngàz à zá hunter remove leg 3SG COMP SO á 6èt-ú kwáyàn PRED PREP squirrel take-3SG 'Then, the hunter took off a leg [of a game animal], and he said to the squirrel, "Take it."

8. Object coding in hypothetical and deontic moods and in past tense

Transitive verbs in the hypothetical and imperative mood must be followed by an object. If the object is third-person and if it has been mentioned before in discourse, it is represented by the form w realized as u after consonants:

(66)zá hí ndà lúw-á-ŋ à má say-GO-3SG SUBJ 3SG COMP 2PL go dàh-á-w go-GO-3SG 'He said, "Go tell her to bring it here."

Cf.:

lúw-á-n (67)hí à zá ndà má dàh-á say-GO-3SG SUBJ go-GO COMP 2PL go 'He said, "Go tell her to come here."

The suffix w is also used in past-tense coding. If there is a change of object, the new object must be represented by a full noun. Both of these cases are represented in the following example:

(68)žèb žèß žè6-ú ndà dzáŋ wàl follow follow 3SG follow-3SG wife find go ngàn nákáhà 3SG REM 'He followed and followed and found his wife,'

The object marker w is also suffixed to the verb of the relative

clause. The antecedent of the object does not have to occur in the relative clause:

(69)νí zá mbù fés ngà ciŋ á 3PL **COMP** child small like DEM PRED dámù kómbì mà k-ú nók sán maybe REL 1PL.EXCL bush cut-3SG know skù NEG

'They said, "There is a small child like that in the bush. Maybe he cut it out. We do not know."

The use of the third-person singular object pronoun -u with subject focus is ungrammatical:

(70) *i k\u00e1 d\u00e4b-\u00e4 z\u00e4 3PL INF ask-3SG EE for 'they asked him'

9. Absence of an object

A transitive verb may occur without an object, if its object has been mentioned previously in the discourse. Compare the following fragment, where the same verb k a y 'to cross' first occurs with an object, lakwa t 'river', and then four sentences later, it occurs without any object, nominal or pronominal:

- (71) hìd-yíì wá í dĩy-á gán làkwát man-PL DEM 3PL put-GO cross river 'The men started to cross river.'
- (72) cìkid tá gwidin ndàv ká sesame GEN single fall POS 'A single sesame seed fell down.'
- kim kim cìkíd (73)mà zá тź listen listen REL COMP REL. sesame ndàv-yí zà. fall-STAT EE 'The one who was good at listening said, "A sesame seed fell down."

(74)kàn í kàn zá cross 3PL cross EE 'They crossed [the river].'

Whether an object is overtly marked is not determined by the subcategorization properties of the verb, but rather by the system of reference, as described in Chapter 16.

When the object is a body part of the subject, the clause has the following form: Subject Verb body part. A possessive pronoun coding the features person and number of the subject is optional:

(75) ká ngà ngàzà ngàn ká break leg 3SG POS INF 'He broke his leg.'

Coreferentiality of subject and object is marked by the noun tàlàn 'head' without possessive pronouns (recall that the intensifier also makes use of the noun tàlàn 'head', but with possessive pronouns, section 14 Chapter 3):

- (76)ká fàď tàlàn kà POS **INF** shave head 'He shaved himself.'
- (77)tàlàn fəɗ à 3SG shave head 'He shaves himself.'

The unmarked object may have a different referent than the immediately preceding object:

wà rèz mèbin ndè tsáp màl (78)wàl á DEM open tsap wife door go 3SG catch ká POS 'The woman opened the door, went [in] and tsáp caught [it].'

10. Coding of object in sequential clauses

In sequential clauses, i.e. clauses that follow another clause or an adverb

of time and clauses that are followed by another clause within the same sentence, the object follows the subject and precedes the verb. Such an object is marked by the locative preposition n. The third person subject \acute{a} in such clauses has high rather than low tone. The motivation for the use of the preposition is provided by the fact that two noun phrases precede the verb, and some means must be provided to assure the distinction between the grammatical roles of the two nouns.

Compare the following pair of sentences, each consisting of two clauses in a sequential relationship. The first clause is coded for the first element of the sequence through a construction consisting of a reduplicated verb, with the subject between the two parts of the verb. The following clause must be sequential. In the example below, it is the second clause that has the object, and it is coded by the preposition n:

(79)	zèm	zàm	zəm	á	zəm	zá
	eat	eat	eat	3SG	eat	$\mathbf{E}\mathbf{E}$
	á	n	kàđám	ngàn	6èt	
	3SG	PREP	calabash	3SG	take	

'She ate and ate and ate, then she took her calabash.'

The object in a sequential clause may not be coded by configuration, as in matrix clauses. Hence, the following is ungrammatical:

for 'She ate and ate and ate, then she took her calabash.'

If the adverb of time is fronted, the object must also occur before the verb:

The sequence of cause-and-effect relationship among the sequential nature of the clause, the fronting of the object and the use of the preposition n is as follows: The fact that the clause is sequential requires the fronting of the object. The fronting of the object requires the use of a preposition to distinguish between the two arguments preceding the verb. The fronting of the object has become a marker of the sequential clause.

11. Pronominal objects

Object pronouns follow the verb and they must be preceded by the suffix \dot{a} following the verb. We gloss \dot{a} as GO for 'goal orientation' because we analyze it to be identical with the goal orientation extension. The following is the list of object pronouns:

Direct Object Pronouns

	Singular	Dual	Plural
First	-kù	nàmú	nènén, nà (EXCL)
			nòkóŋ (INCL)
Second	-h		híníŋ or hínéŋ
Third	Ø, u		tá tàtàŋ

Note that the first and second person plural pronominal forms display vowel harmony. There is no vowel harmony in the first person dual because the labial nasal is [+round], and therefore it is a barrier to round vowel harmony.

Here is an illustration of the form of object pronouns in the habitual aspect where all persons are marked, and in phrase-final position where the non-reduced, and in the case of the third-person the expanded form of the pronoun, is used:

(83)tàw-á-kù ndí **HAB** hit-GO-1SG 3SG 'He hits me.'

(84) à ndí tàw-á-h
3SG HAB hit-GO-2SG
'He hits you.'

The third-person singular can be unmarked. Mina codes the category 'deduced reference' marked by the form $t\dot{a}$ reduced to $t\dot{a}$ in phrase-internal position, and expanded to $t\dot{a}\eta$ in phrase-final position. The deduced reference marker instructs the listener to identify the referent through a process of deduction using knowledge from various sources, including the listener's cognitive system, the speech environment, and previous discourse. This form can function as syntactic object or as determiner of a noun phrase. However, it cannot function as syntactic subject. Unlike other object pronouns, the deduced object marker is not preceded by the goal orientation marker \dot{a} :

(85) à ndi táw tàŋ
3SG HAB hit DED
'He hits him.'

Here are some natural discourse examples of the use of the marker ta:

- (86) syì à ndí dó tò dàp COM 3SG HAB cook DED only 'Then she just cooks it.'
- (87)á í ndí sév tàt kám ngà PRED 3PL TOP (F.) 3PL HAB catch then zà ká ndá kà dá kì-yíì meat-PL EE INF go INF cook:GO tàn DED

'Then, as for them [hyenas], they just catch the meat, [and] bring it for cooking.'

The referential functions of the form $t\dot{a}$ are discussed in Chapter 17, Reference system.

The tone of the third-person singular object suffix u is polar, determined by the last tone of the verb as described in Chapter 2, Phonology. The pronoun u is used in the independent past tense coded through reduplication, and in deontic and hypothetical moods:

(88) dzàw i dzàw-u á dùwón attach 3PL attach-3SG PRED back mòdìngwòrzé donkey 'They attached it to the back of the donkey.'

The dual and plural object pronouns involve the use of the goal orientation marker \dot{a} . All first-person dual and plural forms consist of a pre-fix $n\dot{a}$, whose vowel assimilates to the following vowel by fronting or rounding depending on the front and round characteristics of the following vowel:

- (89) à ndí tàw-á nènéŋ
 3SG HAB hit-GO 1PL.EXCL
 'He hits us'
- (90) à ndí tàw-á nòkóŋ
 3SG HAB hit-GO 1PL.INCL
 'He hits us .INCL'
- (91) à ndí tàw-á nàmú 3SG HAB hit-GO 1DU 'He hits the two of us.'

The second-person plural is marked by two means used simultaneously. First, there is the second-person singular object marker h following the verb, and then the second-person plural object follows:

(92) à ndí tàw-á-h hìnéŋ 3SG HAB hit-GO-2SG 2PL 'He hits you.'

The third-person plural does not have the goal orientation marker \acute{a} :

(93) à ndí táw tètàn 3SG HAB hit 3PL 'He hits them.' (94) káyà wállá bà ďiv-á tá put-GO help (F.) **ASSC** INTERJ (F.) 3PL tàŋ dà cook DED 'She started to help them to cook it.'

Pronouns that constitute syllables, such as plural pronouns, are not suffixed to the verb, as evidenced by the fact that they do not undergo vowel fronting:

- (95) i n k\(\delta\) lìm-\(\delta\) n\(\delta k\(\delta\) lìm-\(\delta\) n\(\delta k\(\delta\) lìm-\(\delta\) n\(\delta k\(\delta\) 1PL.INCL EE 'They should not see us.'
- (96) i ká lìm-é nám zà 3PL INF see-GO 1DU EE 'They saw us.'

The second-person singular has the goal orientation marker \dot{a} , followed by [h]. The glottal continuant is often completely reduced, and only the goal orientation marker \dot{a} signals the second person:

- (97) kớ màl-á-h zà be catch-GO-2SG EE 'He caught you.'
- (98) kà ỳd-á-h zà be hit-2SG EE 'He hit you.'

- (99) i ká lìm-é ná zà 3PL INF see-GO 1PL.EXCL EE 'They saw us.'
- (100) í n ká lìm-é ná zà
 3PL PREP INF see-GO 1PL.EXCL EE
 'lest they see us'

The second-person plural is hi in phrase-internal position:

- (101) í kó lìm-é-h hí zà 3PL INF see-GO-2SG 2PL EE 'They saw you.'
- (102) i n ká lìm-é-h hí zà 3PL PREP INF see-GO-2SG 2PL EE 'lest they see you'

The third-person plural is $t\acute{a}$ in phrase internal position in both indicative and deontic moods:

- (103) i ká lìm tá zà 3PL INF see 3PL EE 'They saw them.'
- (104) i n k\u00e1 l\u00e4m t\u00e4 z\u00e4 3PL PREP INF see 3PL EE 'lest they see them'

12. Coding coreferentiality of subject and object

For most transitive verbs, the coreferentiality of subject and object is coded by the lexeme $ks\delta m$ 'body' in the object position. The noun $ks\delta m$ 'body' may be followed by possessive pronouns referring to the subject. In natural data, the form $ks\delta m$ is used only when the subject has control over the event:

- ngàn (105)sév báy dzà dzà ksám ká á body chief kill 3SG kill 3SG **POS** 'So the chief killed himself'
- (106) $6 \hat{a}t$ 6àt á wás dzà á dzà ksám 3SG take kill 3SG take knife kill body ká ngàn 3SG POS

'He took his knife and killed himself.'

- (107) kó dzò ksóm ngòŋ zà INF kill body 3SG EE 'He stabbed himself.'
- (108) à zá hà tàbál ksám kími 3SG COMP 2SG tire body why 'He said to him, "Why do you tire yourself?""

13. Coding the internal state of the subject

The lexeme *tàlàŋ* 'head' has grammaticalized to code a state of the subject not resulting from the physical activity of the predicate of the clause:

- (109) à ték tàlàn 3SG remember head 'He remembers.'
- (110) séy tàkár-yíì kà wáy tàlàn tsáv zà turtle-PL INF forget head finish EE SO ká dàr INF dance 'So the turtles are completely preoccupied with the dance.'
- (111) kò ték tàlàn zá
 3SG remember head EE
 'he recalled'

With the verb wáy 'forget' the addition of tàlàn produces an unexpected meaning:

(112) kà wáy tàlàn zá
INF forget head EE
'He wasted time.'

Cf.

(113) kà wáy zà INF forget EE 'He forgot.'

The noun $t \hat{a} l \hat{a} \eta$ must be used with the verb $mb \hat{u}$ 'unite' when it has plural subjects in its scope:

Here is an example where the form tàlàn is used as the subject with the verb mbù 'unite, gather' and as the object with the verb tsúk 'isolate':

(115) *tàlàŋ* mbùw-yí kó í mà zà syì COM QUANT 3PL head REL unite-STAT EE tàlàn tètè ndà váy ndà tsúk isolate head 3PL go where 3PL go dáp skà vù NEG iust Q

'If they unite themselves, no matter where they go, they isolate themselves.'

14. Argument structure of verbs of emotional states

The reason we discuss the properties of verbs of emotional states is that the semantic function of the subject is not predictable. It could be either the argument that triggers the emotional state or the argument that is in the emotional state described by the verb. We begin with the verbs of loving.

Some verbs have experiencer as subject; other verbs, have the trigger of the experience as subject. The verb ndòrm 'please' may have only the trigger of the experience as subject and the experiencer as indirect obiect:

(116) mávù á ndèrm-á-k rà 3SG please-GO-1SG D.HAB 'I like beer' (lit, 'beer pleases me') (The dependent habitual marker ra must be used in this sentence)

Having the experiencer as subject results in an ungrammatical sentence:

(117)*sà ndàrm mávù please beer 1SG for 'I like beer'

The verb *ndòrm* may be used in different aspectual forms:

- (118) mávù kó ndòrm-á-k zà beer INF please-GO-1SG EE 'I liked beer' (lit, 'beer pleased me')
- (119) mávù kó ndòrm-á-k dá skù beer INF please-GO-1SG exist NEG 'I didn't like beer' (when I tried it)

The verb *mbál* 'like' may only have the experiencer as subject; the object of liking is the object of the clause. The object may be human or non-human:

- (120) tàtà nfád tàn í mbál wàl tàn 3PL four DED 3PL like woman DED 'The four of them liked the woman.'
- (121) sò mbál kòkòs skù 1SG like beans NEG 'I don't like beans.'

The verb $d\acute{o}m$ 'to ache' has as its subject the part of the body that aches. The experiencer is the object. The part of the body may have a possessive suffix. Elicited clauses with the verb $d\acute{o}m$ and several other verbs of emotional states have the habitual marker $r\grave{a}$ rather than $nd\acute{a}$:

- (122) tàlàŋ dóm-á-k rà [tàlàŋ tóm-ák] head hurt-GO-1SG D.HAB
 'I have a headache' (my head is hurting me).
- (123) ró dóm-á-k rà hand hurt-GO-1SG D.HAB 'My hand aches.'

There are several expressions to code the notion of being afraid. One of them consists of the noun k idiak 'fear' as subject, followed by the verb dal 'make', followed by a dative argument. The evidence that the argument is dative rather than direct object is provided by the fact that the third-person singular is marked by n.

(124) kətülàk dál-á-k rà D.HAB make-GO-1SG fear 'I am scared' (lit., fear made me).

(125) kətúlàk ďál-á-h rà make-GO-2SG D.HAB fear 'You are scared.'

(126) kətülak dál-á-ŋ rà make-GO-3SG D.HAB fear 'He is scared.'

The evidence that kàtúlàk is a noun is provided by the fact that it may occur as head in possessive constructions:

(127) kàtúlàk-ngàŋ 'his fear' 'my fear' -nàŋ -tkón 'your fear'

The verb *ndin* 'to be afraid, to scare' can be transitive or intransitive. When it occurs with one argument only, that argument represents the affected participant. All tenses used with this verb must be dependent:

ndín rà (128) sà 1SG be afraid D.HAB 'I am afraid.'

ndín rà (129) à D.HAB scare 'He is afraid.'

In the past tense only a dependent tense can be used:

ndín (130) sà kà zà EE 1SG INF be afraid 'I was scared.'

(131) sà ndín 1SG be afraid 'I was afraid.'

When the verb is used with two arguments, the first argument is the

trigger of emotion, and the second argument is the affected entity:

(132) à ndín-é-k rà
3SG scare-GO-1SG D.HAB
'It made me scared.'

It remains to be explained why propositions involving emotional states require dependent rather than independent habitual aspect.

15. Dative

We use the term "dative" as a conveniently brief term for the category of indirectly affected argument. The argument is indirectly affected when A acts (on B) and thus affects C. The indirectly affected argument can receive an object, be affected through the activity directed at some other object, benefit from the activity, or be adversely affected by the activity (malefactive). All examples below support the indirect affectedness of the argument as the function of the dative argument. The common coding means for the nominal and pronominal dative is goal orientation marker \acute{a} suffixed to the verb and followed by pronominal suffixes. This marker, however, is not limited to dative function as it also occurs with direct object pronouns.

15.1 Pronominal dative

Except for the third-person singular, the dative and benefactive pronouns and the way they are added to the verb are identical with direct object pronouns. All pronouns, including the third-person singular and plural forms, must be preceded by the goal orientation marker \dot{a} . The set of pronouns is as follows (phrase-final and phrase-internal forms cited, and in that order):

Dative Pronouns

	Singular	Dual	Plural
First	-kù, -k	nàmú	nókù, nókòŋ INCL
			nènéŋ, nà EXCL
Secon	d -h		hínìŋ
Third	-ŋù, -ŋ		-ŋ tətàŋ, tətə
	•		

The full form of pronouns ending in a vowel is preserved in phrase-final position, such as at the end of the clause:

(133) i dəb-á-kù
3PL ask-GO-1SG
'They ask me.'

In phrase-internal position, the final vowel of the pronoun is reduced, and the tone of the pronoun shifts to the preceding syllable, as described in Chapter 2. The first- and the third-person singular, however, may be coded by consonants only, in phrase internal and in phrase final position. The consonant-only variant does not cause vowel lowering on the preceding syllable:

(134) hìdì wèhin á ván zá á n DEM 3SG rain 3SG PREP COMP man gàr nd-á-k ká ďà ká INF touch-GO-1SG INF fall 3SG want kàsám skù body NEG 'This man said, "Rain, when it falls, will not touch me."

In accordance with the rule of vowel fronting, the goal orientation marker a after the verbs with front vowel $b\acute{e}r$ 'sell', $l\grave{i}m$ 'see', and $h\acute{i}l\acute{d}i\acute{b}$ 'to sew' is realized as [e]:

(135) ká bèr-é-k wú z fếs
INF sell-GO-1SG milk EE small
'She sold me a little milk.'

The first-person plural exclusive has the form $n \hat{a} n \hat{i} \eta$ in phrase-final position and $n \hat{a}$ in phrase-internal position:

(136) bitsì mò vl-á nàniŋ
Bitsi REL give-GO 1PL.EXCL
'It is Bitsi that gave it to us.'

vl-à nà kà dá give-GO 1PL.EXCL pot for carrying water 'Give us a clay pot!'

(138) i dàb nòkóŋ
3SG ask 1PL.INCL
'They ask us.' (no goal orientation marker)

The full, probably deliberate style form of third-person dative pronominal suffix is $-\eta \dot{u}$, realized as η in phrase-internal position and in non-deliberate style in phrase final position. This pronoun must be used each time there is a third-person dative pronominal object, whether singular or plural. This is in contrast with the third-person pronominal direct object, whose overt coding depends on the type of reference coded rather than on the semantic function within the clause. The third person pronoun is unmarked for number. If it is not followed by the plural pronoun, however, the default value of the third person pronoun is singular:

```
(139) kớ màl-á-ŋ zà
INF catch-GO-3SG EE
'He caught it for him.'

i dàb-á-ŋù
3SG ask-GO-3SG
'They asked for him.'
```

The direct object follows the verb with its dative suffix:

'They sent people and they went and got the calabash for him and brought it.'

The third-person plural dative is coded by the third-person singular

 $\eta \dot{u}$ followed by the third-person plural pronoun $t\dot{a}$, $t\dot{a}t\dot{a}$, or $t\dot{a}t\dot{a}\eta$ (in phrase-final position):

(141) kwáykwáy đốb í wàŋ sùlúdsùlúd hyena ask 3PL sleep two by two wà mò dál-á-ŋ tòtò mí but what happen-GO-3SG 3PL what 'Hyena asked, "They sleep two by two, but what happened to them?"'

The third person plural form may be reduced to the form táŋ as evidenced by the following example:

(142) áa dámà wàl wà bà á
ah, good woman DEM again 3SG
lúw-á-ŋ tàŋ
say-GO-3SG 3PL
"It's good," the woman told them again.'

The second-person dative is coded by the suffix h in phrase-internal position:

kà tár-á-h zá sà nd-á (143) à 3SG COMP1SG go-GO INF ask-GO-2SG pát tàr á nàn 1SG PRED tomorrow common work 'He said, "I came to ask you for help. Tomorrow is my work day.""

The second-person plural dative must have the second-person singular coded on the verb and the second-person plural as an independent pronoun:

(144) i dəb-a-h hinen 3SG ask-GO-2SG 2PL 'They ask you.'

15.2 Interaction between the dative and direct pronominal object coding

The addition of pronominal direct objects to verbs with dative objects is

realized as follows. The deictic object is marked by the form wàcin 'this' following the verb:

(145) mbí mà bèr-é-k wàcín 3SG REL sell-GO-1SG DEM 'It is he who sold this one to me.'

If the third person is the recipient and the second person is the object given, the second person is affixed to the verb and the third person is coded through a prepositional phrase in the unmarked aspect:

(146) sò vl-á-h nò mbéŋ 1SG give-GO 2SG PREP 3SG 'I give you to him.'

In the unmarked aspect, the overt coding of the direct object is obligatory for transitive verbs. Therefore, if no nominal object occurs, the deduced marker $t\dot{a}$ must be used. The dative is suffixed to the verb and the direct object is marked by the independent pronoun ta (tay in clause-final position):

(147) sò vl-á-h tàŋ 1SG give-GO-2SG DED 'I give it/him/her to you.'

sá déf-é-h tàŋ
1SG introduce-GO-2SG DED
'I am shawing it to you' (rather than salling

'I am showing it to you' (rather than selling it).

In the dependent aspect coded by the form $k \ge ... za$ the third-person singular direct object suffix to the verb may not be used (for a similar situation in Mupun, a West Chadic language cf. Frajzyngier 1993):

(148) sò kó vl-á-h zà
1SG INF give-GO-2SG EE
'I gave it to you.'

sà ká déf-é-h zà 1SG INF show-GO-2SG EE 'I have shown him to you.'

15.3 Nominal dative

The structure of the clause with nominal dative has the form: Verb- \dot{a} - η Object (PRED) n Dative. The verb codes the presence of a dative argument through the suffix η . The locative preposition n is used in all cases except when the underlying dative is a person whose body part is affected. If between the direct object and the dative argument there exists a part-whole relationship, the nominal dative is not coded either by the locative predicator or by the preposition. The dative argument is coded as possessor of the direct object. However, the verb still codes the presence of the dative argument:

(149) à fàd-á-ŋ tàlàŋ tá záváŋ-yíì
3SG shave-GO-3SG head GEN guinea fowl-PL
r bàhá
D.HAB again
'She was shaving the heads of the guinea fowl again.' (for the benefit of the guinea fowl)

If the verb is inherently directional, the locative predicator \dot{a} is not used. This is the case with the verb of saying, whose addressees are coded only by the preposition $n\dot{a}$:

(150) báhámàn là á lúw-á-ŋ nò gámbáy
Bahaman say 3SG say-GO-3SG PREP stick
nákà wà
REM DEM
'Bahaman spoke to the stick.'

The verb $b \hat{e} r$ 'sell' is also inherently directional, and consequently the argument coding the buyer is not preceded by the locative predicator \hat{a} :

(151) à bèr-é-ŋ ndrì ánà association 3SG sell-GO-3SG sorghum PREP association 'He sells sorghum to the association.'

à ndí bèr-é-ŋ kàkàs ná bítsì 3SG HAB sell-GO-3SG beans PREP Bitsi 'He always sells beans to Bitsi.'

If between the verb val 'give' and the recipient there is some other

material, such as an adverb, the recipient is preceded by the locative predicator \dot{a} . We have no explanation as to why the recipient is not also preceded by the preposition n:

(152) ha vəl-a-ŋ wudə zə nek
2SG give-GO-3SG food EE well
a misil zə vu
PRED thief EE Q
'Will you give food to a thief?' (written sources)

The auxiliary za follows the direct object but precedes the dative argument:

- (153) ká bèr-é-ŋ kàkàs zá nà bítsì INF sell-GO-3SG beans EE PREP Bitsi 'He sold beans to Bitsi'
- kàđám (154)6át d-àh mbí ANAPH take calabash bring-GO dà-há-ŋ ká nà báv á bring-GO-3SG PREP PREP chief 'He took the calabash and brought it back to the chief.'

The third-person dative argument marked by y cannot be coreferential with the subject. Thus in the above example, the dative pronoun y can refer to any third-person other than the subject of the clause.

15.4 The dative with body part terms

If the dative object pronoun is followed by a body part noun, this construction codes the affectedness of the dative object. The body part noun is not followed by the possessive pronoun:

wèhin á (155) hìdì ván á zá n 3SG DEM 3SG rain PREP COMP man ká ďà gàr ká nd-á-k INF fall 3SG INF touch-GO-1SG want kàsám skù body NEG 'This man said, "Rain, when it falls, will not touch me."

(156) záván-yíì zá fàd-á ná guinea fowl-PL COMP shave-GO 1PL tàlàŋ ká gí head POS please 'The guinea fowl said "Shave our heads, please."

séy à ndí fàd-á-ŋ tà so (H.) 3SG HAB shave-GO-3SG 3PL tàlàŋ fàd fàd fàd head shave shave shave 'So, she shaved and shaved and shaved their heads.'

(157) ká tìy-á-k màcékwèr zà
INF look-GO-1SG knee EE
'He examined my knee.'

When the dative is marked by the suffix to the verb, the body part noun may not be followed by the possessive pronouns:

(158) ká tìy-á-k màcékwèr *nán zà
INF look-GO-1SG knee 1SG EE
'He examined my knee.'

15.5 The functions of dative

The dative argument can be added to any verb, regardless of whether the verb is inherently malefactive, benefactive, or neither. The dative indicates that the argument so coded is indirectly affected by the event, without specifying the nature of indirect affectedness. The following example has dative as a beneficiary of the event:

(159) ká bál-á-k tsákàr zá
INF smith-GO-1SG lance EE
'He smithed a lance for me.'

In the following example the dative argument is affected neither positively nor negatively:

(160) mótà tá wàbáf ká fîr-é-nók
motor GEN sky INF fly-GO-1PL.INCL
z í tàlàn (tòkòŋ)
EE above head 1PL.INCL
'An airplane flew above us all.'

In the following example, there are two instantiations of the dative construction. The first one codes a benefactive activity (finding oneself a wife) and the second a malefactive activity (to pinch one's heart):

(161)wàl kím mà skú kà hear mouth D.HAB NEG INF woman ká kà gám gr-á-h pár chase POS search-GO-2SG another INF ngáts-**á-h** ngàm á náf rà pinch-GO-2SG because 3SG heart D.HAB 'The woman who does not obey should be chased away. You have to find yourself another, because this one pinches your heart'

Here are examples of the malefactive use of dative pronouns:

- (162) á zm-á-k wùdó z vày
 3SG eat-GO-1SG food EE why
 'Why did he eat my food?'
- (163) i ká bl-á-nòk páy kà
 3PL INF cut-GO-1PL.INCL tree POS
 'They cut a tree on us.'
- (164) i ká bl-á-nà páy kà
 3PL INF cut-1PL.EXCL tree POS
 'They cut a tree on us.'

16. Coding reciprocity

Reciprocity is a situation in which A(s) act on B(s), and B(s) act on A(s). The main strategy for coding the reciprocal function is the noun ksóm 'body' which must be followed by an appropriate plural possessive pronoun. Here is an illustration of all forms:

(165) ná màn ksám tín zà body 1PL.EXCL help EE 1PL.EXCL 'We are going to help each other.'

> màn ksám tám nám zà. body 1DU help 1DU EE 'We are going to help each other.'

nók ksám tók màn zà 1PL.INCL 1PL.INCL EE help body 'We are going to help each other.' mèn hí ksém tíkín 7á 2PL 2PL EE help body 'You are going to help each other.'

The distinction between reciprocal and coreferential function may be blurred in some instances:

(166)zá èп gàmták ázà ká dzà à PREP chicken 3SG **COMP** INF kill go tàm ká ksám 1DU POS body 'He [squirrel] said to the chicken, "Let's kill ourselves."

Control over an event does not necessarily mean active participation in the event itself:

ká (167) áz \hat{a} tòk kàh ksám tòkón skù 1PL INF body 1PL **NEG** bury go dàl-á-n ká á vàngáy syì do-GO-3SG COM INF **PRED** how '[Since the blacksmith is dead] we have to bury each other, otherwise, how can we go about it?'

The other means of coding the reciprocal function involves the use of the marker žėn following the verb. This means has been recorded with verbs of saying:

(168) kwáykwá-yíì lù wà žéŋ zà hyena-PL RECIPR 3PL EE DEM say hìd-yíì ďápdàp kà wà ďá people DEM here exist only 'The hyenas said to each other, there are some people in here.'

17. Conclusions

The subject of a clause can be coded by nouns or by pronouns. A special set of pronouns codes the subject. With respect to the third person, the subject may be coded by a noun and a pronoun at the same time, but this coding has a pragmatic function. If the subject has been mentioned in a preceding clause, it does not have to be mentioned in the subsequent clause. The conjoined noun phrase in the subject function has a different form than the conjoined noun phrase in any other function.

The direct object is marked by the position following the verb. The third-person singular object may be unmarked, or it may be marked by the determiner $t\dot{a}$ or the pronoun u, depending on the requirement of the reference coding and the aspect of the clause. The direct object differs from locative arguments that may also follow the verb directly in that the end-of-event marker za and the auxiliary $d\hat{a}$ 'exist' follow the direct object but precede all other complements.

Pronominal objects, direct or dative, are marked by the goal orientation marker \dot{a} suffixed to the verb and by pronouns following the marker \dot{a} . The third-person singular dative object pronoun, unlike the direct object pronoun, must always be overtly marked. The dative object pronoun must also be used if the dative argument is nominal.

Chapter 6

Coding the event from the point of view of subject

Mina has grammaticalized a function of representing the event from the point of view of subject. This function is in contrast with the unmarked clause, which represents the event without taking any specific point of view. Since this function is not commonly known (but see Frajzyngier 1999, Frajzyngier with Shay 2002) the description that follows provides the evidence for the existence of this function.

1. The form of the point of view of subject marker

The point of view of subject marker is ka, glossed as POS. It occurs at the end of the verb phrase, but before adverbial phrases, if any. In phrase-final and phrase-internal position, it has polar tone, opposite to the tone of the preceding syllable. The syllable that counts for the polar tone is the syllable actually produced rather than the underlying syllable. Thus the noun for 'dog' is $h \grave{a} z \acute{a}$. In phrase-internal position it is reduced to $h \grave{a} z$, and accordingly the tone on the marker ka is high rather than low:

(1) bítsì ká bèr hàz ká
Bitsi INF sell dog POS
'Bitsi sold a dog.' (elicited)

The marker ka is reduced to ka in phrase-internal position.

(2) dèb dè6 ká tètàn fú tàn kì carry 3PL **POS** 3PL all DED carry meat vàm PREP water 'All their meat, they took it into water (for themselves).'

2. The function of the point of view of the subject

Representation of the event from the point of view of the subject indicates that the event is represented as beneficial or as detrimental for the subject. In the following examples, the events are beneficial for the subject. The marker ka can occur with the controlling subject, and in such a situation, it is in complementary distribution with the pronominal coding of the dative argument, which codes the beneficiary of the event. The third-person dative pronoun cannot occur with the third-person subject and be coreferential with it. Instead, the marker of affectedness is used for the same function:

(3) báv nà kàđám ngàn 6àt chief PREP calabash 3SG take déß á déß ká á ìdá carry POS 3SG PRED home carry 'The chief; took his; calabash and carried it home.' (for himself)

The evidence that the marker ka codes the point of view of the subject is provided by the fact that if one would like to add a beneficiary other than the subject, the form ka cannot be used:

- ngàn **(4)** *báv kàđám nà 6àt 3SG PREP calabash take chief dèb dè6 ká ìdá á á carry POS 3SG PRED home carry ngàn wàl ná 3SG PREP wife for 'The chiefi took hisi calabash and carried it home for his wife.'
- (5) dè6 dè6 ķì tètàn fú tàn GEN:3PL all DED 3PL meat bring bring ká yàm n PREP water POS 'They brought all of their meat into the water.' (for themselves)
- (6)*ķì dèb dè6 ká tètàn fú tàn í DED **POS** 3PL all carry 3PL meat carry vàm nà ngámbà tàtàn n PREP water PREP friend 3PL for 'All their meat, they took into water for their friend.'

The point-of view-of the subject indicates the state of the subject as the result of the event. Such subjects could be affected, directly or indirectly. The point of view of the subject may also involve a more general category, viz. how the event should be seen. Consider the following fragment. The first clause sets the background. In the second clause the marker ka indicates that the subject of the first clause was affected:

- **(7)** diy-a làkwát hìdì-yíì wá kán man-PL put-GO DEM 3PL river cross 'The men started to cross the river.'
- (8) gwidin cìkíd tá ndàv kà GEN single fall POS sesame 'A single sesame seed fell down.'

In the third clause, a simple statement is made about the event concerning the sesame seed. However, it is made as if it did not concern the subject:

kim kim (9) cìkíd mà zá listen listen **COMP** sesame ndàv-yí mà zà EE REL fall down-STAT 'The one who was good at listening said, "A sesame seed fell down."

The marker $k\dot{a}$ may represent the point of view of the topic, when the subject is unspecified human:

- (10)wàl sálàd í ndí mà gám lazy 3PL HAB ATT chase POS 'The lazy wife is chased away' lit. 'The lazy wife they chase away'
- (11)wàl tátàn ndí káw kà good 3PL keep **POS** woman HAB 'The good wife is kept.'

The representation of the event from the point of view of the subject is not narrowly defined to positive or negative effects on the subject. Thus in the following example the outcome is neither positive nor negative, and yet the form ka is used:

til ndà zá bin (12)á depart 3SG room EE go dzán à тì bín á dzán kà n PREP mouth room close 3SG close POS 'He went to the room and closed the door.'

In order to render the semantic nuance involved, one would probably have to translate it as 'He went to the room and closed the door behind him.'

Translations of clauses with the point-of-view-of-subject marker into a language that does not have such a category may not reveal the meaning carried by the marker:

(13)ká bèr tá bèr bèr sà n 3PL 1SG PREP INF sell sell sell túwàd kà finish POS 'I will sell them all.' or 'I will sell out'

Polish does have such a marker; it is either the accusative reflexive *się* or the dative reflexive *sobie*. Most of the Mina sentences with the marker ka would be translated into Polish using one of those markers:

(14) Wy-przedam się out-sell:FUT:1SG REFL 'I will sell all of my things'

An event that has a dative argument may also have a point-of-view of subject marker:

(15)hà kà kál-á-n kà n PREP INF refuse-GO-3SG POS 2SG ngàm ngàŋ á mà géy géy PRED PREP REL bad bad 3SG because 'You will deny her [things] because of her bad [conduct].'

Intransitive predications may also have the form ka:

- vàl-á-ŋ (16)déw kà ká give-GO-3SG POS sit INF ďá kà tál nà mà skù INF taste PREP mouth exist **NEG** 'He sat down, and there was nobody to give him anything to eat.'
- (17)kùràk á kùrk-á ngàn ká séy 3SG 3SG POS descend descend-GO SO 'Then he got down.'

3. Point of view of the subject and speaker's empathy

The choice of the point-of-view of the subject marker is the speaker's choice. It is not determined by any element of the clause. If the subject is adversally affected, the choice of the point of view of the subject indicates speaker's sympathy and empathy. Consider the following sentence where the description of the death of some members of a group has the marker ka:

(18)bìkáf dzà tàtà cíké' ká kà God kill **POS** INF 3PL all fin ká à nàmú nám tì tàn remain 1DU 1DU **INF** DED 3SG see 'God has killed them all, there remains only us, we will see'

If one were to talk about one's enemies, where no sympathy is involved, instead of the marker of the point of view of subject ka, one would use the end-of-event marker za:

(19)bìkáf dzà tàtà cíké ' zà ká kill 3PL all God INF EE à fin nàmú nám ká tì tàŋ 3SG **INF** remain 1DU 1DU see DED 'God has killed them all, there remains only us, we will see.'

Consider again the clause:

If, instead of the verb $b \partial t$ 'take', a verb that does not affect the subject, one uses the verb $k \partial p$ 'break a vessel', the speaker may represent the event with the marker ka, expressing his sympathy for the subject's loss:

(21) zàm zàm zàm á zàm zá á n 3SG eat 3SG eat EE **PREP** eat eat kàđám ká ngàn kàp break POS calabash 3SG 'She ate her fill, and then she broke her calabash.'

The following examples illustrate the speaker's attitudes toward the proposition, most likely the attitude of sympathy, although it is not always clear who is the object of sympathy:

- (22)á til rà màllúm kà grá PREP leave PRED PREP marabout want mìnjìvèk ngà-wàl ká dzà ngàn ká medicine INF kill co-wife 3SG POS 'She went to a marabout to get medicine to kill her co-wife.'
- (23) há kờ ták kà 2SG INF attack POS 'If you prevented her . . .'

The marker ka may occur in specific interrogative clauses. Its position in such clauses is before the interrogative marker:

(24) mà bál páy wá ká ví
REL cut tree DEM POS who
'Who cut this tree?'

The marker ka may also be used in questions about the truth:

(25)kà ká hál páy **POS** INF cut tree 'Did he cut a tree?' (The interrogative modality is obtained through the raised intonation over the whole sentence.)

The marker ka is mutually exclusive with the marker za:

*zà (26)ká ká ngà break POS INF EE 'He broke it.' (He was affected by the breaking.)

or:

(27)ká ngà zá break INF EE 'He broke it.'

4. Conclusions

The point-of-view of subject is a separate domain, different from the domain of semantic relationship between the verb and its arguments and adjuncts, and different from grammatical relations. The category pointof-view of subject is a counterpart of the goal-orientation category only when the latter has the object in its scope.

Chapter 7

Locative predication and locative complements

1. Introduction

This chapter deals with two issues: the coding of locative arguments and the coding of adjuncts. Locative arguments are those arguments that code the goal or the source of movement. There are also locative arguments of a stative locative verb, equivalent to "to be in place." Arguments can be added only to some verbs. Locative adjuncts can be added to any verb, not only verbs of movement. Locative arguments and adjuncts constitute one semantic domain, as evidenced by the complementary nature of the coding means used.

The system of coding locative predication includes configuration, the predicator \dot{a} , prepositions $k\dot{a}$ and n, and the auxiliary za. Locative predication in Mina presents two problems. The first problem has to do with the functions of various coding means, which can be used alone or in conjunction with other coding means. Here is the illustration of the coding means used.

The locative predication can be coded by juxtaposition alone:

(1) ábà nd-á ngàn wùtá
ASSC go-GO 3SG village
'Then she returned to her village.'

The preposition n can occur alone. The nasal is followed by a schwa in predictable phonological environments:

(2) tsáy mò tí tí nd-á nástó
then REL look look go-GO enter (F.)
nò yòm
PREP water

'Then the one who was good at looking entered into water.'

The predicator \acute{a} also can occur alone:

(3) i n kə ndəv-a a kayak
3PL PREP INF fall-GO PRED earth
'They will fall down on the ground.' (written sources)

Finally, the predicator and the preposition can occur together:

(4) ván đá rà mòná á
rain fetch:GO D.HAB like PRED
nò lùmò
PREP market
'It was raining from the direction of the market.'

These data present us with two sets of questions. The first has to do with the conditions under which the predicator and the prepositions are used, while the second has to do with the categoriality of the form \dot{a} .

The second problem has to do with the form of possessive constructions that constitute a part of the locative predication. It is usually assumed that the form of a syntactic structure A is independent of the higher syntactic constituent B. Thus, the structure of a noun phrase is assumed not to depend on the syntactic structure of which the noun phrase is a part. In Mina, however, the structure of a genitive phrase does depend on the higher constituent of which the genitive construction is a part. A genitive construction that functions as a subject or object must contain the genitive marker $t\acute{a}$:

(5) hìdà tá kwáykwáy-yíì wàcíŋ house GEN hyena-PL DEM 'house of those hyenas'

If a genitive construction functions as a locative complement in some locative predications, however, the genitive marker $t\acute{a}$ is not used:

(6) hós á idà kwáykwáy-yíì wàciŋ arrive PRED compound hyena-PL DEM 'She arrived at the compound of the hyenas.'

This alternation must be explained, since there is no theoretical reason why the internal structure of a construction should change depending on the type of a higher construction in which it occurs. As will be shown, the solution to problem 1 allows us to postulate a hypothesis explaining the problem 2.

2. Functions of coding means in locative predication

Lexical items involved in a locative predication may be inherently locative or not. Toponyms are inherently locative nouns, as is the word dámù 'uncultivated area(s), bush'. Items like these are referred to as 'locative complements'. Inherently non-locative nouns include [+human] nouns and pronouns. Directional verbs of movement and stative locative verbs are inherently locative and are referred to as 'locative predicates'.

Following is a summary of the interactions among coding means in the domain of locative predication:

Locative predicate and locative complement:

Coding through juxtaposition (example 1);

Locative predicate and non-locative complement:

Predicate n Noun (example 2);

Non-locative predicate and locative complement:

Predicate á Noun (example 3);

Non-locative predicate and non-locative complement:

Predicate á n Noun (example 4)

2.1 Locative Predicate and Locative Complement: Coding through juxtaposition

When both the predicate and the complement are inherently locative, no locative prepositions are used; the properties of the lexical items involved ensure a locative predication interpretation. The inherently locative verbs include the pair: $nd\hat{\sigma}$ 'go', $ts\hat{u}$ 'went', and the borrowed verb $n\hat{a}st\hat{\sigma}$ (F.) 'enter'. These verbs do not usually take the locative predicator á in natural discourse. If the locative complement is also an inherently locative noun, no preposition occurs between the verb and the complement:

- (7a)í-hà ndà tàtà bíŋ vá 3PL.POSS PL-ASSC call go room 'They went into the room.'
- (7b) ngàn ábà nd-á wùtá ASSC go-GO 3SG village 'Then she returned to her village.'

The evidence that a locative argument after a verb is a complement rather than a direct object is provided by the behavior of the end-of-event marker za (phrase-internal forms: z, za). This marker occurs **before** a locative complement (8, 9) but after a direct object (10):

dámù mà pár ká hídí ká (8) ndà zà bàv man INF go EE REL first PREP chief 3PL bush dál-á-n kà mà do-GO-3SG PREP INF mouth 'If anybody goes to the field before the chief, they will make him a lot of problems.'

Z

wútà à

kά

wàcin tán (9) DEM return EE house 3SG SO man sav wàcin ngámbù á médíg ngàn n DEM friend PRED PREP neighbor 3SG dé6-é-n dál há kà INF bring-GO-3SG 2SG money hìdà dál nà wà vànú PREP man DEM money how much 'When the man came back to the house, he said to his neighbor, brought money to this man. How much money?" "Friend, you

End-of-event marker after a direct object:

tsév

hìdì

(10)áá wàl nà kà dzán-á skàn pár INF find-GO thing ah wife 1SG another z.à bàdáp again EE 'Ah, my wife found another thing again.'

2.2 Locative Predicate and Non-Locative Argument: Predicate n Noun

When the predicate is locative but the complement is non-locative, the complement must be marked for its locative role. This is done by the preposition n, whose function is to mark a non-locative noun as a locative complement:

(11)mìnjée mbà mà ká mármàr nàz-á now boy pasture INF abandon-GO REL kw-yîì láy nà zá PREP field goat-PL EE 'Now the shepherd left the goats in the field.'

The evidence that *láy* is inherently non-locative is that it can also mean 'time':

(12) tớr láy tó mìtờs month time GEN hunger 'The year of the hunger.'

Further evidence for the non-locative nature of the noun *láy* is that it may be used, without additional marking, as the subject or object of a clause:

- (13)nda-ha nda tii tii taŋ a a 3SG go:GO see go-GO 3SG see go dish-yi lay mi tseey za cultivate-STAT REL finish EE field 'She came to see that the field has been cultivated completely.'
- (14) guzak naŋ kə vl-a-k lay za
 uncle 1SG INF give-OBJ-1SG field EE
 'My uncle gave me a field.' (both examples from written sources, hence no tonal notation)

Mina has a locative anaphor, $m \partial \eta$, that is used to refer to inherently non-locative nouns. As opposed to inherently locative anaphors, $m \partial \eta$ is treated as inherently non-locative, as evidenced by the fact that it requires the preposition n:

(15) bàk bàk á bàk-á-ŋ bà wìrnjík fill fill 3SG fill-GO-3SG ASSC ash ká nà màŋ
PREP PREP ANAPH
'He filled them [the shoes] with ash.'

2.3 Non-Locative Predicate and Locative Complement: Predicate á Noun

A locative predication whose predicate is non-locative must be marked by the particle \dot{a} . This particle marks a non-locative predicate as having a locative function. The particle \dot{a} follows the direct object, if any. If the complement is inherently locative, it occurs without the preposition n. The verb $y\dot{a}$ 'call' is inherently non-locative. The nouns bin 'room, hut in a compound', and $id\dot{a}$ 'house' are inherently locative:

(16) nd-á yà ngùl ngòn á bìŋ go-GO call husband 3SG PART room 'And [she] called her husband into the room.'

The verb fat 'skin' also is inherently non-locative and therefore the locative predication with this verb must be marked by the predicator \dot{a} :

nkwa ta làvén hì skàm-á ká zà (17)GEN black 2PL INF buy-GO goat EE hì fàt kà á kávàk skin POS PART earth 2PL 'A black goat, when you have bought it, you skin it on the ground.'

Even verbs involving motion may be inherently non-locative. The verb til 'leave, move' is inherently non-locative, and so requires the predicator \dot{a} if the locative complement is to be used:

(18) til ngən a wta leave 3SG PART house 'He returned home.' (written sources)

Similarly, the verb dé6 'carry':

bày (19)'n kádàm 6àt déß ngàn á chief PREP calabash 3SG take 3SG carry déh ká ìdá PART home POS carry 'The chief; took his; calabash and carried it home.'

A non-directional verb, such as y a n 'move house', must be followed by the particle a even when followed by a deictic marker or locative

anaphor. If the anaphor is inherently locative, it is not preceded by the preposition n:

- kwáykway-yíì zá ńgà (20)wà hyena-PL DEM COMP 2SG mbál-ù há vàn á kàcin want-3SG 2SG move PRED here 'The hyenas told her, "If you want to, you can move in here."
- hìd-yíì wà í-bà (21) tàtà èе yàn DEM PL-ASSC man-PL move 3PL eh. màcin á PRED there 'Those people moved over there.'

The predicator \dot{a} is used after the verb $d\dot{a}h\dot{a}$ 'exist' when this verb has a locative complement. This fact is the evidence that the verb is indeed an inherently non-locative verb:

(22)hákèm ďáhá ngàn bìŋ á exist PRED house 3SG daughter 'There is a girl at her house.'

Although the particle \dot{a} codes a locative predication, it is not a predicate for the whole proposition. This particle is a 'local predicator', viz. a predicator with a limited scope extending only to the next complement.

If the clause has no predicate, the locative predication is coded by the particle \dot{a} and a locative complement. This is evidence that the particle \dot{a} alone functions as a locative predicate:

(23)kwáyàŋ màts-yí mà zá Кì squirrel die-STAT REL **COMP** meat bàytán á dámù large PRED bush

'The squirrel said, "There are a lot of dead animals in the bush."

(24) mìmėŋ à zá àmmá bìkáv à leopard 3SG 3SG **COMP** truly God gwád á bìn mbál-á-kù nd-á ķì nàn like-GO-1SG go-GO plenty PRED room 1SG meat 'The leopard said, "God truly loves me, as there is a lot of meat in my room."

The phrase beginning with a local predicator is a new phrase, as evidenced by the fact that lexical forms preceding it occur in phrase-final form. In the following example the adjective bàytáŋ 'large' has the phrase final form rather than the phrase internal form, which is bàytá:

(25) séy mùà bàytán á dámù zìbìr zìbìr so tamarind large PRED bush dark dark 'There is a large tamarind tree in the bush; it is dark.'

2.4 Non-Locative Predicate and Non-Locative Complement: Predicate a n Noun

If neither the predicate nor the complement is inherently locative, the locative predication is marked by the locative predicator \dot{a} and the preposition n, marker of the locative complement:

- (26)sév tàkár tíl á nà vàm turtle leave PRED PREP water SO dzàbáŋ màl màl á màl-á seize seize 3SG seize-GO five 'So, the turtle went in the water and caught five.'
- wàciŋ kúl (27)wàl dál-áhà skù à séy make-GO DEM able **NEG** 3SG woman SO sév dáß ίi dáß á nà làptál take 3PL take PRED PREP hospital SO ká hùrgà tàn cure INF

'This woman was not well, she was sick. So she was brought to a hospital for treatment.'

- (28)ábà bàv mètá ká zèm n ASSC chief PREP INF same place 3PL eat nà ntá zàngár làv mà lizard PRED PREP place REL one 'They will eat with the [large red-headed] lizard in the same place.'
- fálà (29)táwàr **á** nà tàtàn hà tán DED suffer PRED PREP 3PL 2SG among 'You suffer a [a lot] among them.'

The locative predicator \dot{a} and the preposition n are also used to code the addressee of the verb of saying, evidence that the verb is inherently non-locative, and that the addressee is coded as locative complement. The verb, however, is also coded for the dative predication through the third person singular object marker η , the form used only with dative complements:

- ká lùw-á-n żín nà (30)hà PREP INF say-GO-3SG 2SG then PRED PREP who 'Who are you going to tell it to?'
- (31)á nà gimikid à zá áz **COMP** PRED PREP monkey 3SG tùmù médìgì ngák ngák-á ngák í pull pull-GO neighbor pull 3PL 1DU kwáyàŋ pám midigid á squirrel until PART court 'He said to the monkey, "Let's go, neighbor." They went to the squirrel's courtyard.'

3. Genitive construction in the locative phrase

It is often assumed that the form of a syntactic structure A does not depend on the larger syntactic structure B, of which A is part. Coding of the possessive relationship in Mina contradicts this assumption. Here, the same semantic relationship between two nouns is coded in two different ways, depending on the hierarchically higher form in which this relationship is realized. If two nouns in modifying relationship are a part of the argument of the clause, the modifying relationship is coded by the preposition tá:

- (32) dúwàŋ tá màdìngwàrzé ábà màlá back GEN donkey ASSC wound (from illness) 'The back of the donkey has a wound.'
- (33) ká nzlà dùwàn tá màdìngwàrzé (zà)

 INF cure back GEN donkey (EE)

 'He cured the back of the donkey.'

If the two nouns in modifying relationship are part of a locative phrase, however, the modifying relationship is coded by juxtaposition alone and the genitive particle is not allowed:

- (34) kà dĩ dúwàn màdìrngwàrzé
 INF put back donkey
 'He put it on the back of the donkey.'
- (35) tíl zà á bìŋ kūl-yíì
 leave EE PRED room ancestral spirit-PL
 'He went into the house of kulis and . . . '

The situation is further illustrated by contrasting phrases culled from texts with elicited sentences in which the same phrase is used as the subject or object of the clause. The modifying relationship between nouns occurring within a locative phrase is coded by juxtaposition. The same relationship in a noun phrase serving as an argument is coded by the genitive marker $t\acute{a}$:

(36) á bìŋ wàl nákà wà
PART room wife REM DEM
'Into the room of that wife [mentioned before in discourse, but quite far before]'

Cf.:

- (37) bìŋ tó wàl nákà wà nék room GEN wife REM DEM good 'The room of that wife is good/nice.' (elicited)
- (38) á wtò wàl náká wàciŋ
 PRED home woman REM DEM
 'Into the home of that woman'

(39) hós á idò kwáykwáy-yí wàcíŋ arrive PRED compound hyena-PL DEM 'She has arrived at the compound of hyenas.' (elicited)

Cf. the modifying construction as an argument of a clause:

(40) hìdò tó kwáykwáy-yí wàcíŋ house GEN hyena-PL DEM 'house of those hyenas' (elicited)

An explanation for the intriguing behavior of the genitive construction lies in the inherent properties of locative predicates and the locative predicator \dot{a} . As shown in section 2, especially 2.3 and 2.4, the form \dot{a} is a locative predicator that is used in a locative clause whose predicate is not inherently locative. The form \dot{a} thus may be said to be a predicator, not of the entire clause, but of the verb phrase: It codes the complex of verb and following noun as a locative predication.

An important component of the proposed solution to problem 2 is the hypothesis that the genitive marker $t\dot{a}$ also is a predicator, but a modifying predicator: It says, 'this head noun has a property X', where the modifier codes the property X. The reason that the genitive marker $t\dot{a}$ cannot be used in a locative construction when it is immediately preceded by the locative predicate is that the same argument—the head noun of the genitive construction—would thus be marked as part of two different predications, the locative predication (as marked by the presence of an inherently locative verb or the locative predicator \dot{a}) and the genitive predication, as marked by $t\dot{a}$. Thus, there appears to be a constraint that prevents the same noun from being a constituent of two different predications at the same time.

The evidence for the proposed hypothesis consists of several facts. First, in some contexts, the forms \dot{a} and $t\dot{a}$ are interchangeable, providing evidence that they have the same categorial function. Since it has been shown that \dot{a} is a predicator, therefore the function of $t\dot{a}$ should also be that of a predicator:

- (41) bà tá ngìd á tákón cow GEN DEM PRED GEN:1PL 'The cow over there is ours.'
- (42) bà tá ngìd tá tákóŋ cow GEN DEM GEN GEN:1PL 'The cow over there is ours.'

Second, the two forms cannot co-occur, which provides evidence that they perform functions in the same domain:

(43) *bà tá ngìd á tá tákóŋ
cow GEN DEM PRED GEN GEN:1PL
'The cow over there is ours.'

In a locative construction whose complement is not inherently locative, the complement is marked by the preposition n (cf. sections 2.2 and 2.4). This preposition may co-occur with the genitive marker. However, if the complement of the locative construction is inherently locative, and therefore is not marked by the locative preposition n, the genitive marker is omitted in the locative predication. In 44, the first modifying construction, dówón kwàykwàyà 'back of the hyena', has no genitive marker, while the second, mô tô kwàykwàyà 'mouth of the hyena', is marked by $t\dot{a}$. The locative predicator \dot{a} cannot co-occur with $t\dot{a}$, since the presence of to would mark the noun dowon as both part of the locative predication and head of the genitive construction. The verb of the second clause, 'put', is inherently locative and so has the same properties as the predicator á. However, there is an important difference between the locative complements of the two predicators. The expression dówón tó kwàykwàyà 'back of the hyena' is much more inherently locative than the expression mó tó kwàykwàyà 'mouth of the hyena'. Back of an animal is typically the place where the load is carried. The evidence for the inherent locative characteristic of the 'back of hyena' is that dówón tó kwàyk $w \dot{a} y \dot{a}$ 'back of the hyena' is not marked by the locative preposition n, while the expression mô tô kwàykwàyà 'mouth of the hyena' must be preceded by the locative preposition n in a locative predication. Since the locative predicator dóm 'put' is separated from the genitive construction má tá kwàykwàyà by the locative preposition n, the genitive head má cannot be construed as the argument of two different predications. For this reason, the genitive marker to is not omitted, but marks mo as head of a genitive predication:

(44)séy skàn-víi wàciŋ dzáw dzáw 6èt cìké take thing-PL DEM tie tie all SO dówón kwàykwàyà 6èt líjì PRED back hyena take bridle (F.) tá kwàykwàyà dám nà má hyena PREP mouth GEN put 'He took those things and attached them all to the back of the hyena. He took the bridle and put it in the hyena's mouth.'

The natural discourse data fully support the proposed explanation. Here are a few more examples of possessive constructions without the genitive marker in locative predications with inherently locative complements. Since the complement is inherently locative, there is no preposition \mathbf{n} , and so the genitive particle is omitted:

- (45) wà kà dzáŋ tàtà wàl rùkút clothes 3PL woman DEM INF close bìŋ kà ngùl á ngàn room husband POS **PRED** 3SG 'The woman; has locked their; clothes in the room of her husbandi.'
- (46)á nà gimikid zá áz à 3SG COMP PRED PREP monkey tùmù médìgì ngák ngák ngák-á í 3PL pull-GO 1DU neighbor pull pull pám midigid kwáyàŋ á squirrel until PRED court 'He said to the monkey, "Let's go, neighbor." They went to the squirrels' courtyard.'

A spatial specifier followed by a noun is an inherently locative construction. It is not marked by the preposition n and so the genitive marker is not used:

(47) nd-á déw ká á bòr málùm go-GO sit POS PRED side marabout wácìŋ DEM

'He came and sat down next to the marabout.'

A genitive phrase following the preposition ká also does not contain

the genitive marker tá. In 48-49, each genitive construction is part of a locative phrase marked by ká, and the genitive relationship is coded by apposition alone. From this, it follows that the preposition $k\hat{\sigma}$ also is an inherent predicator:

wàcin nék (48)à zá skù náz ká DEM good NEG 3SG COMP throw POS dùwán dà behind house 'He said this isn't good. He threw it behind the house.'

> gìmikid káts wàl ngàŋ-yíì ábà wàz-yíì 3SG-PL ASSC children-PL monkey gather wife nd-á cìké ká dùwán tán DED go-GO PREP behind all dà kwáyàŋ squirrel compound

'The monkey gathered his wives and children. They all stayed behind the squirrel's house.'

The preposition nò may be derived from the verb ndò 'to go'. The evidence that the verb and preposition are related is independently provided by another product of grammaticalization of the same verb. When the verb "to go" is used as an auxiliary verb, i.e. the first verb in a sequence of verbs, it has a variant nò along with ndò:

(49)nà\ndà gr-á nám yàm find-GO 1DU water 'Go bring us some water.'

The variant ndò is in the speech of the same speaker who uses the variant *ndi* for the habitual form.

4. Locative deictics and anaphors

The locative deictics are kà 'here' and mà 'there', the latter having also anaphoric function. These forms are followed by suffixes hin or cin in phrase-final position. Depending on the dialect, the vowels of the forms mà and kà are fronted when followed by the suffix with the high front vowel:

(50)kàcin [á kècin] and [á kàcin] 'It is here.' (in the same compound, but cannot be seen)

> kújì mècin/hin Kuji DEM 'Kuji is there.'

The deictic forms occur without the preposition $n \partial$, which is the evidence that they are inherently locative:

- (51) kwáykwáy-yíì wà zá ńgà há hyena-PL DEM COMP 2SG mhál-ù vàn kàciŋ há á 2SG want-3SG move PRED here 'The hyenas said to her, "If you want, you can move in here."
- hìd-yíì (52)í-bà èе wá yàŋ man-PL DEM 3PL-ASSC eh move tàtà màcin 3PL:POSS PRED there 'Those people moved over there.'

With directional verbs, the deictics occur without the predicator \dot{a} and without any prepositions:

(53) dá kàcin bring here 'Bring it here!'

> kàhín dá bring here 'Bring it here!'

(54) kàhín nd-á go-GO here 'Come here!'

The auxiliary za is placed before the locative deictic:

(55)zàm kàcin sà zá EE 1SG here eat 'I will eat here.'

(56) sò zòm zó màcín
1SG eat EE there
'I will eat there.' (either deictic or anaphoric reference)

In phrase-internal position the form mà or kà is used:

(57) hí skàm bà zá kà vù
2PL buy cow EE here Q
'Will you buy a cow here?'

The evidence for the deictic function of ka is provided by its use when it refers to an entity in the environment of speech:

- (58) kwáykwá-yíì žéŋ wà lù zà RECIP 3PL **COMP** hyena-PL DEM say đápdàp hìdì kà ďá wà people DEM here exist only 'The hyenas said to themselves, there are people in here.'
- (59) báytà gómbòk-yíì mà zá zá syì REL large frog-PL COM EE COMP hí kàm fú tàŋ wàn kà hí **DED** sleep:IMPER down 2PL TOP 2PL all mùkàdkádán sùlúd sùlúd upside down two two 'The largest of the frogs said, "You all lie down on your backs in pairs"

In some cases, it is not possible to say whether low tone $k\hat{a}$ is the deictic locative marker or the affected marker occurring after a high tone morpheme:

(60)mbin kwáykwáy zá kám kì hyena **COMP** ANAPH TOP meat tìkínìn má hín nzà kà GEN:2PL SUBJ stay you here 'The hyena said, "If it is like that, your meat should remain with vou."

If the remote marker $m\grave{a}$ is used, the goal-oriented marker must be added to the verb. The form $m\grave{a}$ indicates a location other than the place

of speech or a place not within visual range:

The form without a locative deictic is unspecified for place:

The antecedent of the locative mà may be a place previously mentioned in discourse, or whose existence can be easily deduced from the preceding discourse:

The form ngid indicates an unspecified location different from the place of speech, 'somewhere', and 'someplace'. Because of the meaning of this form, it cannot be used with mà or kà or with cin or hin. The adverb may be preceded by the locative predicator \dot{a} but not by the preposition *n* (elicited examples):

- (64)ngíd sà ďi (á) 1SG put PRED somewhere 'I put it somewhere.'
- (65)ká ďi ngíd sà (á) 1SG INF PRED somewhere put 'I put it somewhere.'

5. Prepositional form of pronouns

After the locative predicator \dot{a} , pronouns occur in the genitive form, i.e. the form that incorporates the genitive marker tá (tá in phrase-internal position).

á nàn or á tá nàn 'for me' (in phrase-internal position it becomes á tán)
á tùkón
á ngòn
á tù-mù (1DU INCL)
á tòkòn (1PL INCL)
á tìnén
á tìkìnén (phrase internal á tìkìní)
á tòtán

(67) ngwáy á wàží tùk-yíì
'say' PRED children 2SG-PL
dáy dáy á táŋ fiš
much much PRED 1SG small
'Say, for your children it is a lot, for me it is little'

(68) màllú zá á tán wérèh-nè teacher COMP PRED GEN:1SG trick-1SG dáhà exist 'The teacher said, "As for me, I have my means."

6. Preposition ká

Preposition $k\acute{a}$ is a directional marker of adjuncts, coding location or movement inside a contained space. It is thus a spatial specifier. The spatial specifier $k\acute{a}$ precedes the locative predicator \acute{a} . This phenomenon is interesting in view of the fact that in many Chadic languages (Mupun, Frajzyngier 1993, Hausa, Newman 2000) spatial specifiers occur after locative prepositions. The fact that in Mina the spatial specifier occurs before the form \acute{a} provides another argument against \acute{a} being a preposition. Here are examples coding the stative locative, in this case the location where the event takes place:

(69)yá-há-w káf γá 6àt 3PL 3PL morning call call-GO-3SG take *6àt* ká zá dzáŋ bin EE find PREP PRED room take 'In the morning, they called him and locked him up in the room'

If the verb is locative and the noun is not locative, i.e. requires the preposition n, the spatial specifier $k \acute{\sigma}$ occurs before the preposition n:

(70)nd-á náz á náz ká nà láv throw 3SG go-GO throw POS PREP place tàŋ DED 'He went and threw it into its place [in the bag].'

The preposition $k \ne a$ also occurs before the preposition n:

(71)lám hàmás nd-á biŋ ká hàk thatch POS straw go-GO build house cut wán ká nà máŋ inside PREP L.ANAPH lie '(He) . . . built a house, cut straw, thatched the roof, and lay down inside it.'

If both the verb and the noun are inherently locative, the preposition $k\acute{a}$ is the only preposition used if movement into is involved:

(72)èе. á nà mbà té gwidin nàz 3SG PREP child **GEN** ah. one put ká jí6 hole in 'Then she threw one child into the hole.'

The preposition $k\dot{\delta}$ is also used for constructions coding the change of X into Y:

- (73) mà mbàd-ví ká ngùl transform-STAT REL into man 'He changed into a man.'
- (74) gùkúd mà mbàd-yí ká fálfálwádà turn-STAT larva REL butterfly into 'The larva has changed into a butterfly.'

- (75) kwáykwáy-yíì nákà mbàd-yí fú mà REL transform-STAT REM all (F.) hvena-PL žídèp áb nákáhà ká wir tèbén-yíi PREP gravy only ASSC granary-PL REM 'The hyenas became [meat for] her gravy, and the granaries [belong to her].'
- (76)6àt zá ngàn dé6 ká ìdá báv EE chief 3SG POS home get carry 'The chief took it [the stick] and carried it home.'

7. Preposition mbéh

The preposition *mbéh* (*mbé* in phrase-internal position) means "close to". It can occur alone or be followed by locative deictics:

(77) di mbéh put close 'Put it nearby.'

The presence of a deictic following *mbéh* indicates that *mbéh* is a preposition rather than an adverb:

- (78a) di mbé mèhin put close DEM 'Put it near by there.'
- (78b) sà mbé mèhín 1SG close DEM 'I am nearby.'

The preposition mbéh derives from the verb of the same form which functions as auxiliary:

(79) sò mbé kò ndóv-áhà 1SG approach INF fall-GO 'I almost fell down.'

8. Preposition í

The preposition i means "above" or "behind" but excludes contact between the object and the locative reference point. Like other spatial specifiers, this preposition is used regardless of the locative features of nouns and verbs:

- tàlàn tókón tá wàkáf (80)mótà fir fly motor GEN above head 1PL sky 'An airplane flew above us.'
- (81) kà ďi ngid sà above somewhere 1SG INF put 'I put it over there.'

9. Coding the locative source

The direction "from" is coded by verbs of movement and the marker za, which follows a locative complement:

- gár (82)báv kà zà zá chief COMP leave here EE 'The chief said, "Get out of here!"
- (83)tsú ngàn màrhák zà 3SG.POSS Marbak EE went 'He left Marbak.' (cannot be said in Marbak)
- kà zà (84)ngàŋ tsú 3SG.POSS here EE went 'He left from here.'

Note that the adverb kà 'here' keeps its vowel in phrase-internal position. Unlike the point-of-view of subject marker it may not be reduced to kà in phrase-internal position.

(85)ngàŋ zà tsú mà 3SG.POSS there EE 'He left from there.' (either deictic or anaphoric)

If the noun is not inherently locative, it is made so by the preposition $n \ge 1$

- (86) séy ábà nd-á ngàn nà yàm zá so ASSC go-GO 3SG PREP water EE 'Then, he came out of the water.'
- (87)6àt bákátàr dèr tàlàn séy head take bag balance SO ďiy-á kà ngàŋ zà put-GO INF 3SG EE 'He took the bag, balanced it on his head, and started to return.'

If the main verb is in the perfect aspect, the locative noun phrase must be preceded by the locative predicator \dot{a} :

(88) mò ndá-y ngòn á màrbák zà REL return-STAT 3SG PRED Marbak EE 'He has returned from Marbak.'

The use of the auxiliary za in clause final position to code the source of movement provides a piece of evidence for the hypothesis that za derives from a verb 'to be', and even 'to be at a place'. In the West Chadic language Mupun, the source of movement is coded by the verb 'to be' following the noun phrase expressing the source (Frajzyngier 1993). Although the two verbs are not cognates, the use of the same construction, which is exceptional in both languages, provides an argument that the constructions emerged through a similar grammaticalization process. Hence, the argument that the markers following the source noun phrase have the same meaning.

10. Preposition gòdán 'under'

The form $g \partial d \dot{a} \eta$ or $k \partial d \dot{a} \eta$ 'under' has two functions. One is to narrow down the location of the object or subject with respect to the head of the locative phrase. Such markers narrow the spatial orientation to inside, outside, on the side, and so on, of a locative center. These forms are also locative prepositions because they cannot co-occur with the preposition $n \partial$. The structure of the locative phrase with these forms is as follows: (\dot{a}) - $g \partial d \dot{a} \eta$ -Noun:

nzá kèdán páy (89) wàcin à under tree that he 'He was under that tree but he is here now.'

The use of the preposition n before the preposition $k \partial d \dot{a} \eta$ makes the sentence ungrammatical:

(90)*à nzá nó gàdán páy wàcin PREP under tree 3SG that 'He was under that tree.'

11. Preposition ndòn 'bottom, inside'

The notion 'inside' is coded by the marker *ndòn* 'bottom, inside':

(91)kù wàŋ-á ndòn bin zà PRED inside house sleep-GO INF EE 'He slept in the house.'

12. Prepositions dùwán 'back' and kàbám, 'in front'

The noun dùwáy 'back' can serve as a preposition meaning 'behind'. The decision on whether something is 'in front' or 'behind' is different for objects and people. Objects in front of the speaker are á kèbém, 'in front (kàbám "front part" of anything). Objects behind those objects are á dùwán 'in back' (dùwán 'back', starting at the root of the neck going to the waist). If people are involved, then the determining factor is their face from the point of view of the second participant. If the two persons are facing each other, they are á kàbám 'in front' of each other. If one person is facing the back of another than this person is á dùwán 'in back' of the other person.

- (92)kwil kàbám kàdá in front kida kuli 'the kuli (a small clay pot) is in front of the kida (a larger pot for water).'
- (93) kàdá dùwáŋ kwili behind kida kuli 'the kida is behind the kuli.'

For persons facing each other one would say:

(94) kònáy á kàbám kàdú Konay PRED front Kadu 'Konay is in front of Kadu.'

For persons facing somebody's back:

(95) kàdúm dùwáŋ kónày Kadum back Konay 'Kadum is behind Konay.'

The noun tàlàn 'head' is a spatial specifier for 'surface, just above':

(96) bək a bəka talan yəm
pour 3SG pour head water
'He threw it on the surface of the water.' (written sources)

13. [+human] nouns as locatives and the preposition r

A [+ human] noun cannot serve as a locative argument or adjunct without an additional coding means. One of the means is the use of another head noun of which the [+human] noun is a modifier. The nouns that serve as heads of locative expressions with a human goal are wuta 'home' and bra 'side':

(97) tsú wùtó cín
went home his father
'He went to his father.'
i tsú tòtàn á wtó tòtàn
3PL went 3PL PRED village GEN:3PL
'They departed to their place.'

The evidence that locative marker $b
ilde{a}r$, phrase internal form of the noun bra, has indeed the meaning 'side', is provided by its use with inanimate nouns:

(98) sò nó nzá á bòr mìsyòn 1SG HAB stay PRED side mission 'I stay at the mission.' (speaker A) (99)hín kúlí nzá á hàr sà PRED side house deity stay 'I stay at the mission.' (speaker B)⁴

Here is an example of the use of this noun as a locative marker with human locative complements:

áskà (100)tsú ngàŋ bàr wàží 3SG side children actually went 'But actually she went to be with her children.'

Another means of coding a [+human] noun as a locative argument or adjunct is through the preposition r:

- kwaikwav (101) sey til kwayan ra PRED PREP squirrel hyena go SO 'So, Hyena went to Squirrel.' (written sources)
- (102) tán á nd-á báy tàn PREP chief DED go-GO 3SG go 'He went to the chief's.'

The preposition r is often realized as [rangle] when syllabification constraints require it, i.e. when a disallowed consonant cluster would otherwise emerge:

- (103) séy wàl wà til rà ngàn DEM leave PREP 3SG woman 'So the woman went to him.'
- kwáykwáy (104) séy tíl rà kwáyàŋ hyena leave PREP squirrel 'So the hyena went to the squirrel.'

^{4.} This is an interesting formation given the fact that the term kùlí refers to ancestral spirits, clay pots used in the cult of ancestral spirits, but also to anything that is under the protection of an ancestral spirit. The term may well have originated as meaning 'pot', because even today it also refers to the pot used for keeping beer.

(105) á r ngámbù ngòn 3SG PREP friend 3SG 'He is at his friend's.'

The preposition r and the lexical means can substitute for each other:

- (106) sò ndò rò céh 1SG go PREP your father 'I am going to your father.'
- (107) sà ndà wùtá céh [sàndú tà cé] 1SG go house your father 'I am going to your father.'

The preposition [r] may be preceded by the locative predicator \acute{a} :

- (108) sò skòm-á (á) r mbò má-tsà
 1SG buy-GO PRED PREP son mother-2SG
 (zà)
 EE
 'I bought it from your younger brother.'
- (109) á skèm-á gà á r bítsì 3SG buy-GO cow PRED PREP Bitsi 'He bought a cow at Bitsi's.'
- (110) à ní nzò á r-nàŋ
 3SG HAB stay PRED PREP-1SG
 'He lives at my place.' (said outside of the speaker's place)

14. From "hand" to preposition: the grammaticalization of r

Although the predicator \dot{a} and the preposition $n\dot{\partial}$ have cognates in closely and remotely related Chadic languages, the preposition r does not (cf. Frajzyngier 1987c). One of the possible sources of the preposition r is the lexeme $r\dot{a}$ 'hand'. Vowel reduction from $r\dot{a}$ to r is predictable in phrase-internal position. The word $r\dot{a}$ 'hand' in phrase-internal position is also reduced to r:

mà (111) ná kàgám tá tá 1PL.EXCL REL. **GEN GEN** talk hand kásèmà Kasuma 'We talked about the hand of Kasuma.'

(112) $n \partial k$ ká lù na/*á 1PL.INCL INF talk PREP/PRED kásèmà hand-GEN Kasuma 'We talked about the hand of Kasuma.'

The absence of the genitive marker in the locative construction is also a predictable characteristic of the behavior of genitive constructions in locative complements.

15. Direction toward the indirect object: the auxiliary rá

An interesting characteristic of the Mina grammatical system is that it has a special category, movement toward the indirect object. The movement toward the indirect object is coded through the auxiliary rá, glossed as DAT.OR for "dative orientation" occurring at the end of the verbal phrase. Although the marker has the same segmental structure as the dependent habitual marker and it occupies the same syntactic position, it is not a dependent habitual marker because it has a high tone (dependent habitual has a polar tone) and it co-occurs with the future tense marker:

- skèm-á-h ndìr (113) à ká rá PREP INF buy-GO-2SG sorghum DAT.OR 'He will buy sorghum for you and will bring it to you (here or at another place).'
- (114)à ká skèm-á-n ndìr rá buy-GO-3SG sorghum PREP INF 3SG DAT.OR 'He will buy sorghum for him and will bring it to him.'
- (115)ká skàm-á-k ndir rá à n buy-GO-1SG sorghum PREP INF DAT.OR 'He will buy sorghum for me and bring it to me.'

A clause without the auxiliary rá does not imply movement toward

the indirect object:

(116)ká skàm-á-k ndrì n 3SG PREP INF buy-GO-3SG sorghum 'He will buy sorghum for me.'

If there is no overt dative marker, the marker $r\dot{a}$ indicates that the event is for the benefit of the subject or object and that there is subsequent movement toward the beneficiary's place:

- (117)ká skàm ndìr à rá n 3SG PREP INF buy sorghum DAT.OR 'He will buy sorghum for himself and go with it.'
- (118) báy hí nd-á tíkìn ábà mà zá go-GO 2PL ASSC mouth chief COMP 2PL wàl-yíì déb-é-n tskò wùdá rá take-GO-3SG food woman-PL DAT.OR evening 'The chief said, "Return in the evening. The women will bring him food."

The directional function of rá explains why it cannot be used with intransitive predicates, because there is no dative argument:

(119)wán *à n-ká rá PREP-INF wash DAT.OR for 'he will wash and . . . '

16. Conclusions

There are three fundamental means in the coding of locative arguments and adjuncts. If the verb is inherently locative, i.e. a directional verb of movement, or a locative stative verb, and the noun is inherently locative, the locative complement is marked only by the position following the verb. If the predicate is not a directional verb of movement or a locative stative verb, the locative predication is marked by the locative predicator á. If the noun is not inherently locative, such a noun must be marked by the preposition $n \ge 1$. Human arguments, if they are to occur as locative complements, are marked by the preposition r, most likely derived from the lexeme rà 'hand'.

Mina has also grammaticalized a category of the movement toward a

dative argument. This category is coded by the form $r\acute{a}$ following the object. The dative orientation marker provides additional evidence for the existence of the category "dative".

Chapter 8 Adjuncts

1. Introduction

The category "adjunct" includes functions that can be added to any clause, regardless of the inherent properties of the verb. Inherent adjuncts are added without any prepositions. The non-inherent adjuncts can be added only by one or more prepositions. The present chapter describes all adjuncts other than locatives, which have been described in the previous chapter.

2. The topical adjunct

The topical adjunct is a topic of a verb of saying. This adjunct is coded by the noun tàlàn 'head' preceding a noun that is the topic of a verb of saying. The topical adjunct occurs after the end-of-event marker, if any:

(1) nòk ká lù zà tàlàŋ dòk
1PL INF talk EE head horse
'We talked about a horse.'

The topical phrase with $t \hat{a} l \hat{a} \eta$ may also be preceded by the locative predicator \hat{a} . When this is the case, the auxiliary za does not occur:

(2) nòk ká lù á tàlàn kásàmà 1PL INF talk PRED head Kasuma 'We talked about Kasuma.'

The form tàlàn is an obligatory component of the topical phrase; its omission results in an ungrammatical expression:

- (3) *nòk kớ lù á kásòmà
 1PL INF talk PRED Kasuma
 for 'We talked about Kasuma'
- (4) *nók kó gògám á dòk
 1PL INF talk PRED horse
 for 'we talked about a horse.'

If another part of the body is used, $t \ge 1$ 'head' is not used, but the topic is then the specific part of the body. Moreover, the part of the body occurs in the possessive construction, i.e., it is followed by the genitive marker $t \ge 1$, and it must preceded by the preposition $n \ge 1$:

(5) nók ká lù nà/*á ngàz tá dòk 1PL INF talk PREP/PRED leg GEN horse 'We're going to talk about the leg of the horse.'

The locative predicator \acute{a} may be combined with the preposition $n\grave{a}$ to code topical case:

(6) nók ká lù nà ngàz dòk á tá PRED PREP leg 1PL **INF** talk horse GEN 'We're going to talk about the leg of the horse.'

3. The associative phrase

The associative phrase is a separate phrasal category, i.e., it is not a part of the verb phrase. The evidence for this claim is provided by the fact that final-vowel-deletion phenomena do not operate in front of the associative phrase. The associative phrase is marked by the preposition $b(\grave{a})$. The form without the singular-participant-coding vowel \acute{a} occurs when the first component of the associative construction is a pronoun, a demonstrative, or a definite marker:

(7) sò bò nhù ntá 1SG ASSC goat one 'I have one goat.'

- skàŋ-yíì wá **(8)** zàm skú svì ká thing-PL DEM ASSC what COM INF eat 'Or else what to eat those things with?' (tone on wá is high because it has 'absorbed' the vowel with its high tone from the associative preposition ábà)
- (9) kà pék mì jíp nákà bà mbéŋ cover mouth hole REM ASSC it INF 'to cover the entrance hole with it'

The associative preposition has the third-person singular pronoun a when (a) there is no preceding noun; or (b) when the preceding noun phrase is singular. The associative preposition is used to code an additional participant in the event, the commitative:

(10)ká ábà mètázàngár ίi zàm báy PREP INF ASSC chief lizard 3PI. eat nà láy mà ntá PRED PREP place REL one 'They will eat with the large red headed lizard in the same place.'

Recall from Chapter 3 on noun phrase structure that subjects or more precisely the controlling co-participant has the plural associative preposition. When the second participant is non-subject or non-controlling, the singular preposition is used:

hákà sà (11)tsév ká wàn n today 1SG PREP INF sleep SO wàl áhà tùk wàcin ASSC wife 2SG **DEM** 'Today I will sleep with your wife.'

The associative marker codes the role of the noun phrase that follows it rather than being primarily a marker of the relationship between two noun phrases:

(12)mélèz ďál ábà kilif ASSC fish seasoning do 'He made traditional seasoning with fish . . . ' (13) má sà yàm ábà mbí tàŋ
SUBJ drink water ASSC ANAPH DED
'He should drink water with that.'

The associative preposition is also used to code clause-initial adverbial phrases of time, when the adverb is an inherent noun. In this function, the associative has the form $\dot{a}b$. The associative phrase coding adjuncts is never coded by the plural form i-b.

(14) áb dùwáŋ mbéŋ
ASSC back ANAPH
'afterwards'

The associative preposition may also have a verbal complement. Such a complement consists of the verb and its object, if any:

(15) káyà diyà wàllà-tà bà dà tàŋ INTERJ (F.) start help-3PL ASSC cook DED 'She started to help them cook.'

4. Associative through adverbial expressions

- (16) á nzà nù lúmò nà gràb 3SG be PREP market 1PL.EXCL together 'He was at the market with me.'
- (17) á nzà nù lúmò nòk láŋláŋ
 3SG be PREP market 1PL.INCL together
 'He was at the market with us.'

Any person plus second person is coded by second-person plural. Whether the second person is singular or plural is coded by the form of the adverbs:

- (18)lúmò hí nù gràb nzá together 3SG be PREP market 2PL 'He was at the market with you (sg).'
- nù (19)lúmô hì láŋláŋ nzá à PREP market 2PL together 3SG be 'He was at the market with you (pl).'

We see here the interaction of various systems at work. If it were not for the form of the associative adverbs, there would not be a distinction between the singular and plural co-participants in the first and second person.

For a second co-participant that is third person, the functional domains are different. If the first co-participant is controlling the event, any person plus the third-person singular is coded by the third-person singular pronoun:

lúmò (20)tsú PREP market together went 'He went to the market with her/him.'

If the two participants have equal status, the second co-participant is coded by the third person plural pronoun ii, and the singular associative adverb gràb:

- (21) ngàn wàl kó ndà váy 3SG wife where even go gràb dàp íi always together 3PL 'No matter where his wife goes, he is always with her.'
- (22) nd-á zèbèrá à ìdá ká go-GO PRED house follow 3SG PREP INF 3SG dà wàdá gràb dàp together always prepare food 3PL 'When she returns home, and when she cooks he is always with her.'

Any person plus third-person plural is coded by the third-person plural pronoun:

(23) à nzá nù lúmò tàtá láŋláŋ
3SG was PREP market 3PL together
'He was at the market with them.'

The third person singular pronoun coding the second co-participant can be omitted:

(24) kà dál-á gàzad zá gráb INF do-GO work EE together 'He worked with him/her together.'

The first person dual has the singular associative adverb:

(25) tséy ná ŋ-kó wàŋ bákà ná gràb so 1DU PREP-INF sleep today DU together 'So we will sleep together today.'

The notion of disassociation is coded by the adverb párpár 'separately':

(26)dáwày í dálì í-bà tsù zà á Daway 3PL **PL-ASSC** EE **PRED** Dali went párpár nà lúmò separately PREP market 'Dali and Daway went to the market separately.'

5. Adverbs yà and yóm 'also'

The function of the adverb $y\hat{a}$ is to indicate that the proposition that was true with respect to some preceding clause is also true for the clause in which $y\hat{a}$ occurs. The adverb $y\hat{a}$ at the end codes identity of objects.

(27) ngùlày dámà trùwáy dámà yà/*yớm red sorghum good yellow sorghum good also 'Red sorghum is good and yellow sorghum is also good.'

(28)kek daha ya dirif tə GEN seed exist also song 'There is also a song of seeds.' (written sources)

The adverb yà is not a conjunction, as it cannot be used just to conjoin the elements of a sentence or proposition.

(29)wàs ngùlày wàcin trùwáy red sorghum this white sorghum this vìyíd *và wà bá still millet and

'This one is red sorghum, this one is white sorghum, and this one is millet.'

The adverb ya also codes an event in a series of other events. In such usage, và codes the beginning of a new event. The following utterance follows an utterance in which the subject's other activities were described:

(30)sev 6ət gadət ya take arrow also 'Then he also took an arrow, . . .' (written sources)

The adverb yám 'also' occurs after its scope. It signifies that the truth of the proposition in its scope obtains as well as the truth of some preceding proposition:

hì (31)sà dám vám chief of war bush also 1SG 'I am also a member of the warrior clan.'

If the scope is fronted for topicalization, the marker $y \delta m$ is also fronted, following its scope:

(32)míndí yám hìdì káwù á take care (F.) other also 3SG man kùzák zá vù EE maternal uncle Q

'The other person, also, can he take care of the maternal uncle?'

The marker yóm may occur after the noun phrase or at the end of the clause. The scope of the adverb is whatever precedes it:

- (33) tìti yóm gáw-yíì
 3PL also hunter -PL
 'As for them also, they are hunters.'
- (34) tìtíy gáw-yílyám 3PL hunter -PL also 'They are also hunters.'
- (35) sà mbál yàm yám 1SG like water also 'I also like water.'
- (36)tá kújì ngíd wàs hàz tá wà Kuji **DEM** this dog GEN GEN there hàz tá bítsì vám Bitsi GEN also dog 'That's Kuji's dog and the one over there is Bici's dog.'
- (37) mìnjé hìdì áb hídà ngàn yám now man ASSC compound 3SG also 'Let's say that a man has his own compound also' (like everybody else).

The marker $y \acute{a}m$ has a number of sentential and discourse functions that are described elsewhere in the grammar.

6. Adverbs of time

Time adverbs can be lexical or phrasal. Lexical time adverbs are not additionally coded by a morphological marker. Inherently temporal adverbs may occur in clause-final or clause-initial position. Adverbs of time may be followed by demonstratives. In such a case, their final vowels are deleted. Thus, the adverb $b\acute{a}k\grave{a}h\grave{a}$ 'today' is reduced to [bákà]:

(38)vàl-á-n kóo hà báŋ ká give-GO-3SG 2SG think INF even hìdì hákèm túk nà bákà wàcin daughter 2SG PREP man today **DEM** 'Even if you are planning to give your daughter away to someone today . . . '

Compare the adverb in clause-initial position. Although there is a noun in the topicalization position, the adverb occurs right after the topicalized object:

- (39)kwàlkwàl-yíì ká kwik bákàhà màl tà leper-PL kwik today INF seize 3PL kà rèh-é pát 3PL PREP INF escape-GO **PREP** tomorrow nók tìyú tìkì where 1PL.INCL see:3SG 'Lepers. Today we will catch them. Tomorrow we will see from where they will escape.'
- (40)hà tspádapù túm ní vàm dáp always 2SG remain crouched PREP water 'You always remain crouched in one place in the water.'

There are two prepositions used in the coding of adverbial phrases of time: the associative preposition with third-person singular marker $\dot{a}b$, the locative preposition $n \hat{\partial}$ and the locative predicator \hat{a} . Adverbial phrases marked by prepositions may occur at the beginning or at the end of the clause. The choice of preposition depends on the head of the adverbial phrase. The associative preposition ab is used with the following heads: nzád 'night'; píc 'sun'; names of seasons, e.g. kròm 'dry season'; and some times of day, e.g. ábà tskóh 'evening' and áb káfa 'in the morning':

(41) hákèm ngàn zá á kàciŋ daughter 3SG PRED here COMP тvà tá rà bà nzáď skù feces D.HABASSC night 3PL defecate **NEG** 'Her daughter said, "Here one does not defecate at night."

- (42)abə bici kə du wuda sey i 3PL ASSC sun INF prepare food SO za EE 'Then, at the sunrise, when they prepared the food . . .'
- (43) kásàmà á ní skàm ndrì
 Kasuma 3SG HAB buy sorghum
 ábà/*á kràm
 ASSC/PRED dry season
 'Kasuma buys sorghum during dry season.'
- (44) ábà bíts/nzádû/ [ábànzádù] 'during the day/night'

The word $nz\dot{a}d\hat{u}$ 'night' cannot occur with the preposition $n\dot{a}$ or the predicator \dot{a} :

(45) *án nzádu 'at night'

> *á nzádû for 'at night'

The locative predicator \acute{a} precedes words like $p\acute{a}t$ 'next day'. Other prepositions may not occur with this noun:

(47) á pát
PRED next day
'tomorrow'

*ábà pát ASSC next day for 'tomorrow'

*ónò pát PREP next day for 'tomorrow'

The combination á pát has the meaning "future":

- mbán (48)zídèp wàl à zá á pát 3SG COMP PRED tomorrow cut now woman ngàn mbál à zá sàn ngùl 3SG 3SG **COMP** 1SG like husband skù wà DEM NEG 'He said, "From now on, I will not do it." His wife said, "I don't like this husband."
- (49)mbúdàp mábàr zá názá-k kà **POS** lion **COMP** sorry leave-1SG mbán sá gàr kà ďál pàt á do PRED next day break 1SG want INF hà skù vàw áhà ASSC 2SG **NEG** contempt 'The lion said, "Excuse me, from now on I won't give you any problems."
- (50)há kà ďál pát skù gàr á PRED next day 2SG want INF do **NEG** 'In the future, don't do it.'

The preposition n occurs with the noun trá 'a unit of time, month':

- tár láy kàk (51)án tá PREP month time **GEN** sow 'during the time of sowing'
- (52)*á/ábà tár láv tá kàk PRED/ASSC month time **GEN** sow 'during the time of sowing'

7. Adverbs of reason

Adverbial phrases of reason occur in clause final position. The adverbial phrase is marked by the preposition $k\delta$ 'in'. The benefactive argument can be added to clauses with intransitive verbs. The pronominal arguments are coded by possessive pronouns preceded by the preposition tá:

- (53) dáwày nd-á kó tó tánàŋ
 Daway go-GO PREP GEN 1SG
 'Daway came here for me, because of me, thanks to me'
- (54) bícì gàgám ábà báy ká tá tùkóŋ
 Bitsi talk ASSC chief PREP GEN 2SG
 'Bitsi talked to the chief about you/for you'

The preposition $k\acute{a}$ also codes the notion of using X for Y:

(55)kwáyàŋ 6át gàdzàmbàl ngàn 6àt nákà squirrel take guitar 3SG take **REM** 6át ká kàp-á nd-à dùwán break-GO go-GO INF take back ďivà gàn zà ngàn ká kàďám ábà EE 3SG PREP calabash **ASSC** 3SG put ngàn ndá á wtá go:GO 3SG PRED house

'Squirrel took his guitar, the one that he broke, put it on his back as his calabash, then he returned home.'

8. Adverbs of manner

Adverbs of manner can be derived from any lexical category through reduplication. Reduplicated lexical items are not preceded by any prepositions. Thus, from the noun cìdé 'pile' the reduplication derives the adverb cìdé cìdé cìdé cìdé 'in piles':

(56)div-à wirnjìk bàk-áhà put-GO ash pour-GO cìđé cìđé cìɗé kàtàf cìđé á pile PRED road pile pile pile 'Ash was pouring out of the shoe in small piles on the road.'

The form dap occurs only in clause-final position. Its functional range involves limitation of an argument, be it subject or object, or limitation of the event to the one explicitly stated in the clause. In the present grammar it is variously glossed as 'only', 'just', 'like that':

The adverb *tátà* 'alone' is derived from the numeral *ntá* 'one' (note the deletion of initial nasal in the word-internal position):

The adverb tátà can also be used with plural pronouns, which is the evidence that tátà has already grammaticalized to become an adverb:

The adverb bibic-bibic 'all day' is derived from the noun bibic 'day'. Adverbial reduplication from bisyllabic sources is accompanied by the reduction of the last vowel in the first reduplicated part: nzádu 'night' \rightarrow nzádnzádu 'all night'. Similarly one can derive adverbs from adjectives, e.g. from dámà 'good' one can derive an adverb dámdámà 'well'; from mbéh 'close', mbéhmbéh 'recently':

9. The scope of the adverb tátà 'alone, only'

The adverb $t\acute{a}t\grave{a}$ narrows the scope of the preceding noun by excluding all other potential arguments. If the only argument in the clause is the subject, and if the subject is to be in the scope of the adverb, the anaphor $mb\acute{i}$ must be used before the adverb:

(61) ngàz bù mbí tátà leg turn ANAPH one-one 'The wheel turned itself.'

(62) dàvàr tàrlàn mbí tátà hoe turn ANAPH one-one 'The hoe turned itself.'

If the object is in the scope of the adverb, the adverb is not preceded by the anaphor mbi:

(63) sò n kó bù ngàz tátà
1SG PREP INF turn wheel one
'I want to turn the wheel only.'

If the clause has a subject and an object, and if the scope of the adverb is the subject, the anaphor *mbi* must be used before the adverb:

(64) bitsì bú ngàz mbí tátà
Bitsi turn wheel ANAPH one
'Bitsi turned the wheel alone.'

When there is no anaphor *mbi* then the scope is the last noun phrase:

(65) sò n kó bù ngàz s tátà
1SG PREP INF turn wheel 1SG one
'I want to turn the wheel alone (only me, nobody else).'

10. Adding a beneficiary

The adjunct coding the beneficiary is marked by the genitive preposition $t\dot{a}$:

(66) a-ndə r sku mbi mi
3SG-go D.HAB NEG 3SG ANAPH
žeber tə tùkoŋ
follow GEN 2SG
'She does not leave in order to follow for you.'

11. Adverb bà 'again'

The adverb ba, 'again' can occur at the end or at the beginning of the clause:

- ngàn zídèp (67a) *ká* zàm tá cík bà wà **GEN** 3SG full again INF now **DEM** eat lùw-á-ŋ vàngáy há kà á n say-GO-3SG PRED 2SG PREP INF how 'Given that he has already eaten his fill again, what are you going to tell him?'
- (67b) áa dámà wàl wà bà à ah, good woman DEM again 3SG lùw-á-ŋ tàŋ say-GO-3SG 3PL "It's good," the woman told them again.'

In negative clauses, the adverb acquires a polar meaning, 'anymore':

- (68a) á sán skà bà
 3SG know NEG more
 'She does not know anymore!'
- (68b) *wàl* hàn hàn vàngáy wà kà ďál DEM INF do how cry woman cry skà sàn bà know NEG 3SG again 'This woman cried, "What should I do?" She did not know anymore!""

12. Cognate adverbs

The term cognate adverb designates adverbs formed with the same root as the verb. This term is formed on analogy with the term cognate object, where the object is cognate with the verb. The cognate adverb in Mina is formed through the preposition *i* preceding the verbal stem. Such an adverbial phrase follows the verb without an object. The cognate adverb is used to confirm somebody's presupposition, with an explanation to follow:

(69) à zá sò mìsìl-é í mìsìl 3SG COMP 1SG steal-GO PREP steal 'He said, "I stole it" lit. 'I stole it by stealing'

13. Conclusions

There are two types of coding means for adjuncts: lexical, i.e. the item is an inherent adjunct and therefore not additionally marked by a preposition; and phrasal, where the adjunct is marked by a preposition. Two prepositions are used for the coding of adjuncts: the associative preposition $\dot{a}b$ and the locative preposition n. In addition, the locative predicator \dot{a} is also used.

Adverbs of manner are derived from other lexical categories through reduplication.

Chapter 9 Goal-orientation extension

1. Introduction

In African and Chadic linguistics, the term "verbal extensions" has come to designate a wide range of suffixes added to the verb. Mina has just one extension, labeled here 'goal-orientation extension', and glossed as GO. This extension is an important element of the grammatical system as it interacts with the coding of argument structure and locative predication.

2. The form of the goal orientation extension

The goal orientation extension is coded by the suffix \dot{a} in phrase-internal position and $\dot{a}h\dot{a}$ in phrase-final position. The change from $\dot{a}h\dot{a}$ to \dot{a} follows predictable phonological rules, viz. deletion of the final vowel, followed by deletion of the glottal continuant in phrase-internal position. Pronominal objects follow the goal orientation extension:

With a long pause between the clause and the adverbial phrase:

Without the goal orientation extension the verb ends in schwa:

The tone on the suffix \dot{a} is high. If the suffix replaces the vowel of the verb, it carries its own tone, viz. the high tone. Consider the verb $d\dot{a}$ 'cook'. In phrase-internal position, it is reduced to d, and schwa is inserted if required by syllabification. If there is a goal orientation suffix, it assumes the position of the vowel of the verb and it has high rather than low tone. The tone of the goal orientation suffix has no effect on the tone of the infinitive marker $k\partial$, which, in phrase-initial position, keeps its tone as determined by the underlying tone of the verb:

- (4) kớ dờ zá
 INF cook EE
 'He cooked it.' (unspecified place)
- (5) $k\acute{a}$ $d-\acute{a}$ $z\grave{a}$ INF cook-GO EE 'He cooked it.' (not in the place of speech)
- (6) ká sà máv zà
 INF drink beer EE
 'He drank beer.' (unspecified place)
- (7) ká s-á máv zà INF drink-GO beer EE 'He drank beer.' (not here)

If the verb has inherently high tone, the goal orientation extension has high tone as well:

(8) kà ts-á láy zà INF burn-GO field EE 'He burned the field.' (not here)

Cf.

(9) kà tsá láy zà
INF burn field EE
'He burned the field.' (unspecified place)

The vowel of the goal orientation suffix is raised to e if the preceding vowel is [+front]:

(10) sò zìn-é nò lúm zà
1SG return-GO PREP market EE
'I returned from the market.'

3. Function of the goal orientation extension

The general function of the goal orientation extension is to indicate that the event happened at a specific place, that the movement is directed toward a specific place. The specific place may be overtly coded by a locative expression, or it may be omitted. The direction involved may be toward the speaker or another deictic center (ventive) or away from the speaker or another deictic center (allative, andative). The possibility of two directions provides the evidence that the function of the marker cannot be either ventive or allative. The scope of the goal orientation extension may be either the subject or the object.

With intransitive verbs, the subject is in the scope of the goal orientation. The goal orientation extension interacts with the inherent meaning of the verb. Thus the verb *nd* means 'depart, go' without the goal orientation extension, and 'arrive' with the goal orientation extension:

- (11) séy tán á nd-áhà à zá so go 3SG go-GO 3SG COMP 'So he came and said . . '
- (12) ván wilkil ká nd-áhà rain fail INF go-GO 'The rain had not yet come.'

(14) á ndà zá vù 3SG go-GO EE Q 'Will he go?'

The deictic center can be the place where the story is unfolding:

dùwán (15)mhí áb séy, then (H.) ASSC back **ANAPH** nd-à-y làkwát má zá river REL go-GO-STAT EE 'And afterwards the river came.' (Seasonal rivers fill up after the rains.)

If the story is unfolding at the place of speech, the goal orientation extension may have the ventive interpretation. In the following example, the object is expected to move to the place of speech:

(16) ndà y-áhà-w go call-GO-3SG 'Go call him here.'

Compare the form without the goal orientation extension: The verb does not imply movement of the person to the place of speech.

(17) ndà y-ù go call-3SG 'Go call him.'

The extension does not have to imply movement toward the place of speech. It may simply indicate that the event occurred at the place that the listener should be able to deduce either from the previous discourse or from general knowledge:

(18) séy hìdì wàcin á ndò kò tál-áhà so man DEM 3SG go INF walk-GO 'Then that man went for a walk.'

Compare the above sentence with the one where the man comes for a walk:

- (19) séy hìdì wàcin á nd-á kà tál so man DEM 3SG go-GO INF walk 'Then that man comes for a walk.'
- minjée mbà ká nàz-á (20)mà mármár abandon-GO now boy REL INF pasture kw-víì zá nà lάν goat-PL EE PREP field 'Now the shepherd left the goats in the field.'

In the following fragment, the verb max 'shepherd' is used with the goal orientation marker. The verb $nd\delta$ 'go' is used without the goal orientation extension:

'They have the habit of pasturing somewhere else. He asks one of the children to go and pasture. The others are at home.'

The form without the extension has no implication as to where the event has taken place.

Systematic evidence for the goal orientation function is provided by the constraint that does not allow the use of the goal orientation marker and the proximate demonstratives within the same clause. Such a use would constitute an internal contradiction:

Compare the following sentence, which is grammatical without the goal orientation marker:

(23)nká skàm zà kà ntá 3PL INF buy EE cow one 'nkù kèčín ábà ntá PRED here ASSC goat one 'They bought a cow and a goat here.'

With non-movement verbs, the goal orientation indicates that the event happened at a place other than the place of speech:

(24) sò nz-á màrbák 1SG stay-GO Marbak 'I was in Marbak.' (said in Maroua)

The following exchange illustrates the function of the goal orientation extension. To the question:

(25) hà mbál wàdá ká zàm vù 2SG want food INF eat Q 'Do you want to eat?'

The answer with the goal orientation marker indicates that speaker ate somewhere else:

(26) $\partial \hat{o}$ s $k\hat{o}$ $z\hat{o}m-\hat{o}$ $z\hat{o}$ no 1SG INF eat-GO EE 'No, I already ate [somewhere].'

The answer without goal orientation marker does not specify the place:

(27) $\partial \hat{o}$ s $k\hat{o}$ $z\hat{o}m$ $z\hat{a}$ no 1SG INF eat EE 'No, I already ate.'

The verb $\delta \partial t$ 'take' does not inherently indicate goal. The addition of a goal requires addition of the goal orientation extension:

(28) s ká bàt-á yàm ká páláh 1SG INF take-GO water PREP outside 'I took the water out of the room to outside.' If no movement into some other place is involved, the goal orientation extension is not used:

- (29) bàt á bàt déftèr ngàn take 3SG take Koran (F.) 3SG 'He took out his Koran.'
- (30) bàt á bàt kàdád ngàn take 3SG take arrow 3SG 'He took his arrows...'
- (31) í ndò kó bèr-é cìkíd 3PL go INF sell-GO sesame bùhù ntá bag (F.) one 'They were going to sell one bag of sesame seeds.'

One can use the goal orientation extension in interrogative clauses about place. In the following sentence, the goal orientation marker is obligatory because the situation requires the addressee to be at the place of speech and the question implies that the speaker does not know where the event took place:

(32) há wàn-á á tíkì
2SG sleep-GO PRED where
'Where did you sleep?'

The goal-orientation extension is not required for the future tense; the place of speech is the possible location for the event:

(33) há ỳ kú wàn á tíkì
2SG PREP INF sleep PRED where
'Where are you going to sleep?'

4. Grammaticalization of the goal orientation marker

There exist cognates of the goal-oriented marker suffixed to the verb in other Chadic languages, from the Central (Hdi, Frajzyngier with Shay 2002, Gidar, Frajzyngier to appear) and West branches (the 'applicative extension' in Hausa, Newman 2000 and references there). Therefore,

the grammaticalization of the marker most likely preceded the split of Proto-Central Chadic, and very likely is even older. One can only speculate how the marker \dot{a} grammaticalized as the goal orientation marker. A possible process of grammaticalization is as follows: First, the form \dot{a} had a locative function coding direction of movement (Frajzyngier 1985, 2002). The locative center might have been a place or a person. Subsequently, the locative marker became attached to the preceding verb. In a subsequent stage of grammaticalization, the locative predicator occurring before the pronominal object became a formal requirement for pronominal objects, regardless of whether the pronoun represents the indirect or the direct object. This situation to a certain degree parallels that of the Spanish locative preposition a.

5. Conclusions

Unlike some other Central Chadic languages spoken north of Mina (cf. Frajzyngier with Shay 2002), Mina has only one verbal extension, goal orientation. This marker has two types of goals in its scope: (1) locative, coding movement toward the place of speech, the default case, or to another specified place, and (2) object orientation, coding the presence of a pronominal object. The goal orientation extension probably grammaticalized from the same form that produced the locative predicator \acute{a} .

Chapter 10

Tenses

1. Introduction

The term 'tense' designates grammatical coding of the time of an event. The term 'aspect' refers to the coding of the event from the point of view of its internal characteristics. Mina has the categories tense and aspect, but they belong to one functional domain, as evidenced by the fact that tenses and aspects cannot cooccur within the same clause, and also by the fact that there exists a verbal form which is unmarked, and may have either tense or aspectual interpretations. We describe tenses and aspects in separate chapters only on the basis of the main characteristics of the categories involved and not because they belong to different domains in the grammar of Mina.

The domain of tense in Mina has two subdomains: future and past. In the future tense, there is a distinction between the coding of pragmatically independent and pragmatically dependent clauses. Pragmatically independent clauses are clauses that do not require another proposition or a specific situation for their interpretation. A clause is marked as pragmatically dependent so that the hearer is forced to interpret it in connection with another previously mentioned or yet to be mentioned clause. In negative clauses, the future tense is coded in a way different from the coding of either independent or dependent clauses.

Within the past tense, there is a distinction between the coding of singulative events (the unmarked, default form) and the coding of plural events, marked by multiple reduplications of the verb.

A clause unmarked for tense may have various time interpretations, including past, present, and future, depending on the tense of the immediately preceding clause.

2. Future tenses

There are three grammaticalized means of coding future time. Two of these means code a different type of clause. One tense codes future in pragmatically independent clauses, and the other codes the future in pragmatically dependent clauses. The future tense markers alone can code the type of clause. Since the two tenses are in a way complementary, we shall describe their functions together.

2.1 The form of the independent future

The independent future has the subject followed by the verb, followed by the auxiliary za, coding the end-of-event. The marker za must occur after the object:

(1) sò bèr-é-ŋ gò-n zá
1SG sell-GO-3SG cow-1SG EE
'I will sell him my cow.'

As with all instances of the end-of-event markers, the locative and time adverbials follow the particle za:

(2) dáwày nd-á zà bàká bà tskôh Daway go-GO EE today ASSC afternoon 'Daway will come this afternoon.' (elicited)

The third-person pronominal subject is marked by the pronoun \dot{a} :

(3) à nd-á zà 3SG go-GO EE 'He will come.'

2.2 The form of the dependent future

The dependent future is marked by the form $nk\partial$ or $n\partial$ $k\partial$, which may well be a complex construction consisting of the locative preposition $n\partial$ followed by the infinitive marker $k\partial$. The evidence that the construction consists of the preposition and the infinitive marker is provided by three

facts. First, the form n is often realized as $n \ge n$, which would not have been the case if it were part of the morpheme *nko. The second fact is that the tone on the form ko depends on the tone of the following verb, just like the tone of the infinitive. The third fact is that in negative future clauses, the form ko occurs without the marker n. We therefore gloss the sequence n ko as PREP INF. The third-person singular subject is marked by à. All pronominal and nominal subjects precede the sequence $n \, ka$. The dependent future complex precedes the verb:

- **(4)** nd-á bà tskòh ká ná PREP INF go-GO ASSC evening 1PL.EXCL 'We (EXCL) will come in the afternoon.'
- hà (5) ká nd-á tskòh hí go-GO ASSC evening 2PL PREP INF 'You will come in the afternoon.'

The preposition n is deleted if the preceding pronoun ends in a consonant, which is the case for the first person dual and plural inclusive pronouns:

- **(6)** kà nd-á bà tskòh . . . nám ASSC evening go-GO INF 1DU 'The two of us will come in the afternoon.'
- **(7)** nd-á nók bà kà tskòh go-GO ASSC evening **INF** 1PL.INCL 'We (INCL) will come in the afternoon.'

2.3 Functions of the two future tenses

The dependent future indicates that the clause must be interpreted in connection with another proposition, whether already made or still to be made. The clause marked by dependent future may also provide necessary information for the proper interpretation of another clause.

The dependent future occurs in temporal and conditional protasis clauses:

(8) hìdì wèhin à zá ván á ká n DEM 3SG 3SG COMP rain PREP INF man kàsám gàr kà nd-á-k ďà á body 3SG INF touch-GO-1SG fall want skù **NEG**

'This man said, "Rain, when it falls, will not touch me."

The dependent future is used in comment-on-focus clauses. In the following two examples, speaker subjects respond to a challenge:

- gáw (9) á tá-n dév zá hunter COMP PRED GEN-1SG also ká kán sà tàŋ n 1SG PREP INF cross DED 'The hunter said, "I will also cross it."
- (10) sò bó sò n-kí mín s tátà 1SG also 1SG PREP-INF stay 1SG alone 'I also will stay alone.'

In the following example the focus is on the reason phrase:

(11)ngàm kàgám wàcin hìd-yiì míndìŋ DEM man-PL speech another because ngàts-á-h ká náf à n pinch-GO-2SG PREP INF heart 'Because of this word, the other person will disturb you.' (lit. pinch your heart)

The dependent future cannot be used in an independent clause in isolation:

(12) *à n ká ngàts-á-h náf 3SG PREP INF pinch-GO-2SG heart for 'He will disturb you.'

In the following example the dependent future is used in the main clause with the verb "to say." The full interpretation requires the complement clause, viz. what will be said:

'I will say that God has killed the others, and that I alone remain.'

The independent future in the matrix clause, viz. $s \hat{\sigma} \not b \acute{a} z \grave{a}$, would be ungrammatical in the above example.

The dependent future codes information that is unexpected or contrary to expectation. Thus, in the following fragment, the dependent future codes an imminent danger, that of God coming to kill the protagonists:

'He (the frog) said, "Look, there remains only us. He (God) will come immediately."

The dependent future may not be used in questions about the truth. Only the independent future may be used in such questions:

With specific questions only the dependent future is used, because specific questions assume the truth of the rest of the proposition and are interpreted in connection with the rest of the proposition:

(16)wà mà ká ndà ká who **INF** but INF go gàd-á-nòk kú νí pick fire-GO-1PL fire who 'But who will go to find us fire?'

The dependent future can be used with the complementizer $z\dot{a}$, which indicates either that the tense is not necessarily synchronically a verbal category and/or that the complementizer grammaticalized from a verb:

(17) hà n kớ zá lùw-á-n mớk you PREP INF COMP tell-GO-3SG what 'What will you tell it?' (error)

The use of dependent future alone codes focus, usually focus on the predicate:

(18) bàhámán zá hí n ká
Bahaman COMP 2PL PREP INF
lùw-á-ŋ syì bárkàmà
say-GO-3SG COM chief
'Bahaman said, "You say to it, my chief,'

kámbáy nď-á-k gί svì hit-GO-1SG POL COM 3SG stick kà ďál-á tàn n PREP INF do-GO:2SG **DED** ""Stick, hit me,' and it will do it to you."

(19)syí íi zá bákà há ká n 3PL COMP today COM 2SG PREP INF dá tàl tùkón cook head 2SG 'They said, "Today you will cook yourself."'

The dependent future is used in comparative constructions. The independent future may not be used there:

- (20) sò n-k ší dáy kó hóŋ
 1SG PREP-INF run surpass PREP 2SG
 'I will run better than you.'
- (21) *sò šì dáy zà kó hóŋ 1SG run surpass EE PREP 2SG for 'I will run better than you.'

The dependent future is by far more frequent than the independent future in texts. The reason for this may be that many statements pertaining to future events involve promises and commitments, which often require another proposition for proper interpretation:

(22)ndìká mànjé wàhin sà kà dzán n PREP INF find DEM 1SG better (F.) now gómbòk zá sá ká ndrák n frog EE 1SG PREP INF smash mhàd wìrnjík become ash 'From now on when I find a frog, I will smash it to ashes.'

The dependent future is used in clauses that follow the adverb of time, be it phrasal or clausal. The clause that follows the adverb of time is interpreted as a comment on the adverb of time. The independent future cannot be used there:

- (23) mbémbé wá à n ká nd-á tàŋ now DEM 3SG PREP INF go-GO DED 'He (God) will come immediately.'
- (24) *mbémbé wá à nd-á zà táŋ now DEM 3SG go-GO EE DED for 'He (God) will come immediately.'

The following fragment illustrates the contrast between dependent future used in a focus clause, and the independent future used in a pragmatically neutral clause:

- (25)í zá. bákà syì hà n 3PL today COMP **COMP** 2SG **PREP** dà ká tàlàn tùkón INF head cook 2SG 'They said, "Today you will cook yourself."'
- (26) à zá á dámà só dò zá 3SG COMP ah good 1SG cook EE 'She said, "Good, I will cook."

In questions about the truth, when there are no presuppositions, the independent future is used:

2.4 Future through the verb gàr 'want'

Future time may also be coded through the verb $g \partial r$ 'want'. While the use of the auxiliary $g \partial r$ is a standard means to code the negative future, we have also one example of the use of this auxiliary in the affirmative future:

The use of the auxiliary in the negative form, combined with the nature of the example in the affirmative form, indicates that the auxiliary codes hypothetical future.

2.5 Negative future

There are two types of negative clauses with future time reference. One type involves use of the verb $gr\grave{a}$ 'want' in its phrase internal form $gr\grave{a}$ or $g\grave{a}r$ followed by the infinitive marker ka, the main verb with its object, if any, and the negative marker $sk\grave{u}$:

(29) hìdì wèhin à zá ván á n 3SG **COMP** 3SG **PREP** DEM rain man gàr ká nd-á-k ďà kà á INF touch-GO-1SG INF fall 3SG want kàsám skù body NEG 'This man said, "Rain, when it falls, will not touch me."

The evidence that the form $g \partial r$ is an auxiliary rather than a lexical verb is provided by examples where the lexical verb interpretation is not possible:

(30) nók gàr ká nzà dám skù...

1PL.INCL want INF stay good NEG
'We will not be well...'

The other type of negative future is formed with the verb *ndà* 'go', followed by the dependent habitual marker and the negative marker *skù* at the end of the clause. This is essentially a construction that denies intentions:

- (31)mbál hákèm ngàŋ ká hà à n daughter 3SG PREP INF 2SG like 3SG sá ndà-r ká vàl zá skù go-D.HAB COMP 1SG INF give **NEG** 'If you like his daughter, he will say, "I am not going to give [her] ""
- (32)hà ká lù zá há ndà rà D.HAB 2SG INF EE 2SG say go ká tà skù cín tá wàl tán **DED** INF NEG wife father GEN pay hákèm zá wtá ná báy COMP daughter 1SG 3SG PRED home chief 'If you said that you will not pay, the father of the woman will say, "My daughter is at the chief's."

The evidence that the verb "to go" has grammaticalized as the marker of the negative future is provided by the fact that it is not used in the affirmative future:

hákèm (33)hà mbál ngàŋ à daughter 3SG 3SG 2SG like sà vàl ká zá zá n give PREP INF **COMP** 1SG EE 'If you like his daughter, he will say, "I will give . . ."

3. Independent past tense

3.1 The reduplicated form of the verb

The independent past tense is coded by the reduplicated verb with the subject, nominal or pronominal inserted between the reduplicated parts, i.e., it has the form Verb Subject Verb. Presence of the nominal subject in between the reduplicated parts of the verb indicates that reduplication is not a morphological process, but rather a syntactic process:

(34) séy ndò mòl wàl wà mòl kà so go catch woman DEM catch POS 'Then the woman stopped it.'

The third-person singular pronoun is \acute{a} . All pronominal subjects must occur between the reduplicated parts of the verb and they all have high tone:

(35) kán í kán zá cross 3PL cross EE 'They crossed [the river].'

Verbs occur with their underlying tone or the tone as determined by inflectional morphemes. The reduplicated verb may have the goal orientation marker added. The form that occurs after the subject does not have the goal orientation marker:

(36) dá dá dá dô wàné draw:GO draw:GO 3SG draw a lot (F.) 'It rained a lot.'

3.2 Functions of the independent past

The evidence that the reduplicated form codes tense and not aspect is provided by the fact that it can code both bounded and unbounded events, thus ruling out the potential categorization into perfective or imperfective aspect. Here are examples of bounded events:

(37)gwidin nákà dzáŋ á dzán-á mà tá single REM find 3SG find-GO REL **GEN** wèhin nd-á náz ká nà náz á DEM go-GO throw 3SG throw POS **PREP** tàn láv place **DED**

'He found the one sesame of those [that were counted], returned and threw it into its place [in the bag].'

Here is an example of unbounded event:

(38) dá dá dá dà wàné draw:GO draw:GO 3SG draw a lot (F.) 'It rained a lot.'

The evidence that the reduplicated form codes past tense is provided by the fact that all sentences with the verb reduplicated leftwards designate past time and only past time event. This fact is amply illustrated in all examples in this section.

The evidence that the reduplicated form codes past tense in a clause that does not require another proposition for its interpretation is provided by the fact that the independent past tense may occur in the last clause of a narrative:

(39) nd-á náz á náz kó nò láy tàŋ go-GO throw 3SG throw POS PREP place DED 'He went and threw it into its place [in the bag].'

Another piece of evidence for the independent nature of the reduplicated form is that it is independent of the preceding and the following propositions, as in the following fragment, where the independent past is used in the middle sentence: (40) i nd-rá i nd-rá vàŋ wà
 3PL walk-D.HAB 3PL walk-D.HAB rain start
 kó dà
 INF draw water
 'While they were walking, rain started to fall.'

dá dá dà wàné draw:GO draw:GO 3SG draw a lot (F.) 'It rained a lot.'

séy, áb dùwáŋ mbéŋ làkwát then (H.) ASSC back ANAPH river mà nd-à-y zá REL go-GO-STAT EE 'And afterwards a river came.'

The proposition with the independent past tense may be a part of a larger sentence, but then the clause has independent interpretation, as in the following utterance consisting of two clauses:

(41) tà á tì dá skù see 3SG see exist NEG 'He looked around -- nothing.'

One clause with independent past tense can be followed by another clause with independent past tense:

- (42a) ngàd ngàd i ngàd cikè' (zá) ká
 count count 3PL count all (EE) POS
 'They counted all [the sesame seeds].' (The form ká was first
 given when a language assistant repeated the recorded sentence.)
- (42b) dzàw i dzàw-ù á dùwón mòdìngwòrzé attach 3PL attach-3SG PRED back donkey 'They attached it to the back of the donkey.'

At least two verbs cannot be reduplicated, and instead another verb is used in lieu of the first part of the reduplicated verb. One verb is $p\acute{a}$ 'give' used as the first part instead of the verb $v\grave{a}l$ 'give', and the other is til 'depart'. In the case of the verb $nd\grave{a}$ 'depart', instead of the first part of the reduplicated verb, the form til 'depart' is used:

(43) i zá ndà tíl á ndà báhà 3PL COMP go leave 3SG go again 'They said, "Go!". And he went again.'

Additional examples of the usage of these verbs can be found in Chapter 11, Section 8.

The following are additional systematic arguments for the independent nature of the reduplicated form: The simple reduplicated form cannot occur in negative clauses, i.e. clauses which in the majority of cases deny the truth of the presupposition. The reduplicated form cannot occur in specific interrogative clauses, i.e. clauses that assume that truth of a proposition and inquire about one element of the proposition. The reduplicated form cannot occur in comment-on-focus clauses, or in relative clauses, i.e. clauses that by their nature are comments on another element. The reduplicated verb cannot occur in temporal or conditional protases, i.e. clauses that cannot be interpreted on their own. The reduplicated form can occur, however, in both temporal and conditional apodoses, i.e. clauses that may be interpreted on their own.

4. The independent past-plural tense

The independent past plural is coded by the multiple leftward reduplications of the verb, i.e., the reduplication has at least two instantiations of the same verb before the subject pronoun (Verb) Verb Verb Subject pronoun Verb. The nominal subject, if any, occurs before the first instantiation of the verb. The singular or plural subject pronoun occurs before the form that has been reduplicated. In the following example the verb $d\hat{a}$ 'cook' codes the past-plural event aspect in the matrix clause:

(44)kàďám sév wá dà dà á calabash DEM cook 3SG cook SO wùd màná wà d-á-n mbá pè cook-GO-3SG food like DEM much SO té té té té á mà kàhám ngàŋ spread(4 times) 3SG PRED DEM face

'So the calabash made a lot of food for her and spread it in front of her.'

The plurality of the event involves the plurality of either the object of a transitive verb or of the subject of an intransitive verb, but does not involve the plurality of the subject of a transitive verb (cf. Frajzyngier 1985c):

(45) dá dá dà wàné draw:GO draw:GO 3SG draw a lot (F. 'It rained a lot.'

The plural form also may code multiple events performed by a single subject, coding in effect an unbounded event:

(46)dùwáŋ til á nà vàm áb tá PRED PREP water DED ASSC back mbéŋ tìv-ú tìy tìv á ANAPH look look 3SG look-3SG 'He entered into water and he searched for it [the sesame seed].'

The plural form is used when the object is plural:

(47) ngàd ngàd i ngàd cikè' (zá) ká count count 3PL count all EE POS 'They counted all [the sesame seeds].'

5. Unmarked tense/aspect

The formal characteristics of the unmarked tense/aspect consist of the absence of any tense and aspectual markers. The third person singular pronominal subject is \grave{a} .

The unmarked tense/aspect codes a pragmatically dependent clause, i.e. a clause that must be interpreted in connection with another proposition or in connection with a specific element in the environment of speech. The tense and aspectual values of the unmarked form are determined by the preceding tense or aspect in discourse. In the absence of the preceding element in discourse, the time of the unmarked aspect is simultaneous with the time of speech:

(48) à zèbér mò tùkón
3SG follow word 2SG
'He is following your word.' (about an interpreter during a recording session)

à gàr ngùlài-yíì 3SG want red sorghum-PL 'He is looking for red sorghum.'

In addition to the indicative mood as illustrated above, the unmarked aspect can be used in specific interrogative clauses. Its time and aspectual interpretation is dictated by the preceding discourse and speech context. In the following examples the unmarked tense has past time interpretation in specific interrogative clauses:

- wàcin syì wàciŋ bàhámán dzà (49) à wúl DEM COM Bahaman 3SG **DEM** neck cry svì à kìm-é nòk mí COM 3SG listen-GO 1PL what [chief talking] 'Bahaman is yelling over there. What has he heard for us?' (What kind of news does he have for us?)
- (50)bán skù túk há rà PRED you think D.HAB **NEG** 2SG wúl héŧ rà wá svi break D.HAB DEM COM neck 'You are not thinking, you are crying with joy.'

hà lìm-é nòk mí 2SG see-GO 1PL.INCL what 'What have you found for us?'

(51) mà mbád ví
REL surpass who
'Which one is superior?' (with respect to characters mentioned earlier in a story).

Here is an example of the use of the unmarked aspect in the specific interrogative clause followed by the indicative clause also with the unmarked aspect:

(52) à mìsíl mí à mìsíl wùdá 3SG steal what 3SG steal food 'What did she steal? She stole food.' The unmarked aspect may be a first aspect in a new episode of a narration. Thus, the preceding clauses are followed by a clause that describes a specific event in the narrative:

(53) ii zék yàw
3PL make competition
'They had a competition.'

The unmarked tense aspect is used in non-focus constructions. Compare the following exchange, which begins with a focus on the predicate, followed by a question; the third clause has the same propositional content as the first, except that there is no focus on the subject:

bárkàmà wàl nà kà dzán-á (54)àa 1SG INF wife find-GO chief ah pár skàn zá ďáhà thing strange EE exist "Ah, my chief, there is something my wife found."

> skàn tá nzá vàngáy thing DED be how

'What is this thing?'

à à dzán-á kàdám ah 3SG find-GO calabash

'She found a calabash.'

The unmarked form of the verb may be used in questions about the truth in the *de re* domain, i.e. in reference to some specific situation or some specific event:

(55) hà ndin bà mbi vù 2SG fear ASSC ANAPH Q 'Are you afraid of him?'

6. Dependent past tense

The dependent past tense is coded by the infinitive marker k o, whose tone is polar with respect to the tone of the immediately following verb

and by the end of event marker za or its negative counterpart $d\hat{a}$ after the verb or direct object, if any. The form $k\partial$, which otherwise is an infinitive marker, is also the marker of the focus on the predicate.

The dependent past codes the same time characteristics as the independent past tense. The clause marked by the dependent past tense must be interpreted in conjunction with another proposition, in conjunction with some situation in the speech environment, or in conjunction with a presupposition. The evidence for this function of the dependent past is provided by types of clauses in which the dependent past form can occur. These are all environments in which the independent past tense coded by reduplication cannot occur:

Negative clause:

- (56) ván ká mbàlém dá skù rain INF touch exist NEG 'The rain did not touch him.'
- wá (57)sév wàl kám ká nàz tál the DEM TOP INF walk woman stop ďá skù dáp exist NEG only 'Then, that woman did not stop taking her walks.'

Focus on the predicate or subject:

- (58) ngùl-yíi s kà dzán-á husband-PL 1SG INF find-GO nám skàn zá 1DU thing EE 'My husband, I found us something!'
- (59) ká fàk wàl zá
 INF give neck EE
 'He started to scream.' (the scream of joy)
- (60)háá nók kà dzán-á nók ķì zά 1PL INF find-GO 1PL yes EE meat 'Yes, we found the meat for ourselves.'

Temporal and conditional protasis:

(61)lùw-á-ŋ skàn há ká sá wà svì say-GO-3SG COM 2SG thing **INF** here DEM wùdà gí kàđám vl-á nòk zà 1PL food **POL** EE calabash give-GO dá tà dàp svì ndí COM 3SG HAB make DED only 'Here you have this thing. If you say to it, "Calabash make us food, please," then it just cooks.'

Relative clause:

(62)kwáykwá-yíì kà ndà dzán ngá ĺ hyena-PL 3PL break go find INF kì zá svì EE COM meat

'And she found some hyenas who had caught some meat.'

In a pragmatically dependent clause, the plurality of the event is coded by the marker k > a and rightward reduplication. Here is an example of a temporal protasis:

(63)ngàn á ndà ká tàl á 3SG 3SG 3SG INF walk go tàl tàl tàl tàl walk walk walk walk 'She walked for a long time.'

7. Conclusions

The tense system of Mina consists of future and past tenses, and a form unmarked for tense. In both tenses, there is a distinction between tense coding in pragmatically independent clauses and tense coding in pragmatically dependent clauses.

The dependent future tense is coded by the preposition n followed by the infinitival marker $k\partial$, and followed by the verb. This tense occurs in focus constructions and simply marks focus in specific questions. It is by far the most frequent future tense marker in the texts, and by itself, it forces the interpretation of the clause in connection with another clause. The independent future is marked by the construction consisting

of the subject, followed by the verb and the end-of-event marker za. This construction can be interpreted on its own.

The independent past tense coding is characterized by the structure Verb Subject Verb. The dependent past has the structure Subject ka Verb za. The past tense distinguishes between singulative event and plural event. The singulative event is the unmarked past tense form. The plural event of the independent past tense is coded through the reduplication of the verb leftward, beyond the structure Verb-Subject Verb. In pragmatically dependent clauses, the plural event is coded through the reduplication of the verb rightward.

Chapter 11 Aspects

1. Introduction

The following coding means are used in the domain of aspect coding: the reduplication of the pronominal subject and the verb; auxiliaries and particles that precede or follow the verb; and a single, i.e. non-reduplicated, verbal form that is not accompanied by auxiliaries or particles. This last type is referred to as the unmarked aspectual form, and its function can best be described once all the marked forms are described.

The auxiliaries coding aspectual distinctions are $w\acute{a}$ 'start', $diy\grave{a}$ 'put', $t\acute{u}w\grave{a}d$ 'finish', $n\acute{a}z$ 'stop'. These forms precede other verbs without any prepositions or other markers. The particles that follow the verb or the verb and its object are za and ka, but only the former is an aspectual form.

The aspectual forms in Mina code not only the nature of the event within a temporal frame but also the pragmatic status of the clause, viz. whether the clause should be interpreted on its own (pragmatically independent) or in connection with another, preceding or following proposition (pragmatically dependent). In addition to the unmarked aspect, Mina also has the habitual aspect, which has two variants: one used in a pragmatically independent clause, and the other in a pragmatically dependent clause. The remaining aspects do not code the distinction between pragmatically dependent and pragmatically independent clauses. For alternative approaches to two aspectual systems in African languages, see Hyman and Watters 1984, Jungraithmayr 1994, Newman 2000. For a similar approach, cf. Frajzyngier with Shay 2002.

The habitual and the unmarked aspect also have variants coding the number of the event. The domain of number for the habitual consists of the categories singular, plural, and iterative. The following represents a total system of aspectual distinction. The terms "independent" and "de-

pendent" refer to the pragmatically independent and pragmatically dependent clauses. The singular is the unmarked variant; the plural is the marked variant.

Independent Dependent Plural Aspect Subject V Subject V Habitual ndí V V ra mà Verb-yí Perfect náz 'throw' **Terminative** tok 'finish' Completive Intentional ndà ka 'go to' rightward re-Iterative duplication Unmarked VV

2. Independent habitual

2.1 The form

The independent habitual is marked by the morpheme ndi (ni in Kefedjevreng dialect), which follows subject pronouns and precedes the verb. The third-person singular subject is a, occurring even if there is an overt nominal subject (examples 1-4 occur in that sequence in a text):

- (1) míndén à ndí lóm bín another 3SG HAB build house 'One builds a house.'
- (2) míndén à ndí téwél gámbáy another 3SG HAB twirl stick 'Another twirls a stick.'

In a sequence of clauses in a narrative, the habitual aspect marker may be omitted if the preceding and following clauses have the same aspect. Consequently, the simple form of the verb may be used:

(3) míndén à pàdák njúl another 3SG split a type of grass 'Another splits a stalk of grass.'

(4) míndén à ndí mbìr another 3SG HAB jump 'Another jumps.'

2.2 The functions of the independent habitual

The form *ndi* codes habitual actions, events, and states in affirmative indicative clauses and in questions about truth. The clauses with the marker *ndi* do not require any other clauses for their interpretation. The marker specifically does not code actions and events that are actually taking place:

mbín (5) mbál skù kí á wàl à 3SG like NEG that 3SG woman in mìsil túm túm dùwáŋ ndí ábà ASSC back always always HAB steal gwáď mbín và và á và **ANAPH** last last 3SG plenty last ďàl báytàn make old

'He does not want a wife. And that is why he steals all the time, and after that he was like that until he became old.'

The following example contains instances of both the dependent and the independent habitual (both bolded). The dependent habitual codes the conditional protasis, and the independent habitual codes the apodosis clause:

nfáď **(6)** mà tàŋ á ngàn kó à lím PRED 3SG REL four DED 3SG even see skàn kávàk tàp mà D.HAB thing crawl ground there à ndí hàn dàp 3SG HAB only cry

'The fourth one, even if he sees a thing crawling on the ground, he only cries.'

The independent habitual is used in comment-on-topic clauses:

(7) wàl màsálád í ndí gám kà woman lazy 3PL HAB chase POS 'The lazy woman is chased away.'

(8) kám sév á tàt í ndí ngà PRED 3PL TOP (F.) 3PL HAB then catch kì-víì zà ndá kà dá ká tàn meat-PL EE **INF** go INF **DED** cook 'Then, as for them [hyenas], they just catch the meat, bring it for cooking.' (i.e., they have plenty of meat)

The absolute time of the habitual may be either past or present, depending on the time established earlier in discourse. The following example was used in reference to undetermined, general time:

- (9) bìgáv bò à ndí wàllà tàŋ
 God also (F.) 3SG HAB help (F.) DED
 'God also helps him.'
- (10) *i ndi wàŋ tàtà gráb*3PL HAB sleep 3PL together
 'They sleep together.'

The following examples were used in reference to past time:

- (11)ndí kán mbà ngàn ká nzàr-á à tàn HAB child 3SG send 3SG INF wait-GO DED 'He used to send his child; to wait on him;'
- (12) i ndi bàt-á-n ndrì á kìmbéŋ
 3PL HAB give-GO-3SG sorghum PRED like that
 '[And] like that they used to give him sorghum.'

The habitual marker occurs in questions about the truth of the proposition:

(13) i ndi bèr máy vù 3PL HAB sell mother Q 'Do you sell your mother?'

The marker also occurs in specific interrogatives, but its scope is not referential with respect to the object, but rather with respect to a class of objects:

(14)ndí dzán-á nám skàn hà thing 2SG HAB find-GO 1DU tákí màná wá like DEM where 'Where do you find us things like this?'

3. Dependent habitual

3.1 The form of dependent habitual

We use the term "dependent habitual" for the aspect marked by the form ra, reduced to ra or r in phrase-internal position. The tone on the habitual marker forms with vowel is polar, opposite to the tone of the preceding syllable. Compare the following sentences. In the first, the dependent habitual follows the verb with the goal orientation marker, which has high tone. The dependent habitual has low tone:

(15) ván dá rà mòná á nò rain draw:GO D.HAB like PRED PREP lúmò market
'It was raining from the direction of the market.'

In the next sentence, the dependent habitual marker follows the same verb, but without the goal orientation marker. This is an inherently low tone verb, and consequently, the dependent habitual has high tone:

(16)mà mhír mhír ván ďà rá ďiy-á REL jump jump rain draw D.HAB start-GO mhìr cìdék cìdék cìdék cìdék nà mán jump PREP ANAPH ideophone 'The one who jumps, when the rain was falling, he started to jump in it.'

When dependent habitual is realized by the consonant r alone, i.e. after vowel deletion, the consonant does not carry any tone and is part of the preceding word. In the present description, we write this morpheme separately, regardless of how it is realized.

Unlike the independent habitual marker, the dependent habitual marker occurs after an intransitive verb or the object of a transitive

verb. The third-person singular subject pronoun in the dependent habitual aspect is \grave{a} .

3.2 The function of dependent habitual

The dependent habitual aspect indicates that the proposition coded by the clause must be interpreted in connection with another proposition, whether produced in a preceding discourse or yet to be made. The dependent habitual occurs in those clauses where the independent habitual cannot occur, viz. in negative clauses, temporal and conditional protasis clauses, and in specific interrogatives. Most negative clauses imply the existence of an affirmative presupposition. The temporal and conditional protases must be interpreted in connection with an appropriate apodosis clause. The specific interrogative clauses can be properly interpreted only when one assumes the truth of the whole proposition. The three types of clauses exclude the use of independent habitual, and force the use of the dependent habitual, provided the event is unbounded. The evidence for the function of the dependent habitual as a marker of pragmatically dependent clauses is provided by its use in clauses where it is in contrast with independent habitual, viz. Affirmative clauses and questions about the truth (polar questions).

3.2.1 The dependent habitual in affirmative clauses

In affirmative clauses, the dependent habitual makes the listener interpret the proposition in connection with some other proposition or in connection with some elements of the environment of speech, similar to the English progressive. In affirmative clauses, the dependent habitual marker also occurs in comments on the elements in focus. In the following clauses, it is the focus on the predicate, requiring some reaction from the addressees:

nà máŋ PREP LOC.ANAPH (17a)séy mà fés tà REL small GEN SO skàn-yíì állà njíf rà kàcin D.HAB thing-PL smell PRED DEM God 'Then the youngest among them [said], "God, something smells here."

The dependent habitual marker indicates that the clause requires a specific presupposition for its interpretation. Here is an example of a clause that gives a reason, justification, for another event:

(18) séy mò nd-á ngàm à so REL go-GO because 3SG dòm-á-ŋ rà hurt-GO-3SG D.HAB 'He should go because it hurts him.'

Comment on a previous event:

(19)hìdì lá vo nkù bá á **PRED** so (F.) of still man goat ngàts-á-n báhà náf rá pinch-GO-3SG heart D.HAB still 'So the owner of the goat still makes him nervous.'

The dependent habitual may be the sole marker of the temporal protasis clause:

- (20a)wàl ngèn táŋ séy á nd rà wife 3SG DED 3SG D.HAB go SO wàcin syì wirnjìk ďiy-à bàk-áhá DEM COM ash pour-GO put-GO cìđé' cìđể' cìđể' cìďé ' kàtàf á pile pile PRED road pile pile 'When his wife was leaving, ash was pouring out of the shoe in small piles on the road.'
- (20b)nd rá nd rá D.HAB 3PL walk 3PL walk D.HAB wà ká vàn dà INF rain start fetch water 'While they were walking, the rain started to fall.'

3.2.2 The dependent habitual in questions about the truth

The dependent habitual can be used in a question about the truth, but such use codes astonishment, i.e. forces the interpretation of the proposition in connection with some other proposition:

(21)báy hìdú wà dàm hákèm zá à marry daughter chief DEM 3SG COMP man túk rà νù 2SG D.HAB 0 'The chief asked, "Is he going to marry your daughter?"'

The answer to such a question also has the dependent habitual marker ra, because it is an answer to a presupposition:

(The chief has heard about the marriage. He is astonished.)

(22) à zá à dòm rà
3SG COMP 3SG marry D.HAB
'He said he is marrying her.'

When the question has no presuppositions, such as, what are you doing? the answer does not include the marker ra:

(23) sò dòm táŋ 1SG marry DED 'I am marrying her'

The plural form of the dependent habitual has the phrase consisting of the subject and the verb repeated:

(24)nd rá nd rá 3PL walk D.HAB 3PL walk D.HAB wà ká vàn ďà rain INF fetch water start 'While they were walking, the rain started to fall.'

The dependent habitual relates the event to some other event. Thus, the preceding example is followed in its text by the following:

(25) ván dá rà mòná á
rain fetch:GO D.HAB like PRED
nò lúmò
PREP market
'It was raining from the direction of the market.'

The dependent habitual may occur with the focus marker $k\partial$. The co-occurrence of the dependent habitual marker $r\partial$ and the form $k\partial$ provides the evidence that the form $k\partial$ does not code an aspectual category:

- (26) s kà méd rà sá 1SG INF swear D.HAB here 'Here I am swearing [on the coal].'
- (27) kà méd rà sá
 INF swear D.HAB here
 'Here he is swearing [on the coal].'

Cf. independent habitual:

(28) sò ndí méd 1SG HAB swear 'I am in the habit of swearing.'

The dependent habitual must occur in complement clauses marking an event as occurring at the time of another event:

- (29)sév tì á tì cin SO see 3SG see father.3SG à ìdá nd 3SG D.HAB home go 'Then he saw his father go home.'
- (30)ká ndà zá fú ndà dzáŋ INF always EE find go go záván-yíì í màr rà guinea fowl-PL 3PL graze D.HAB 'Each time she went, she found guinea fowl grazing.'

The dependent habitual is used in questions about the truth, but these are rhetorical questions, when the speaker knows the true answer. Therefore, these questions are in fact comments on another statement:

- (31) báy zá ngùl mbù mbò chief COMP husband beget child r bá vù
 D.HAB again Q
 'The chief said, "Does a man give birth to a child?"
- (32) vàŋ á nd-á r vé
 rain 3SG go-GO D.HAB Q
 'Is the rain coming?' (the person knows very well that there is no chance of rain)

The evidence that the dependent habitual is an aspectual rather than a tense category is provided by the fact that it can cooccur with tense markers, more specifically with the future tense. The dependent habitual codes the pragmatically dependent clause, i.e. a clause that must be interpreted in connection with another proposition. In the following example, the chicken does not want the wild cat to be invited, and therefore in addition to the interrogative clause there is the dependent habitual marker:

(33)	gàmták	zá	hà	n	ká	tàr-á
, ,	chicken	COMP	2SG	PREP	INF	ask-GO
	wàláŋ	rá	vù			
	wildcat	D.HAB	Q			
	'Chicken said,	, "But are you g	going to	invite t	he wild	cat?"

If the chicken were merely asking a question without any presupposition, it would have said:

(34) hà tàr-á wòlán zò vù 2SG ask-GO wildcat EE Q 'Will you invite the wild cat?'

The plural dependent habitual is coded through the reduplication of the phrase consisting of the subject, the verb, and the habitual marker: (35)nd nd rá í rá vàŋ D.HAB 3PL walk D.HAB rain 3PL walk ká ďà wà start INF fetch water 'While they were walking, the rain started to fall.'

3.2.3 The habitual aspect in negative clauses

Although in affirmative clauses with the habitual aspect, the marker $r\dot{a}$ may, but does not have to, occur, in negative clauses, the marker is obligatory if the aspect is habitual. In negative clauses the marker ndi cannot be used:

- báŋ (36)túk há skù á rà PRED you 2SG think D.HAB **NEG** wúl 6éŧ rà wá svi DEM COM neck break D.HAB 'You are not thinking, you are crying with joy.'
- (37)ndà skù à mbí r NEG ANAPH 3SG D.HAB go žèhèr má tá tùkón REL. follow GEN 2SG 'If she does not go, she should follow yours.'
- (38) kó wàl nd rà skù but neck go D.HAB NEG 'But the voice did not go out as before.'

The evidence that the form ra codes the same temporal and aspectual range as the independent habitual marker ndi is provided by the following example, where r refers to a habitual situation rather than to an ongoing event.

(39)hà wàŋ wàŋ hà lim wàl sleep 2SG sleep 2SG see woman rà skù D.HAB **NEG** 'You spend a long time without seeing a woman.'

- (40) i wán r gràb skù
 3PL sleep D.HAB together NEG
 'They do not sleep together.'
- (41) skàn mà tórà lì-dá make suffer (F.) of-home REL thing mbàd mhí skù á thing D.HAB **NEG** 3SG surpass 'There is no such thing that will make the head of the family suffer more than that.'

Additional evidence for the pragmatic function of the dependent habitual is provided by the fact that it can be used in equational clauses with no verb:

- (42) ciŋ zá hágờm
 his father COMP girl
 rờ skớ vù
 D.HAB NEG Q
 'His father said, "Isn't it a girl?"'
- (43) láydán állà rà skù ďál mà God dawn D.HAB NEG REL do mí what 'God, it is not yet dawn, what is going on?'

The dependent habitual must also occur with the negative interrogative clause if the aspect is habitual:

(44)zá nà à á báv há tì PRED PREP chief **COMP** 2SG 3SG see ská νù D.HAB **NEG** 0 'He said to the chief, "Don't you see?"'

The past tense in negative clauses with the dependent habitual is coded by the existential verb dáhà:

(45) wàl wà sám à zá never (F.) 3SG DEM COMP woman skù dám-á-k ďá rà pain-GO-1SG D.HAB **NEG** exist 'That woman said, "It never hurt me."

The explanation for the use of the dependent habitual in negative clauses is that they do in fact code the negation of a presupposition. An exception to the use of the marker $r\dot{a}$ in the negative habitual occurs if there is no negation of a presupposition. Thus, the exception confirms the proposed explanation of the function of the dependent habitual marker:

(46) màllúm wà bàhá à tálá skù marabout DEM also 3SG walk NEG 'That teacher, he was a sedentary one.' (lit. 'was the one who does not walk', in contrast to traveling teachers)

4. Perfect

4.1 The form of the perfect aspect

The perfect aspect has the form (Noun phrase) $m \ge 0$ Verb -yi. If there is no noun phrase before the form $m \ge 0$, the subject is third-person singular.

The reason we postulate -yi as the underlying form rather than i, the form most frequently realized, is that the form does not cause the fronting of the preceding vowels or the palatalization of the preceding consonants. The palatal glide is a barrier to vowel fronting and to palatalization. In phrase-internal position, when the form follows the vowel a, it is reduced to palatal glide y and forms a coda of the preceding syllable. If the stative marker follows a consonant, it is realized as i and forms a syllabic peak of its own.

If the verb has the CV structure, the V is deleted, and the marker yi becomes the syllabic peak and carries a tone of its own:

(47) máv mò s-yí zà beer REL drink-STAT EE 'The beer is drunk up.' (kó sà 'drink')

(48) wùdò mò d-yí zà food REL cook-STAT EE 'The food is cooked.' (kó dà 'cook')

The stative suffix keeps its high tone regardless of the tone of the verb:

(49) ndìr túk mà t-yí skù sorghum 2SG REL measure-STAT NEG 'Your sorghum is not measured' (i.e., is not sold) tà 'measure'

The perfect aspect may be followed by the end-of-event marker za in affirmative clauses and da in negative clauses. The marker ma is identical with the relative marker, and in order to preserve uniform glossing, we gloss it as REL.

- (50) mà dál-yí zà kà mbí REL do-STAT EE like that 'It is done like that.'
- (51) mò dál-yí dá kò mbí skù REL do-STAT NEG like that NEG 'if it is not done like that'

If the verb has a goal orientation marker, the stative suffix *i* is added after the goal orientation marker but before the possessive subject pronouns:

(52) sò mò nd-à-y n zà
1SG REL go-GO-STAT 1SG EE
'I have returned.'

4.2 The function of the perfect

The perfect aspect is used to code the state of an entity at a specific time that results from a previous event. The subject of the perfect aspect is affected. Thus, the perfect aspect is used to code the state of the subject with verbs that in the non-perfect aspects take a controlling subject:

Cf.:

(54) i kà báh kà
3PL INF hide POS
'They hid something.'

If the verb is transitive, the subject noun phrase represents the patient rather than the agent.

(55) gì mò mòsáw-yí zà meat REL grill-STAT EE 'The meat is grilled.'

The perfect aspect can be used in conditional protasis clauses, where it must be used with the end-of-event marker $z\hat{a}$:

(56)màts-yí tsáy mà zà completely die-STAT REL EE mbákà và tá nà màn GEN PREP ANAPH blacksmith call 'If he is completely dead, one calls the blacksmith, who is already there.' (zà cannot be omitted)

With intransitive verbs of movement, the perfect aspect codes the state that followed the movement:

- (57) séy gáw mà nd-à-y zá so hunter (F.) REL go-GO-STAT EE 'So the hunter came.' (gáw 'master hunter, sorcerer, healer')
- (58) séy í mà nd-à-y zá so 3PL REL go-GO-STAT EE 'So they came.'

- (59)séy skàn-yii wàcin i mà nd-à-y DEM 3PL go-STAT REL thing-PL SO á 6àt wàdá pàt zá рá food give PRED tomorrow EE take ndrì zìn bát fetch sorghum time 'So the animals came. He took food and gave it to them. Tomorrow he will give them sorghum.'
- (60)skàn-iyi wàciŋ wàl ngàn zá **COMP** thing-PL **DEM** 3SG woman nd-à-y zá í mà go-GO-STAT EE 3PL 3PL REL 6ám nàmú kà PREP INF eat 1DU

'His wife said, "If those animals return, it is us that they will eat."

The difference between the use of the perfect form of the verb nda and of a sequential past event form is that perfect codes the subject still being present at the destination:

- (61) mà nd-à-y zá
 REL go-GO-STAT EE
 'He has come (and he is still here).'
- (62) k\u00e1 nd-\u00e1 z\u00e1 INF go-GO EE 'He came and went.' (He is not here anymore.)
- (63) làkáf tríš mò ndòv-yí zà baboon ONOM REL fall-STAT EE 'Baboon fell down, bam!' (baboon is still down at the next event in the story)
- (64) kwáyàŋ zá gì mà màts-yí
 squirrel COMP meat REL die-STAT
 báytàŋ á dámù
 large PRED bush
 'The squirrel said, there is a large dead game enim

'The squirrel said, there is a large dead game animal in the bush.'

(65) séy di kà séy mà n-yí zà so guard POS so REL ripen-STAT EE 'The more they kept it, the more rotten it became.' (kà ná 'to ripen')

The scope of the perfect may be the agent. Thus, the scope of the verb *mbùw* 'to give birth' is the mother, not the child:

(66) mà mbùw-yí zà
REL give birth-STAT EE
'She has given birth.'

The perfect aspect may be followed by the point-of-view of source marker ka:

(67)í-bà nd-á tàtàŋ séy tàŋ tàŋ PL-ASSC 3PL go-GO SO go go gimikid zá à zá nà màtsád monkey 3SG EE **COMP** PREP tweezers wáy-á-yí kà mà nàn forget-GO-STAT **POS** 1SG REL 'After they walked for a long time, he told them, "My tweezers are left there."

The perfect aspect cannot be formed from adjectives. The explanation for this is that adjectival predicates are inherently stative, and therefore the use of perfect coding would be redundant:

- (68) wàdá mbéh food ready 'The food is ready.'
- (69) *wàdá mà mbéh-yi zà food REL ready-STAT EE for 'The food is ready.'

The difference between dynamic and stative aspect is that the dynamic aspect determines the time of the event, and the stative does not. In the following example, there are two events with the same verb. The first is expressed through a dynamic expression and the second through the perfect:

- (70)báy ábà nd-á ngàn séy mbéŋ ASSC go-GO 3SG 3PL chief SO gàmikìd-yiì nd-à-v kà mà zá monkey-PL go-GO-STAT EE INF REL wàcin 6ám páv **DEM** eat tree 'When the chief returned, the monkeys came to eat the tree.' (gàmikìd'yellow monkey')
- nd-á (71) nd-á tán táŋ á svi go-GO go-GO **COMP** walk walk 3SG gàmíkìd-yíì wàn-yí kàtàf mà á monkey-PL sleep-STAT REL PRED road sùlúd tàn í-hà mámà tàtà PL-ASSC mother.3SG 3PL two DED 'He walked and walked. When he arrived, he found the monkey lying on the road with his mother, both of them.'

5. The terminative aspect

Along with the inceptive aspect coding the beginning of an activity, there is also a terminative aspect, coding the cessation of an activity. This aspect is coded by the verb náz 'throw', which has an extended meaning 'stop'. Note that a similar semantic extension has taken place in Polish, where the verb za-rzucić 'over-throw' came to mean "cease, stop". As the auxiliary, nàz has low tone:

kám tál (72)sév wàl wà ká nàz then woman DEM DEM INF stop walk dáp ďá skù exist NEG iust 'Then, that woman did not stop taking her walks.'

6. The completive aspect

The auxiliary verbs $t \delta k$ and $t u w \partial d$ 'finish, end' follow the main verb. If the main verb has an object, the auxiliary occurs after the object. The verb $t \delta k$ has as its scope the event, whereas the verb $t u w \partial d$ has as its scope the object of the transitive verb:

- (73) wàd ká hòl hòl tók hàz ká spread POS dry dry finish crush POS 'She spread it [sorghum]. When it dried, she crushed it.'
- (74) ngámbù ngòn séy sà á sò
 friend 3SG so drink 3SG drink
 túwòd kà
 finish POS
 'Then his friend finished drinking.' (He drank everything.)
- ngámbù (75) nà wà á ngàn mhú рá PRED PREP friend 3SG DEM give child sà sà túwàd bàhá again drink drink finish 'That child gave it to his friend. Again he drank everything.'

All auxiliary verbs may occur as main verbs:

- (76) ngàlámbrà wàcin fés ngàcin túwàd zà story DEM small like that finish EE 'This little story ended like that.'
- (77)6át – mbà wàcin diy-á sév 6át take DEM put-GO take 3PL child SO ká báv PREP chief 'So they took the child and made him their chief.'
- (78) ngàlámbrà tók zà vú áb wàcíŋ story finish EE Q ASSC DEM 'The story has ended like that.'

The completive aspect may also be coded by the adverb $ts\acute{a}y$ 'completely'. The marker $ts\acute{a}y$ is analyzed as an adverb rather than an auxiliary verb, because there is no infinitive form $*k\grave{a}$ $ts\acute{a}y$, and because there is no environment where $ts\acute{a}y$ would be a predicate:

(79) ká dá tìpíd tsáy zà
INF gather termites completely EE
'She has finished looking for termites.'

- dà dà dà dà á (80)kàđám wá **3SG** calabash DEM make make make make d-á-ŋ wùdá mà wá kà ná DEM DEM POS make-GO-3SG food that gwád tsáv zà completely EE fill
 - 'The calabash made him a lot of food, filled completely.'

7. The intentional aspect

The intentional aspect is coded by the auxiliary $nd\partial$ 'go', followed by the infinitive form of the verb. Evidence that the form $nd\partial$ functions as an auxiliary rather than as a lexical verb of movement is provided by its use in the context where no movement takes place:

- (81) i ndà ká bèr-é cìkid 3PL go INF sell-GO sesame bùhù ntá bag (F.) one 'They intended to sell one bag of sesame seeds.'
- (82) ngàd ngàd i ngàd cikè' (zá) ká count count 3PL count all (EE) POS 'They counted all [the sesame seeds].'

Additional evidence for the intentional function of the marker $nd\hat{\partial}$ is provided by clauses where the movement meaning for the verb $nd\hat{\partial}$ is ruled out:

(83)mà ndà ká šì νí sév REL go INF who then run ká nd-á zà INF hit-GO EE 'The one who wants to run away, he hit him.'

The form $nd\partial$ has come to serve as indirect means to code the modality of obligations. This usage is quite similar to the use of the future tense in English to code indirectly the modality of obligation:

(84)màllúm à há ndà fàt zá marabout 3SG COMP 2SG go skin gàr mèli màsár màsár nkwà há há 2SG 2SG grill grill goat search oil 'The teacher said, "You should slaughter a goat, get oil, and grill it."

8. Verbs with inherent tense and aspectual values

Several verbs, mainly verbs of movement, have lexicalized various tense and aspectual values as evidenced by the fact that they do not take aspectual markers. The common characteristic of these verbs is that they all have inherent past meaning. They do not have infinitive forms with $k\partial$ either. They also differ from other verbs in that the third-person singular subject is unmarked. These verbs are inherently inceptive. The verbs $ts\acute{u}$ and $t\acute{u}l$ cannot be reduplicated for aspectual or number distinctions.

These verbs serve as the first component for the reduplicated part of other verbs. Thus, the verb $v \partial l$ 'give' cannot be reduplicated, and instead the first part of the reduplicated construction is filled by the form $p \dot{a}$ 'give', a form that does not take the infinitive marker:

(85)màl ίi màl-á-n ķà báytàn kà táŋ seize-GO-3SG cow **GEN** large cow seize 3PL ngùl vàl-á-n nd-á kàđám рá í give-GO-3SG calabash male go-GO give 3PL 'They caught a large cow, a bull, for him, and they gave him a calabash [to fill it with the milk from the bull].

The verb *til* used alone codes a pragmatically dependent clause, as evidenced by the following examples, where it serves as the marker of a temporal protasis clause. The third-person pronominal subject is unmarked:

(86)tíl áh á nà vàm tá PRED PREP water DED **ASSC** dùwán mbén tì á tìv-ú 3SG back **ANAPH** look look-3SG look 'Having entered the water, he searched for it [the sesame seed].' Nominal subjects occur before the verb. The verb til move' is inherently non-locative as it requires the locative predicator \dot{a} before a locative complement:

The verb $t\acute{a}\eta$ 'return' is inherently locative, as it does not require the locative predicator \acute{a} :

'When the man came back to the house, he said to his neighbor, "Friend, you brought money to this man. How much money?""

Pronominal subjects, however, follow *til*. The verb *til* serves as the first component of a sequential past event construction formed through reduplication, when the target of the reduplication is *ndà* 'go':

Like other verbs of movement the verb *til* and the other verbs in the group can take possessive subject pronouns to code the finality of movement:

(90)mbà wà tíl ngàn kà kà màr n 3SG shepherd child DEM leave INF PREP INF dàgáytíi đéw kà á wtá POS PRED house others sit áhà tàtàŋ cín ASSC father.3SG 3PL 'That child went to herd. The others stayed at their father's

The evidence for the auxiliary function of *til* is provided by the fact that it cannot be used as the only predicate of an independent clause. Thus to a question 'where is he?' one cannot answer:

(91) *tíl á nà yàm enter PRED PREP water for 'He entered into the water.'

home.'

(92) *tán/*tíl nà lúmò go PREP market for 'He arrived at the market.'

The evidence that $ts\dot{u}$ is a verb comes from the fact that it can take subject pronouns from the verbal set, except for the third-person singular, which is unmarked:

- (93) i tsú nà lúmò 3PL went PREP market 'They went to the market.'
- (94) hí tsú no lúmò
 2PL went PREP market
 'You went to the market.'

Unlike til, the verb $ts\dot{u}$ can be used as the only predicate in an independent clause, affirmative or negative:

(95) tsú nò lúmò went PREP market 'He went to the market.'

(96) tsú zó nò lúmò went EE PREP market 'He went to the market.'

The non-past equivalent of the verbs til and $ts\dot{u}$ is nd 'go'. It is used in functions in which the other three verbs may not be used:

- (97) kàdúm ndà n lúmò Kadum go PREP market 'Kadum goes to the market!'
- (98) ndá n lúmò go PREP market 'Go to the market!'

The verb *nd* can be used with the subject-focus construction, in both past and present time reference:

(99) kàdúm ká ndà zá n lúmò Kadum INF go EE PREP market 'Kadum was at the market!'

The verb *nd* may be used with the dependent habitual aspect in comment-on-focus clauses:

(100) kàdúm ndà rá nà lúmò Kadum go D.HAB PREP market 'It is Kadum that is going to the market!'

The verb $6\dot{a}k$ 'die', which does not have an infinitive or future tense forms behaves similarly to the verbs til and $ts\dot{u}$, in that it does not take the third person singular subject pronouns:

(101) séy bák mbà á jíb so died down there PRED hole 'So, she died down there in the hole.'

9. The iterative aspect

The iterative aspect is coded by the rightward reduplication of the verb:

nfád-yíì (102) hìd tá zàm zèm fák-á GEN palace (F.)-PL eat leave-GO eat man 'The men of the palace all ate and left the remains.'

If the verb has an object, the object is reduplicated along with the verb:

gár (103)màl màl-á-n tètàn stop-GO-3SG search 3PL 3PL 'They started looking for them [people hiding].' ńvàn hók ńvàn hók hók remove stone ńvàn hók ńvàn hók stone remove 'They removed stone.' (repeated four times)

In the following examples the plural event is coded through reduplication leftward, and the iterative in sequential clauses is coded by reduplication rightward:

- ngád ngád pàl á pàl bàtákàr (104)mà count count detach 3SG detach bag REL ngàd ngàd count count 'The one who was good at counting detached the bag and counted [the seeds].'
- (105) séy kàđám wá dà dà á DEM SO calabash cook cook 3SG d-á-n wùd màná wà mbá pè cook-GO-3SG food DEM like SO much té té té té kàhám á mà spread spread spread PRED PREP face ngàn 3SG

'So the calabash made a lot of food for her, [and] spread [it] in front of her.'

10. Inceptive aspect

Inceptive aspect is coded periphrastically by the verb $\theta \delta t$ 'take' in the simple or reduplicated form. The function of the marker is to code the inception of another event. Evidence for the grammatical rather than verbal function of the form is provided by the fact that this form is followed by another verb. In addition, when this marker occurs, there is no potential object for this verb:

- pàďák njûl pàďák á pàďák-á 6èt (106)mà split 3SG split-GO grass take split REL ngàn nà nástà mán PREP LOC.ANAPH enter (F.) 3SG 'The one who splits grass split a stalk of grass and entered it.'
- (107) *séy 6àt* 6àt màsíl màsil á á 3SG then take 3SG take steal steal vàm á náz wà náz ngán throw 3SG water DEM throw 3SG kán ká nà jíbà kán á zà PREP PREP pocket cross 3SG cross EE 'Then he up and stole the water, threw it into his pocket, and crossed [the river].'
- (108)kámbáy 6àt séy nákà ká zá stick REM INF take EE SO dàp immediately 'So the stick took off immediately.' hWáp hWáp hWáp điyà gàld wàl wàhin put hit DEM bap bap bap woman 'Wap, wap, wap, [it] started to hit the woman.'

11. The unmarked aspect

In the preceding Chapter, we have described the operation of the unmarked tense. The unmarked form of the verb may also be interpreted as having the same aspect as the preceding clause. The unmarked form of the verb may be used in a sequence of clauses in a narrative. Thus in

the following sequence, the third clause does not have the habitual marker ndi, although the aspect of the clause is definitely habitual:

(115)míndéŋà ndí lám bín 3SG HAB build another house 'One builds a house.'

> kámbáy mindén à ndí téwél 3SG HAB twirl stick another 'Another twirls a stick.'

pàdák njûl Mindén à split grass (a variety) 3SG Another 'Another splits stalk of grass.'

Mindén ndí mhìr à another 3SG HAB jump 'Another jumps.'

12. Conclusions

There are two habitual aspects in Mina: one coding habitual in pragmatically independent clauses and the other coding habitual in pragmatically dependent clauses. The aspectual coding in pragmatically independent clauses is a morphologically marked form, in that it involves reduplication for the past tense form. In pragmatically dependent clauses, a simple form of the verb is used.

In addition to the habitual Mina has the following aspects: perfect, coded by the relative marker mò preceding the verb and the stative suffix -yi added to the verb; terminative coded by auxiliary verb náz 'throw'; completive coded by auxiliary verbs tók and túwàd, 'finish'; intentional coded by auxiliary verb nd 'go'; iterative coded by the rightward reduplication of the verb; the inceptive aspect coded by the auxiliary bát 'take'; and the unmarked aspect. The unmarked aspect receives the aspectual interpretation from the preceding clause.

Chapter 12 Modality

1. Introduction

Mina makes formal distinction between deontic and epistemic modalities. Within epistemic modalities, the speaker's belief in the truth of the proposition is the unmarked value. Dubitative modality is the marked category within the epistemic modality. Mina has also morphological means to code hedging about the truth.

Within the deontic modalities, Mina makes a distinction between imperative, an order given to the second-person singular and plural; subjunctive, a wish with respect to the second person; and optative, expressing a wish with respect to all persons, including second person.

A common characteristic of all deontic moods is that transitive verbs must be followed by an object. If there is no nominal or pronominal object, the unspecified pronoun u is added to the verb. This is distinct from non-deontic moods, which do not require an object with transitive verbs.

In addition to the epistemic and deontic modality, the language also codes the emotive modality.

The Chapter is organized as follows: Section 2 deals with epistemic modality, Section 3 with emotive modality, Sections 4-9 with various deontic modalities, and section 10 with the category 'comment clause'.

2. Epistemic modality

As in many languages, the speaker's belief in the truth of the proposition is the unmarked modality in Mina, coded by the indicative affirmative clause (Frajzyngier 1985a). The evidence for this hypothesis is provided by the following facts: (a) there are no overt markers to express the speaker's belief in the truth of his/her statement, and (b) any

other modality must be overtly marked. The present chapter begins with a description of the subdomains within the epistemic modality. By showing the marked subdomains, we provide an argument for the unmarked value of the indicative clause. Then we discuss the emotive modality, and finally various subdomains of the deontic modality.

2.1 Dubitative modality

The dubitative modality is marked by the form $\eta g \partial h d$ or $\eta g \partial h d$ 'like that', realized as ngd in phrase-internal position, and glossed as DUB. Since the deictic has the same variants as the verb 'break', it is possible that it is ultimately derived from this verb.

- **(1)** lùw-á-h hà nék skù à zá say-GO-2SG COMP 2SG 3SG **NEG** good ngà νú DUB 0 'Will he tell you that you are not good?' (I doubt he will.)
- (2) à gàl féš ngà dáp
 3SG grow little DUB only
 'It grew only a little.' (about búrgàdán, a variety of millet with very small black grains.)

2.2 Hedging

Uncertainty about the truth of the proposition or of part of it is coded by the particle $m \partial n \dot{a}$ 'like'. This particle may consist of the relative marker $m \partial$ and the form $n \dot{a}$, for which no potential source has been found in contemporary Mina but which has cognates in many Chadic languages of the area, where it is a *de dicto* complementizer and a verb of saying. As a marker of uncertainty, it precedes the part of the proposition about which the uncertainty is expressed:

- (3) ván đá rà mòná á
 rain fetch:GO D.HAB like PRED
 nò lúmò
 PREP market
 'It was raining as if from the side of the market.'
- **(4)** ngàn áu sà wàl zá INTERJ 1SG wife 3SG COMP ďál-á-h màná wà mí DEM what do-GO-2SG like 'His wife said, "What did I do to you?" (i.e., she has not done anything wrong.)

3. Emotive modality

Mina appears to have grammaticalized a modality that codes an emotional attitude of the speaker toward a proposition. While such attitudes are coded in many languages, the frequency of the emotive modality coding in Mina indicates that the speakers have to attend to this category whenever there is potential for its occurrence.

Emotive modality is coded by the marker syì placed at the end of a phrase or a clause that is in its scope. The following fragment contains three uses of the marker syì; the first two have a topic and an adverbial phrase in its scope, and the third has a clause in its scope:

- (5) bàhámàn ah tùk bákà PRED you Bahaman today oh svì ták píč wà svi COM all DEM COM sun 'Oh, Bahaman, for you, with all this heat?'
- rà **(6)** á túk bán há skù PRED you think D.HAB 2SG NEG wúl 6él rà wá svi break D.HAB DEM COM neck "You are not thinking, you are yelling with joy." (bét 'break a container to get its contents', e.g. break a coconut)

The marker syì codes a range of emotions including surprise, astonishment, and amazement. The marker codes speaker's emotional

comment on a proposition or event. For purely conventional reasons, it is glossed as COM for "comment":

- (7) hàn hàn hàn á hàn mòná wàcin syì cry cry cry 3SG cry like that DEM COM 'He cried a lot like that.'
- (8) bàhámán à dzà wúl wàcíŋ syì
 Bahaman 3SG cry neck DEM COM
 'Bahaman is crying over there.'

The marker is also used with requests, perhaps as a marker of impatience:

6àt-á nòk (9) àa ndà skú syì get-GO 1PL NEG **COM** ah go á vàngáy how "Ah, go bring it to us, otherwise what can we do?"

In some of its uses the function of the marker means something like "given such and such a situation, doing X satisfies the condition Y," "just like that":

- (10) dà dà á d-á-ŋ tá
 make make 3SG make-GO-3SG PL
 wùdà wàciŋ syì
 food DEM COM
 'Then it made food for them.'
- (11)kàgám syì màl-á-n ndà màl á tá hit-GO-3SG talk COM hit 3SG 3PL go 'ndź tàtà mà há syì 3PL DEM over there COM go 'They talked [to the stick]. It started beating them over there.'

The single characteristics of this marker is that it occurs at the end of the clause:

(12) hàn hàn hàn á hàn mòná wàcín syì cry cry cry 3SG cry like DEM COM 'He cried a lot like that.'

tús ńgàtsà right like that 'rightly like that' (tús 'right, well')

The marker syì may also occur between the matrix and the complement clause. Such use is discussed in the chapter on comment clauses.

4. Imperative

4.1 The deontic stem

The mood of obligation in both imperative and debitive is coded, in addition to any syntactic means, by tone lowering on the verb. Such stems are called here deontic stems. The monosyllabic high tone verbs become low tone:

(13) $6 \grave{a} m \qquad \& i$ eat meat
'Eat the meat!'

Cf.:

- (14) kà bám kì zà
 INF eat meat EE
 'He ate the meat'
- (15) làm bíŋ
 build house
 'Build a house!'

Cf.:

- (16) kà lám bíŋ zà
 INF build house EE
 'He built a house.'
- (17) mbir jump 'Jump!'

Cf.:

(18) kà mbír zà INF jump EE 'He jumped.'

Verbs that have high-low structure form their deontic form through a change into low-low structure:

(19) tèwèl ţámbáy
twirl stick
'Let him twirl the stick!'

Cf.:

(20) kà téwèl gámbáy zà REL twirl stick EE 'the one who twirls the stick'

The low-high verbs stay low-high in the imperative:

- (21) pàdák njûl split grass 'Split a stalk of grass!'
- (22) kà pàdák njúl zà INF split grass EE 'He split grass.'

Low tone verbs stay low in the imperative:

- (23) kim-û listen-3SG 'Let him listen!'
- (24) kớ gìm zá
 INF listen EE
 'He listened.'
- (25) ngàd-ú count-3SG 'Count it!'

Cf.:

- (26) ká ngàd zá
 INF count EE
 'He counted'
- (27) tìy-ú
 'Look!'
 'Let him look.'

kó tì zá INF look EE 'He looked.'

If the verb has the goal orientation extension \dot{a} , the tone in the deontic stem remains high:

(28) ndá kù yám go:GO take also 'Come take some also!'

The goal-orientation marker preceding object pronouns becomes low in the deontic forms as illustrated later in section 5.

4.2 Subject coding in the imperative

The imperative may have the nominal addressee preceding the verb:

- (29) kwáykwáyà ndà dáp nà gr-á nòkóŋ hyena go just go find-GO 1PL 'Hyena, you just go and find for us!' (Kefedjerveng dialect)
- (30) há lùw-á-ŋ ngásì
 2SG say-GO-3SG like that

 kámbáy n-dí dál tó vù
 stick go do DED Q
 'You say to it just like that, "Stick, do it?""

If there is no nominal addressee preceding the verb, the second-person singular subject pronoun $h\dot{a}$ is optional. Both the singular and plural second-person subject pronouns have high tone in the imperative. The second-person singular subject pronoun is used when there is

a modal adverb or when there is a sequence of commands. Both of these cases are illustrated in the following examples:

(31)gélbà kám há pàts-à better (F.) TOP (F.) take:IMPER-GO 2SG nòk mbà ntá há d-à 1PL.INCL child cook:IMPER-GO 2SG one nòkón 1PL.INCL

'You'd better take one of your children and cook him for us all.'

If the order is given to more than one addressee, the second-person plural pronoun must be used. The pronoun has high tone in the imperative:

- (32)tìkìn kám hí nd-àhá á PRED 2PL TOP(F.) 2PL go:IMPER-GO fú hì tàn all (F.) **DED** 2PL 'As for you, you all come!'
- (33)hí ngàn ngùl уà husband 3SG 2PL call tùk wàl kà mìsíl zà wife 2SG INF steal EE 'Call her husband, [tell him] "Your wife has committed a theft."

4.3 Object coding in the imperative

If the verb is transitive and there is no nominal or specific pronominal object, the third-person definite object marker \dot{u} must be added to the verb. Transitive verbs with the CVC structure undergo tone lowering if they have high tone and add \dot{u} after the last consonant:

(34) zàm-ú 'eat!'; bàk-ú 'pour (sand, grain, flour)!'; wày-ú 'forget!'; bèr-ú 'sell!'; pàs-ú 'cover with soil'

The evidence that \dot{u} is the definite object marker is provided by the fact that if the object is plural the third-person plural pronoun is used:

- (35) tì tàŋ look 3PL 'Look at them!'
- (36) bèr tàŋ 'Sell them!'

The formation of the imperative allows us to determine that some of the verbs that without any suffixes impressionistically end in a vowel actually have a glottal continuant in the C2 position, and that the glottal continuant is often deleted in phrase-final position:

(37)	Indicative	Imperative	Gloss
	góh	gòħ-ú	'wash
	káh	kàh-ú	'bury'
	$b\grave{o}h$	bòh-ú	'break off a branch'

If the verb has CVC structure and the vowel is [+front], the object suffix is fronted:

(38) báy zá mèd-û chief COMP swear-3SG 'The chief said, "Swear!"

If the verb ends in the vowel a, the form u replaces the vowel of the verb and assumes the low tone of the deontic stem, and not of the underlying stem:

```
(39) sù 'drink!' (sà 'drink')

wù 'start! (wà 'start')

rù 'dig!' (rá 'dig a hole')

tsù 'set the field on fire!' (tsá 'put fire into a field')
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The addition of the object marker u to verbs with final high vowels i or u supports the hypothesis that these verbs have an underlying palatal or labial glide in word final position. Thus, mbu 'give birth, unite, put together' has the imperative mbuwu 'put together'. Other forms in-

clude l u w u 'say!' from l u 'say' and the following examples with palatal glides:

(40) dĩ 'put' dĩyú! tìy 'see' tìyú!

Some intransitive verbs, specifically verbs in which the subject undergoes movement or change, also have the deontic formed with \dot{u} if the locative complement is not overtly coded:

(41) zìn-û return:IMPER-3SG 'Return there!'

If the locative complement is overtly coded, there is no suffix \dot{u} :

- (42) zìn màrβák return:IMPER Marbak 'Return to Marbak!'
- (43) $y \partial p$ and $y \partial p u$ 'rest!'
- (44) yàp nà bàbúsì rest:IMPER PREP mat 'Rest on the mat!' (kà yáp 'return')

 $nz-\dot{u}$ 'sit down!' (can be used only when pointing at a mat, chair, etc.):

(45) nzà káyàk sit:IMPER ground 'Sit on the ground!'

Intransitive verbs $nd\grave{a}$ 'go' and $\check{s}i$ 'run!' do not end in the vowel u in the imperative, but rather keep their underlying vowels:

(46) kwáykwáy zá hí ndà hyena COMP 2PL go 'Hyena said, "You go!"

If the verb *ndà* 'go' is followed by a complement clause, the verb has the final vowel reduced:

(47)ķά hí ndà уà cín à father.3SG 3SG 2PL call say go hákèm wàciŋ **DEM** girl 'He said, "Go and call the father of that girl!"

The deontic form may have the point-of-view of source marker added:

- (48) bàt á bàt káyyà hí màl ká start 3SG start INTERJ 2PL catch POS 'He started, "Yikes! Stop him!"
- (49)hí kàm fú hí wàn fúkà tàn 2PL TOP all DED 2PL completely sleep mùkàdkádán sùlúd sùlúd upside down two two 'As for you all, you sleep all on your back in pairs.'

5. Polite orders

The order may be made polite through several means. One is by a periphrastic construction consisting of the negative marker $sk\dot{u}$ but with high rather than low tone, the emotive marker syi and the interrogative \dot{a} $v \dot{a} n g \dot{a} y$ 'how'. Note that the examples below contain goal-orientation marker preceding object pronouns in the imperative mood. In this position the goal-orientation marker has low tone:

(50)ndà hàt-à nòk skú àa syì PL ah get-GO1 NEG COM 90 vàngáy PRED how "Ah, go bring it to us, otherwise what can we do?"

Another means of making the order polite is through the clause-final particle gi following the verb in deontic form.

(51) kàdám vl-à-k wùd gí calabash give-GO-1SG food POL 'Calabash, could you give me some food?'

(52) séy bàt dêf-é skàn nákà wá gí so take show-GO thing REM DEM POL 'So, take and show [me] that thing!'

The form gi is used in all kinds of situations when politeness is involved:

- (53) kàdám vl-à nà wàdá calabash give-GO 1PL.EXCL food gi tsáy dàp
 POL finish only
 'Calabash, give us food! That is all.'
- (54) màn-à-k gi help-GO-1SG POL 'Help me!' (ká màn 'help')
- (55) á zá kámbáy nd-à-k gí 3SG COMP stick hit-GO-1SG POL 'She said, "Stick, beat me, please!"

A related Chadic language, Gidar, whose outlying villages are as close as 20 kilometers away from Hina settlements, has the debitive marker $g \ni ni$, reduced to $g \ni ni$ in phrase-internal position. That may indicate the marker of politeness in Mina and the debitive in Gidar are related. Whether this relationship indicates a common retention, a common innovation or a borrowing has to be decided by a comparative study of the relevant domains in Chadic languages.

Among people of equal rank and age, the imperative clause may end in the form $m \ge k$ 'first', 'wouldn't you'. This form may not be used when addressing older people or people in a higher social rank:

(56) séy à zá sò yòm zó mòk so 3SG COMP drink water EE first 'Then he said, "Why don't you drink the water first?""

6. Debitive mood

There are several means to code obligation with respect to the first and the third person and non-imperative obligation with respect to the second person. Some of these means involve use of markers that seem to be uniquely dedicated to this function, and other means also have other functions in the language, but they acquire the debitive function through their use in specific constructions.

6.1 Debitive with respect to the third person

The mood of obligation with respect to the third-person is coded by the marker má (note the high tone) preceding the verb, which has low tone. The form is glossed as DEB for 'debitive'. We are grateful to Bernard Comrie for suggesting this term. If the subject is nominal, the debitive marker follows the subject:

(57) kwàykwày mhí kám zά Ьì TOP (F.) **COMP ANAPH** hvena meat kìní híŋ tì má nzà-h kà GEN 2SG DEB stay-2SG 2PL **POS** 'Hyena said, "If it is like that, your meat should remain with you."

The third-person singular pronominal subject is unmarked:

(58)má làm bín DEB build house 'Let him build a house.'

The debitive marker differs from the relative marker in tone only:

(59)mà lám bín REL build house 'the one who builds a house'

Verbs that have high-low structure form their debitive through a change into low-low structure:

(60)tèwèl kámbáy má DEB twirl stick 'Let him twirl the stick!' Cf.:

- (61) mà téwèl gámbáy
 REL twirl stick
 'the one who twirls the stick'
- (62) mó pòdák njúl
 DEB split grass
 'Let him split grass!'
- (63) mà pádak njúl

 REL split grass

 'the one who splits a stalk of grass'

Monosyllabic verbs with high tone in the indicative have low tone in the subjunctive:

(64) má mbìr

DEB jump

'Let him jump!'

Cf.:

- (65) mà mbír mbír REL jump jump 'the one who jumps'
- (66) mớ hìm

 DEB listen

 'Let him listen!'

Cf.

- (67) mà him him
 REL listen-listen
 'the one who is a listener'
- (68) má ngàd
 DEB count
 'Let him count!'

Cf.:

(69) mà ngád ngád REL count count 'the one who counts'

- (70)má tìy-ù DEB look-look 'Let him look.'
- **(71)** mà tiy-tiy REL look-look 'The one who looks.'

Here are examples of the use of debitive forms in natural discourse:

- (72)sév má nd-á ngàm 3SG go-GO because SO à dəm-a-n hurt-GO-3SG D.HAB 3SG 'He should go because it hurts him.'
- (73) fàk ká má ndá leave POS DEB go 'Let him go.'
- mhí (74)ndà skù à r 3SG NEG **ANAPH** D.HAB go má žèĥér tá tùkón DEB follow GEN 2SG 'If she does not leave, she should follow yours.'

The second person in the debitive is marked by the pronoun $h\dot{a}$. Recall that in the imperative, the second person singular is marked by independent pronouns or is unmarked. Hence, use of the pronoun is the coding means for the debitive modality:

- mùnyál (75)báy zá ďàl kà mìsíl-é-h chief patience (F.) COMP do INF steal-GO-2SG zà há nd-á há gìz-è-kù go-GO tell-GO-1SG EE 2SG 2SG 'The chief said, "Patience. If he steals, you should come and tell me."
- (76)6àt-à-k há rá take-GO-1SG DAT.OR 'You should bring it to me.'

(77) há žèbér kà gàr mbén 2SG follow INF want ANAPH 'You should follow [her] in order to get her.'

The debitive clause may also end in the clause-final familiarity marker $m \ge k$, the same form that we have seen already in use in the de-ontic form:

nd-á r-á-h (78)à zá sà go-GO dig-GO-2SG 1SG 3SG **COMP** hì vàm màk 2PL water first 'He said, "Come, so that I will dig a well for you."

Obligation with respect to the first person is coded by high tone on the pronouns and the deontic stem of the verb:

- mbákí-yì tàlàn (79)nók nók mbù ďá blacksmith 1PL unite head exist 1PL:INCL ká kàgám mà pár skù word other NEG speak INF 'We blacksmiths, we have to get together, there is nothing else to say.'
- (80) séy só nd-á ngàm so 1SG go-GO because à dóm-á-ŋ rà 3SG hurt-GO-3SG D.HAB 'I should go because it hurts him'
- (81) séy nók nd-á ngàm so 1PL.INCL go-GO because à dám-á-ŋ rà 3SG hurt-GO-3SG D.HAB 'We should go because it hurts him'

The verb nd 'go' has also a special debitive form $\dot{a}z\dot{u}$, which is followed by possessive subject pronouns.)

(82)á nà gimikid à zά áz 3SG **COMP** PRED PREP monkey go tùmù médìgì ngák ngák ngák-á í pull 1DU neighbor pull 3PL pull-GO kwáyàŋ midigid pám squirrel until PRED court 'He said to the monkey, "Let's go, neighbor." They pulled it to the squirrels courtyard.'

6.2 Debitive modality through auxiliary dà

The debitive modality with respect to the first person, and only the first person, can also be coded through the auxiliary verb $d\dot{a}$ 'bring'. The auxiliary occurs before the subject pronoun:

- kwáyàŋ (83)zá dà sà tàp-ú squirrel COMP bring 1SG climb-3SG tàlàn ká ngà ká màsáw nán break INF grill head 1SG 'Squirrel said, "Let me climb, break [myself into pieces], and grill myself."
- (84) dà sá hítdì6-é-h kràp bring 1SG sew-GO-2SG shoe "Wait, I will sew you some shoes."

The use of $d\hat{a}$ with the third person pronouns results in an ungrammatical construction:

(85) *dà tàtàn màl-á-n nkwà bring 3PL catch-GO-3SG goat for 'They should catch a goat for him.'

7. Coding the mood of obligation through the infinitive

Another means of coding obligation is with the infinitive marker $k\partial$. This means is used with respect to all persons in both singular and plural:

- (86) wàl gìm mò r skù kò woman hear mouth D.HAB NEG INF gám kà chase POS 'The woman who does not obey should be chased away.'
- (87)gàd-á ká ndà ká wá mà REL INF take-GO but INF go nòk kú νí 1PL fire who 'But who should go to find us fire?'

The coding of obligation through the infinitive is a means used in German, Russian and Polish, to mention just a few Indo-European languages.

8. Coding the mood of obligation through possessive constructions

The third means of coding the mood of obligation is through an expression consisting of a possessive pronoun followed by the infinitive form of the verb. There are two types of this construction. One consists of the debitive form $\dot{a}z$ 'go' followed by a genitive expression, and followed by the verb. The verb has low tone, i.e., it occurs in the deontic form. Consequently, the infinitive marker has high tone:

- (88)à ká áz tàm ká šì táŋ **DED** 3SG say 1DU.GEN INF go run 'He said, "Let's run!"
- (89)άz tòk ká kàh ksám tòk ká **INF POS** 1PL.INCL body 1PL go bury đál-á-ŋ vàngáy skù syì kà NEG COM INF do-GO-3SG how 'Let's bury ourselves. Otherwise, what can we do?'
- (90) tò, áz tòk
 okay (H.) go 1PL.INCL
 ké gr-á kúhú
 INF search-GO fire
 'Okay, let us find fire'

The other type consists of possessive pronouns preceding the verb in the infinitive form:

- wàciŋ (91)tó mìsil tá nà nigeria PREP Nigeria **DEM** thief well (H.) GEN ká bàm-á à ká séy nàn INF 3SG then 1DU meet-GO say ábà mìsíl tá Cameroun wàciŋ n ASSC thief GEN PREP Cameroon DEM 'The Nigerian thief said, "I have to go to meet the Cameroonian thief."
- (92)mìsíl nà wàcin à tá Cameroun zá PREP Cameroon DEM 3SG **COMP** thief GEN nàŋ ká bàmá ábà mìsíl tá nà nigeria ASSC thief PREP Nigeria 1DU INF meet GEN wàcin DEM

'The Cameroonian thief said, "I should meet with the Nigerian thief."

9. Coding the mood of obligation through modal adverbs

(93)gèl6é sà kà ďi ndìr ká n better 1SG PREP INF sorghum **PREP** put kàcin **DEM** 'It is better that I put the sorghum here . . .'

This adverb may also be coded by the deontic form of the verb:

(94)gèlbá kám pàts-á nók mbà há take-GO child better TOP(F.) 2SG 1PL d-á ntá hà nòkón 2SG cook-GO 1PL one 'You better take one of your children and cook it for us.'

10. Comment clause

Mina has grammaticalized the category 'comment clause'. Comment on another proposition in discourse (as opposed to comment on another clause in the sentence) is marked by the clause initial marker $w\grave{a}$ identical with the proximate deictic marker. The proposition to which another proposition is related may have been produced or implied by the speaker or by the addressee or the speaker may think that the addressee holds a given proposition.

- (95) wà hí dál-á mí
 DEM 2PL do-GO what
 'But what have you done?'
- (96)hí kà tá wà ndà gr-á syì DEM 2PL INF search-GO DED COM go mí what 'But what were you looking for?'
- (97)wà tìy màk zàmán tà age(Ar.) DED DEM look first gáy à νú à ngám vù 3SG 3SG beauty Q spoil O 'But look, this age, is it bad or is it good?
- (98)gèlbá sà wà ká nt-àh n DEM better 1SG PREP INF pay-2SG бà skú svì sà n-kà COM 1SG **UNSP.ANAPH** PREP-INF thing dál-á-n vàngáy do-GO-3SG how 'It's better that I pay you for it. Otherwise, what will I do?'

The marker $w\dot{a}$ can occur between the two clauses, and then the clause that precedes it is the clause to which the ensuing proposition is related. The marker $w\dot{a}$ codes the dilemma posed by the preceding clause. The second clause often ends with an interrogative marker:

- (99)mbú dàp vl-à-k wàl nà only give-GO-1SG woman 1SG pardon kà ďál ká sà vàngáy wà PREP INF POS 1SG do how but 'Sorry, could you give me back my wife? Otherwise, what can I do?
- (100)ká cík žídèp zàm tá ngàn zà full (F.) MF GEN 3SG EE already eat ká lùw-á-n vàngáy hà wà say-GO-3SG how PREP INF DEM 2SG 'He already ate his fill. So how are you going to tell him?'
- nd-á ká ndà (101)sà gìz-é-ŋ mà má tell-GO-3SG 1SG go-GO INF REL REL. go bàm-à vòwà sà n ká gàr νí PREP INF eat-GObut 1SG search then who 'I came to tell him to go and to eat, but who will I look for?

The source of the marker wa may be sought in the segmentally identical deictic marker wa, which as a modifier has an identical tone with that of the preceding syllable.

11. Coding counterexpectation

Counterexpectation, resulting from the preceding discourse or from the speech situation, can be coded by the marker àmmá borrowed from Arabic via Fula or Hausa.

- (102) kéké kàm gúzàk ká mbàl
 before TOP maternal uncle INF help
 kálvày zá
 paternal uncle EE
 'In the old times the maternal uncle helped the paternal uncle.'
- (103) àmmá gúzàk wàcín hà n kíndìn ábà but uncle DEM 2SG PREP fear ASSC mbén
 ANAPH
 'But the maternal uncle, you fear him . . .'

12. Conclusions

The intended truth is the unmarked epistemic modality of the indicative clause. All other epistemic modalities, such as dubitative and hypothetical must be overtly marked. Deontic modality is coded by inflectional changes, more specifically, by tonal changes in the verb. Deontic modality may also be coded by modal adverbs occurring at the beginning of the clause.

Chapter 13 End-of-event coding

1. Introduction

Mina has grammaticalized a category, which for the lack of a better term we call 'end-of-event'. Since this is not a commonly found category, the purpose of this chapter is to provide a description of the category, the evidence for its existence, the interaction of the category with other categories in the language, more specifically with the categories of aspect and tense, and the implications of the existence of the category. Because the category is linked with the domain of modality, with the domain of discourse coding, and with the systems of tense and aspect, it is an important component of the grammatical structure of Mina.

2. The form and syntax of the end-of-event marker

The end of event is marked by the form za in phrase-final position, and za or z, depending on what follows it, in phrase-internal position. The tone on the marker za is polar with respect to the preceding tone. The form za and its phonological variants are glossed as EE.

The syntax of the end-of-event marker is interesting in that it distinguishes between the direct object of the verb and all other complements, thus providing a tool for determining the categorial status of a constituent. The form za follows the direct object:

(1) ngùl-yíì s kà dzán-á nám husband-PL 1SG INF find-GO 1DU skàn zá thing EE 'My husband, I found us something.'

The end-of-event marker occurs before a locative complement, regardless of whether the locative complement is preceded by a preposition. Thus, the noun dámù 'bush' which is not preceded by a preposition is inherently locative, and if it also follows an inherently locative verb, the end of event marker must occur after the verb:

(2) sév ngùl ngùl tìy mà husband husband REL see SO tsú tìy-ú dámù á wàl zà see-3SG wife EE bush 3SG went 'So the husband saw that the wife went to the bush.'

The end-of-event marker precedes the infinitival complement:

(3) tò kwáykwáy zà ká gàd-á táŋ take-GO hyena INF okay go EE kúhú fire 'Okay, the hyena went to get fire.'

The marker za precedes the possessive subject pronouns:

ngàn **(4)** sév báv dé6 ìdá zà ká chief take EE PRED home then 3SG POS 'Then the chief took the calabash home.'

If the verb is transitive and there is no object, the marker za follows the verb:

(5) zòm zòm zòm á zòm zá eat eat eat 3SG eat EE 'He ate a lot.'

3. The function of the end-of-event marker

The form za functions in the domain of modality, in that it implies that the event is real, regardless of its absolute time or aspect. The evidence for the affirmative value of the marker za is provided by the fact that it occurs only in affirmative clauses. It does not occur in negative clauses,

i.e. in clauses that explicitly state that an event did not or will not occur. All examples in the present chapter confirm this hypothesis.

The notion of event contrasts here with the notion of state. Only events can be marked with the marker za. The description of states cannot have this marker.

The marker za occurs with the last clause in a sequence of clauses where each clause describes an event following the preceding one. If there is a clause following za, it codes a different event:

(6) *6àt* 6àt màshíl á màshíl vìm sév á 3SG steal 3SG take steal water then take náz ngán ká wà á náz nà iíbà throw 3SG PREP PREP pocket DEM throw 3SG kán kán zà cross 3SG EE cross

'Then he up and stole the water, threw it into his pocket, and crossed [the river].'

The evidence that the end-of-event marker za is not a tense category is provided by the fact that it can occur in the future and in the past time reference:

- (7) wàl ngòn mòsáw zà woman 3SG grill EE 'His wife will grill.'
- (8) *6àt* á hàt-ú tsànád tá gàmták take 3SG take-3SG gizzard **GEN** chicken 6ám 6ám zà EE eat eat

'She took the chicken gizzard and ate it.'1

Here is an example whose absolute time is undetermined:

^{1.} This is a serious infraction in Hina customs. The chicken gizzard is reserved only for the head of the family. Wives and children should not eat it. Similar restrictions exist among other groups in Northern Cameroon.

(9) ángà hì kíndín ábà gúzàk ďá skù ASSC maternal uncle exist 2PL NEG fear kindin zà áhà νí ASSC who fear EE 'If you do not fear your maternal uncle, who are you going to fear?'2

The evidence that the marker za is not an aspectual category is provided by the fact that it occurs with various aspects, more specifically in sequential past, and the independent and the dependent habitual aspect. Here is an example in sequential past:

(10) bàn i bàn zá
cross 3PL cross EE
'They crossed [the river].' (What follows is an unrelated paragraph.)

Habitual aspect:

(11)tàt kám sév á ndí ngà then PRED 3PL TOP (F.) 3PL HAB catch kì zá ká nd-á kà dá tàn go-GO EE INF INF cook DED meat 'As for them [the hyenas], they just catch the meat [and] bring it for cooking.' (i.e., they have plenty of meat)

Here are examples of the use of the end-of-event marker with the perfect aspect:

(12)kim kim cìkíd zá má mà REL listen listen **COMP** REL sesame ndàv-yi zà fall-STAT EE 'The one who was good at listening said, "A sesame seed fell down "

² One fears one's own father less than one's maternal uncle. One does not quarrel or dispute with one's maternal uncle. The maternal uncle can order his nephew to do anything, and the nephew has to obey.

- (13) séy áb dùwáŋ mbéŋ làkwát then (H.) ASSC back ANAPH river mà nd-à-y zá
 REL go-GO-STAT EE
 'And afterwards the river came.'
- (14) séy hìdíi wà mò ndá-y zà then people DEM REL come-STAT EE 'Then those people [the hyenas] came.'
- í (15)nd nd rá í rá D.HAB D.HAB 3PL 3PL go go dzáŋ nd rá ndà làkwát D.HAB find river 3PL go go nd-à-y mà zá go-GO-STAT EE REL.

'They were going, going, going, till they came to a river, which was filled up.' (A new discourse paragraph follows.)

The end-of-event marker can occur in the deontic mood:

(16)má ndà zá gwà OPT EE go first túgwà hà νà νí patience 2SG call who 'Let her go first. Patience, who are you talking about?'

The distribution of za within discourse provides one piece of evidence for its end-of-event function. The marker occurs at the end of stories, when nothing in the story can follow:

(17) wàcin dár tá ndìr ká gàg that dance GEN sorghum PREP thresh 'That is the festivity for the threshing of sorghum.'

> tók zà end EE 'It ended.'

Several clauses may follow one another, each having an end-of-event marker:

(19)lúgà ngàn wàcin mà gáy zà bowstring 3SG DEM REL spoil EE ngàm kámì wàl ngàn kà 6ám because why woman 3SG INF eat tsànád tá gàmták wà zá **GEN** chicken DEM EE gizzard 'His bowstring is spoiled. Why? Because his wife ate the chicken gizzard.'

The end-of-event marker may be used in a clause that is followed by a temporal marker, but then the second clause is not a result or an explanation of the preceding clause:

(20) kớ fàk wàl zá
INF give neck EE
'He started to yell' (from joy).

séy mìd fàk then wind give 'Then a wind blew.'

4. The end-of-event marker in protasis clauses

The end-of-event marker must occur in temporal and conditional protasis clauses of sentences of the type: If/when X is done then Y. The presence of the end-of-event marker in such clauses provides further evidence for its postulated function. Here are examples of conditional protases:

mànjé wàhin sà (21)ndìká kà dzán n better (F.) DEM 1SG PREP INF find now gómbòk sá ká ndrák zá n frog 1SG PREP INF EE smash mbàd wìrnjík become ash

'From now on when I find a frog, I will smash it to ashes.'

(22)sá skèn wà syì há ká lùw-á-ŋ INF thing DEM COM 2SG say-GO-3SG nòk wùdà gi kàđám vl-á zà give-GO 1PL food POL EE calabash dàp dá svì à ndí tà COM 3SG HAB make DED only 'Here you have this thing. If you say to it, "Calabash make us food, please," then it just cooks.'

Examples (23)-(25) constitute one fragment:

- ďál (23)mbà ká zà svì á n pár COM 3SG PREP child **INF** do EE another jí6 náz ká throw into hole 'Each time she was doing that, she took one child and threw it into the hole'
- (24) ká dál zà syì hàa tí pic INF do EE COM until day 'She did like that until the day'
- wàží túwàď zà (25)ίi zá bákà syì finish EE COMP today children they COM tàlàn tùkón há ká dá 2SG PREP INF cook head 2SG 'When there were no more children, they said, "Today you will cook yourself."

Here is an example of the temporal protasis with the perfect aspect:

(26) mò ndà-y zó á ìdá

REL go-GO-STAT EE PRED home
séy nd-á dà
then go-GO cook
'When she returned home, she cooked.'

The end-of-event marker in the protasis clause may also occur with repetitive events:

And finally, here is a piece of evidence from the elicitation process. In the process of elicitation, when each elicited clause represents a separate event, most indicative clauses are given with the end-of-event marker za, because each clause describes a separate event:

(28)wál tá ká kà kà zá INF neck GEN EE cut cow 'He slaughtered a cow.'

5. Evidence from the absence of the end-of-event marker

Negative evidence, i.e. evidence from the absence of the marker, cannot be taken to be as strong as evidence from its presence; nevertheless, those cases when the marker cannot occur share a number of characteristics that rule out za because these characteristics are in contrast with the postulated function of the marker. Evidence that za marks some kind of end-of-event is provided by the fact that it does not occur if a clause is followed by its logical consequence:

fàd-á (29)záván-yíì zá ná guinea fowl-PL **COMP** shave-GO 1PL tàlàn ká gí please head POS 'The guinea fowl said, "Shave our heads, please."'

'So, she would shave their heads. Shave, shave, shave'

The end-of-event marker cannot be used in any of the verbless clauses, such as the equational, possessive, existential, and locative, because of the internal semantic contradiction: An equational clause cannot have an end of the event.

The end-of-event marker za may not occur in a clause with adverb mbé 'almost' because this adverb implies a continuation of the situation:

(30) láy mbé ká tòk *(zà) field approach INF finish EE 'The field is almost finished.' (elicited)

Cf.:

(31) láy mò tòk-yí zà field REL finish-STAT EE 'The field is finished.' (elicited)

In the following fragment, the first sentence does not end in za as it is not the end of the event, but the second one does:

(32) đá đá á đà wàné draw:GO draw:GO 3SG draw a lot (F.) 'It rained a lot.'

séy, áb dùwáŋ mbéŋ làkwát then (H.) ASSC back ANAPH river má nd-à-y zá
REL go-GO-STAT EE
'And afterwards the river came.'

One cannot insert the end-of-event marker za after the first clause, because the second clause in the sentence continues description of the same event:

(33) *dá dá á dô wàné zà draw draw 3SG draw a lot (F.) EE for: 'It rained a lot.'

séy, áb dùwáŋ mbéŋ làkwát then (H.) ASSC back ANAPH river má nd-à-y zá
REL go-GO-STAT EE
'And afterwards the river came.'

The end-of-event marker does not occur in clauses where an adverb or some other means of coding rule out an end-of-event situation:

(34) í ká dàb-á-k žìŋ gwád 3PL INF ask-GO-1SG times many 'They asked me many times.'

Cf.:

(35) i ká dàb-á-k zà 3PL INF ask-GO-1SG EE 'They asked me.'

6. The end-of-event and the negative clause

The end-of-event marker za cannot occur in negative clauses. This fact supports the hypothesis that the function of the end-of-event marker is affirmative. The negative equivalent of the end-of-event marker has the form: $k\partial$ Verb $d\hat{a}$ $sk\hat{u}$ where $k\partial$ is the infinitive marker used to code pragmatically dependent clauses, $d\hat{a}$ is the phrase internal form of the verb $d\hat{a}h\hat{a}$ 'exist', and $sk\hat{u}$ is the negative marker:

- (36) ká cín ká tà zá mbà kìm father INF feel EE child INF pay náwdùm ďá skù exist **NEG** pain (F.) 'His father has paid, and the child has not suffered.'
- (37) kó ká lìm kó đá skù even INF see even exist NEG 'She has not seen anybody.'

In the following fragment, which consists of several clauses, only the last one would call for the end-of-event marker if it were an affirmative clause. However, since it is a negative clause, instead of the marker za the marker da is used:

(38)pàdák njûl mà 6át pàdák á pàďák-á take 3SG split-GO REL split grass split nástà ngàn nà mán PREP LOC.ANAPH enter (F.) 3SG 'The one who splits grass split a stalk of grass and entered it.'

```
ngàn
             ká
                  nà
                          màn
                                ván
                                       ká
tsú
      3SG
             inside PREP
                                rain
                                       INF
                          it
enter
mhàlém
             ďá
                   skù
touch
             exist
                   NEG
```

7. Grammaticalization sources of the end-of-event marker

There are no obvious grammaticalization sources for the marker za. One possible source would be the verb nza 'to sit, to live in a place'. Such verbs in many languages have grammaticalized into copulas, a potential candidate for the end-of-event marker. The copula za could be postulated in a few instances. One of them involves superlative modifying construction:

(39)báytà gómbòk-yíì mà zá zá frog-PL large **COMP** REL EE fú kàm tàn svì hí hí wàn COM 2PL TOP all DED 2PL sleep:IMPER mùkàdkádán sùlúd sùlúd kà down upside down two two 'The largest of the frogs said, "You all lie down on your backs in pairs . . . '

The argument that $z \ge i$ in the above example is the verb 'to be' is provided by the fact that modifying constructions also occur without this marker, but in such cases they do not have superlative meaning. Copulas are used in many languages to code focus (cf. Frajzyngier, Krech, Mirzayan 2002). In the case at hand, the copula codes the superlative function of the modifying construction.

More compelling evidence that the end-of-event marker comes from the verb 'to be' is provided by locative predicates coding the direction "from," which are coded by the marker za occurring after the verb:

(40) bitsì nd-á zò tikì
Bitsi go-GO EE where 'Where does/did Bitsi come from?'

^{&#}x27;He entered it [the grass], and the rain did not touch him.'

The use of the form za to code direction "from" originated in its meaning as the verb "be," the locative phrase having the meaning "be at a place X." The full form of a locative predication would have the form "Subject came was at X". The evidence for the existence of such expression is comparative, in that this is the structure recorded in other Chadic languages. Moreover, other Chadic languages use the equivalents of the verb 'to be' in such constructions.

The other potential cognate of the marker za is the debitive form az of the verb nd 'go'. Although semantically it could serve as an auxiliary, we cannot account for the absence of the vowel \dot{a} in the auxiliary verb.

Finally, the third potential source for the end-of-event marker is the de dicto complementizer zá. The segmental structure is similar. The tones, however, are not. Moreover, the complementizer never loses its end-of-event marker while the The functional connection between verbs of saying (the potential source of the de dicto complementizer) and aspectual markers has been attested in in other languages of Africa e.g. in Kanuri (Hutchison 1984) and Amharic (Cohen 1937).

Hence, we opt for the derivation of the end-of-event marker from the verb 'to be'.

8. Conclusions

Mina has grammaticalized the category "end-of-event," which belongs to the domain of representation of structure of events. The category is coded by the marker za occurring after the verb or after the direct object. If there is a locative or another complement, the end-of-event marker precedes those other complements. This marker occurs only in affirmative clauses.

Chapter 14

Negation

1. Common formal characteristics of negation

Negative clauses differ from their affirmative counterparts in a number of features, the chief among them being the use of dependent aspects and tenses. Negation for most types of clauses is marked by the clause-final particle sku. Subject pronouns in negative clauses have high rather than low tone.

The negative marker is placed directly after its scope, i.e. after the predicate that is negated. Here is an example of the negation of a clause with an adjectival predicate:

(1) á tì-y-á-h hà nék skù
3SG see-GO-2SG 2SG good NEG
'He does not see you as a good person' (when considering a marriage prospect)

The negative marker $sk\hat{u}$ is reduced to $sk\hat{\sigma}$ in phrase-internal position:

(2) á sán skà bà 3SG know NEG more 'She does not know anymore!'

There are, however, negative clauses that do not involve the marker $sk\dot{u}$. These are clauses in the unmarked aspect and in the prohibitive mood, as well as verbless clauses.

2. Coding the scope of negation

If there are several predicates in the sentence and the negative marker occurs at the end of the sentence, the scope of negation is marked by additional means. More specifically, in the habitual aspect, the scope of negation is marked by the dependent habitual aspect marker and the verb of existence dáhà placed after the negated predicate. The negative marker skù occurs in sentence-final position:

(3) ďá ká á tì-v-á-h hà see-GO-2SG 2SG 3SG D.HAB exist as hìdì skù mà gévgéy REL bad **NEG** man 'He does not see you as a bad person.'

If the predicate contains an infinitival complement, it is the predicate rather than the complement that is negated. Pronouns have low rather than high tone when the verb is infinitival:

(4) hà kúl kà ší skù 2SG able INF run NEG 'You cannot run.'

3. Negation of verbless clauses

The negation of an equational clause with adjectival predicate or an identificational clause nominal predicate, requires the negative particle $sk\hat{u}$ at the end of the clause:

- (5) hìdì tớ nék skù man GEN good NEG 'This man is not good.'
- (6) ŋkwù tá lìvèŋ nék skù goat GEN black good NEG 'The black goat is no good.'
- (7) wàl tùk skù woman 2SG NEG 'It is not your wife.'

The negation of an existential clause has the verb $d\hat{a}h\hat{a}$ followed by the negative marker $sk\hat{u}$:

- (8) kwáykwáy-yíi wà zá bákà hì đá skù hyena-PL DEM COMP today meat exist NEG 'The hyenas said, "Today, there is no meat."
- (9) mà tá gwidin dá skù REL GEN single exist NEG 'One grain is missing.'

Possessive clauses that have the verb of existence dáhà retain this verb in the negative mood:

- (10) wàl tùk dá skù woman 2SG exist NEG 'You do not have a wife.'
- (11) kó hìdì ngòn đá skù even man 3SG exist NEG 'He does not have anybody.'
- (12) bàkàlàf dàbàráy ngàn dá skà buffalo strength 3SG exist NEG bá zídèp

 ASSC more 'The buffalo does not have strength anymore.'

4. Negation and future tenses

The future tense in the negative clause is marked by a construction consisting of the verb $gr\grave{a}$ 'search, want' realized as $g\grave{a}r$ in phrase-internal position, the infinitival marker $k\grave{a}$ preceding the main verb, and the negative marker $sk\grave{u}$. The third-person singular pronoun is \acute{a} with high tone:

- (13)hìdì wèhin à zá ván á ká n DEM 3SG **COMP** rain 3SG PREP INF man ďà gàr kàsám kà nd-á-k á body fall 3SG touch-GO-1SG INF want skù **NEG** 'This man said, "Rain, when it falls, will not touch me."
- (14) á gòr kó mìsíl skù 3SG want INF steal NEG 'He will not steal.'

The negative future may be used in questions about the truth but crucially not in specific questions:

(15) á gèr ká mìsíl skè vú 3SG want INF steal NEG Q 'Will he not steal?'

Specific questions in the negative future are coded through a construction consisting of the dependent future marker n k σ followed by the verb $k\acute{a}l$ 'refuse' and the infinitival clause. There is no clause-final negative marker. Unfortunately, there are no examples of specific interrogative negative clauses in our texts; hence, the examples have been elicited:

- (16) á n ká kál ká mìsíl skà mí 3SG PREP INF refuse INF steal NEG what 'What he will not steal?'
- (17) mà n ká kál kà nd-á ví
 REL PREP INF refuse INF go-GO who
 'Who will not come?'

5. Negation and the dependent aspect

The negation of clauses that in the affirmative are marked by reduplication of the verb requires the dependent form, with the infinitival marker $k\partial$, the verb $d\hat{a}h\hat{a}$ 'exist', reduced to $d\hat{a}$ in phrase-internal position, and the negative marker $sk\hat{u}$, in that order:

- (18) ván kó mbòlém dá skù rain INF touch exist NEG 'The rain did not touch him.'
- (19)sév wàl wà kám ká nàz tál DEM TOP INF walk then stop woman dáp ďá skù exist NEG still 'Then, that woman still did not stop taking her walks.'

The negative particle may occur with the end-of-event marker za, but such clauses mark rhetorical rather than genuine negation:

(20)kàgám nà wà kà kím zá mìnjé speech 1SG DEM EE now INF see skà νù NEG 0 'My word, he got it, didn't he?'

6. Negation of the perfect

The negation of all forms that have the initial $m \partial$, viz. the relative and the stative marker, is coded by the form $t \dot{a} k$. The predicate with $t \dot{a} k$ may optionally be followed by the negative marker $s k \dot{u}$:

(21) mà mbád ábà ándàl ví
REL surpass ASSC magic (F.) who
'Who surpasses in magic?'

mà ták sán REL NEG know 'Nobody knows.'

(22) tíl à nd-á á wtó mò ták
go 3SG go-GO PRED house REL NEG
wàŋ-yí
sleep-STAT
'She went to the house of the one who does not sleep.'

(23)séy à gàr ngùl mà ták husband REL 3SG NEG want SO ngàlngàl skù màlá kám NEG otherwise (F.) scarify scar à mbál skù 3SG like NEG

'She wants somebody who does not have a scar. Otherwise she does not like any man.' (Since almost every Hina man has a traditional facial scar, this is an excuse for the woman not to accept any man.)

The origin of the form $t\acute{a}k$ as a negative marker may be sought in the verb $t\acute{a}k$, which has a variety of meanings including "block, prevent":

- (24) há kà ták kà 2SG INF block POS 'If you prevented him . . .'
- táŋ (25)táŋ à zá sà zà nd-á 3SG 1SG COMP walk walk EE go-GO widin kà kàtàf wàcin sà ták ká block road snake INF POS DEM 1SG ďivà ndə tán beat DED start 'He said, "I was walking, walking, and there was a snake

The end-of-event marker za is replaced by da in negative clauses:

(86) mò mbád dá skù

REL surpass exist NEG

'Nobody is superior!' (lit. 'nobody is surpassed')

blocking the road, and I started to hit it."

(27) kó mà láb-yíì dá skù
QUANT REL wet-PL exist NEG
'Not even one is wet.'

The sequence dá skù can constitute a complete clause:

(28) mó mbód zó v-yíì dá skù REL surpass EE who-PL exist NEG 'Who is superior? Nobody.'

7. Negation of the habitual

The negation of clauses in the habitual aspect is coded by the dependent habitual marker $r\grave{a}$ (reduced to $r\grave{a}$ or r in phrase-internal position) and the negative marker $sk\grave{u}$. Subject pronouns have high rather than low tone:

- (29)hà wáŋ wáŋ há lìm wàl sleep sleep 2SG 2SG see woman rà skù D.HAB **NEG** 'You stay for a long time without finding a woman.'
- (30) á tùk há bốn rồ skù
 PRED you 2SG think D.HAB NEG
 'You are not thinking.'
- (31) kó wál nd rà skù even (F.) neck go D.HAB NEG 'But the voice does not go out as before.'
- (32)tìy-á séy tì á kà mhí like 3SG see-GO that SO see á ďäl rà skù D.HAB 3SG do **NEG** 'Then she saw that one does not do it like that.'
- (33)á skàn ďà vl-àh rà skù give-GO thing D.HAB 3SG **NEG** exist kó ngàn mbán à nzá stay:GO 3SG.POSS 3SG cut 'If she does not give you something, even if she stays away, who cares.'?

(34) ngùl ngòn à dìs
husband 3SG 3SG cultivate
r skù màsálád
D.HAB NEG lazy one
'Her husband does not farm. He is a lazy one.'

The negation may be coded by the marker ra and the interrogative marker $v\hat{u}$ with low tone; thus, the basic marker of negation $sk\hat{u}$ is not used. Such clauses do not code only negation but also an emotional state of the speaker, such as displeasure or astonishment:

- (35)bín céh à zá á ná PRED house father 1PL.EXCL 3SG **COMP** rà νù wáŋ sleep D.HAB Q '[Mother] said, "One cannot sleep at the house of your father!"
- (36) ngùl nó zòm skòn nó husband 1SG eat thing 1SG r vù D.HAB Q 'My husband, he does not eat my food!'
- (37)nd-á-y áa sà mà zá hí go-GO-STAT EE Oh 1SG REL 2PL sà máv rà đáh νù D.HAB drink beer rather O 'Oh, I came. "So, you are drinking beer, aren't you?" (dábà 'rather')

8. Prohibitive

The prohibitive for the second person is coded through a construction consisting of the second-person pronoun + verb + negative marker $sk\hat{u}$. The subject pronoun has low rather than high tone, which makes the construction different from negative clauses. The verb has high rather than low tone, which makes the construction different from the imperative.

- báy hà (38)zá dá kàđám **COMP** 2SG chief bring calabash tá mà ká skù GEN DEM here **NEG** 'The chief said, "Never bring this calabash here." (kàdám tá mà is a reduced form of kàdám tá màcín 'this calabash'.)
- (39) hí (n)zò dám skù hí ndò wùtá 2PL stay field NEG 2PL go home 'Do not stay in the field, go home!'

Prohibitive constructions of the type illustrated above are rather rare in the texts. Instead, two other constructions occur more frequently. One uses the existential verb dahà in the negative clause:

(40) hà đá kà bán skù
2SG exist INF think NEG
'You should not think.'

The negative future is also used in the prohibitive function. Such prohibition is considered less forceful than the prohibitive construction with $sk\hat{u}$ alone:

- (41)á tàkár à zá há n gàr 3SG EE PRED PREP turtle 2SG want kà ďá skù vàm MF draw water NEG 'He told the turtle not to fetch water.'
- (42) há gèr kè dál á pát skù 2SG want INF do tomorrow NEG 'You should not do [it like that] tomorrow.'

9. Negation with interrogative

If the negation occurs in an interrogative clause, the negative marker $sk\hat{u}$ precedes the interrogative marker:

(43)à zá sà wàcin sémbàn ďá 3SG **COMP** DEM strength (F.) 1SG exist skà νù NEG 0 'He said, "Am I not strong?" (lit. 'does not my strength exist?')

We have no reliable source of grammaticalization of $sk\hat{u}$. The only morpheme remotely similar to the negative marker is the word $sk\hat{\sigma}n$ 'thing'. This could be acceptable as the source of $sk\hat{u}$ under the grammaticalization conditions similar to those that led to the development of the French clause final negative markers pas, point, etc. Essentially, the marker $sk\hat{\sigma}n$ would have first been used in the sense "thing," which in negative clauses would have produced something equivalent to "not a thing." Such grammaticalization must have also involved reduction of the final nasal. Such a reduction, however, is not otherwise attested in the language.

10. Negative adverb wílkíl 'fail'

Negation can be coded by the auxiliary predicate wilkil 'fail', followed by the infinitive form of the verb:

(44) ván wilkil ká ndá-hà rain fail INF go-GO 'The rain failed to come.'

It is possible that the expression wilkil consists of two morphemes, the verb wil 'lack' and the verb kúl 'be able', whose vowel undergoes fronting under the influence of the preceding vowel. An argument for this analysis is provided by the fact that the forms wil and kúl can occur independently. The argument that wil is a verb is provided by the fact that it can be followed by object pronouns:

(45) láy wíl-á-ŋ time lack-GO-3SG 'It is not time yet.'

The form kúl 'be able to' requires infinitival complements:

(46) bàkàlàf nà gómbòk zá buffalo COMP PREP frog kúl hà kà ší skù **NEG** 2SG able INF run 'The buffalo said to the frog, "You cannot run"

The combination of the two forms may well result in the phonological form wilkil and explains why this form is followed by the infinitival complements.

There is also a form kil, which is more difficult to identify. It can follow the existential marker dá and precede the negative marker skù:

(47)mhà ďá kìl mbí ká mbù skù give birth 3SG INF child exist **NEG** 'She has not yet given birth.'

The simple negative answer to a question about truth is $\dot{a}\dot{a}w$ 'no!'. Its affirmative equivalent is váw 'yes!'.

11. Conclusions

The fundamental means of coding negation are high tone on subject pronouns, use of the dependent aspects and tenses, and, for most types of negative clauses, the use of the clause-final particle $sk\hat{u}$. The auxiliary dáhà 'exist' is used in past singular and in habitual negative clauses. The perfect negative is coded by the auxiliary ták 'prevent, block'.

Chapter 15 Verbless clauses

1. Introduction

The chapter includes a description of several types of sentences whose common characteristic is that in the present tense their predicates are not verbal. The types to be considered here are equational clauses with nominal, possessive, and attributive predicates, and locative sentences. In all time references other than present, the equational clause must have a verb. Some types of clauses do not have a verb in those other time reference either. Equational clauses cannot have aspectual markers.

2. Equational clauses

Equational clauses with present time reference have the form Subject Predicate, i.e., there is no copula. The subject may be nominal, pronominal, or even clausal. The predicate may be nominal, including nominal expressions derived from verbs; numeral; or adjectival. The subject constitutes a separate phrase, as evidenced by the fact that final vowels of subject phrases are never omitted, and that demonstratives of subject phrases occur in their phrase-final forms. This indicates that the subject phrase in equational clauses has a different phrasal status than the subject phrase in verbal clauses, which, unless it is also a topic, has the final vowel deleted. Here are examples of subject phrases ending in demonstratives, with their phrase-final forms ending in η (examples 1-3 are in sequence in a text):

(1) míndí wàcín màllúm other DEM teacher 'One is a teacher.'

- (2) míndí wàcín gáw other DEM hunter 'Another is a hunter.'
- (3) mindi wàcin mòsil other DEM thief 'Another is a thief.'

The pronominal subjects of equational clause have the same segmental form as the pronominal subjects of verbal clauses, but unlike those in verbal affirmative clauses, they have high tone:

- (4) há skùláh nàŋ
 2SG in-law 1SG
 'You are my son-in-law.'
- (5) ngám só mbò ngòŋ because (F.) 1SG child 3SG 'because I am his child'
- (6) há và nàŋ
 2SG father 1SG
 'You are my father.'

Compare the low tone on the pronoun $h\dot{a}$ when it serves as the predicate of an equational clause:

(7) wà hà đáb vù DEM 2SG so Q 'So, it's you?'

The third-person plural pronominal subject $t \partial t \partial$ has low tone, but recall (Chapter 5, Section 4) that this form does not occur as a verbal subject. The verbal subject for the third-person plural is i:

(8) tàtà gwád á bín á màcín 3PL plenty PRED room PRED DEM 'They are numerous in that room over there.'

Equational clauses provide evidence that \dot{a} (i.e. the low tone form) is a subject marker in verbal clauses rather than an independent third-

person pronoun. The pronoun \dot{a} may not be used as the subject in equational clauses:

(9) *à wàl ngòn
3SG woman 3SG
for 'She is his wife.'

The third-person pronominal subject in equational clauses is coded in two ways. One is by the proximate deictic marker wà or wàcin (when the subject is topicalized) for non-human nouns. The other is by the anaphor mbi for human nouns. The deictic marker in clause-initial position, without any other elements preceding it within the clause, has low tone:

(10) séy báy zá wà dámà so chief COMP DEM good 'The chief said, "That is good."'

Pronominal predicates of equational clauses are drawn from the set of independent pronouns:

(11)báy mížì mindéŋ zά mhí other one REL:DEM 3SG chief COMP hà mà dáh νù bring 2SG REL 0 The chief said, "The other one, is it you who brought him?"

3. Identificational clauses

Identificational clauses are those whose subject is an entity present in the environment of speech, but not overtly represented in the clause. Such clauses have pleonastic subjects wà or wàcin for non-focal subjects and mbi for focal subjects.

(12)ngàlámbrà bàhá lèk lèk wà DEM again story Lek Lek kám hídà táŋ name GEN DED man 'This is a story of Lek. Lek is the name of this man.'

- (13) wàcin dàr tó ndìr kó gòb DEM dance GEN sorghum INF thresh 'This [the topic] is the dance for the threshing of sorghum.'
- (14) fú á mìdìgid báy wàciŋ gùgwáy
 all PRED court chief DEM festival
 tàŋ
 DED
 'Everybody into the front yard of the chief. It is the holiday.'

For subjects in focus constructions, one uses the marker mbi:

- (15) à zá mbí sày
 3SG COMP 3SG 1SG
 'He said, "So it is me."
- (16) à zá mbí hòŋ
 3SG COMP 3SG 2SG
 'He said, "So it is you."
- (17) à zá mbí mbín 3SG COMP 3SG 3SG 'He said, "So it is him."
- (18) à zá mbí nàmú 3SG COMP 3SG 1PL 'He said, "So it is us."

4. Equational clauses with possessive predicate

There are two constructions coding possessive equational clauses of the type X is Y's. One consists of the subject and the possessor without any preposition preceding the possessor:

(19) tèbén tùkón granary 2SG 'That's your granary.' (tèbén 'large granary in the courtyard')

The other construction involves the locative predicator \acute{a} and the genitive marker $t\acute{a}$. Some pronouns following the possessive marker are

possessive, having incorporated the preposition. The first-person singular form is $t\acute{a}$ $n\grave{a}\eta$. With a possessive that already has the preposition $t\acute{a}$ incorporated, one may use another genitive or the locative predicator \acute{a} but not the two combined:

- (20) Bà tá ngid á tákóŋ [tókóŋ] cow GEN DEM PRED GEN.1PL 'The cow over there is ours.'
- (21) bà tá ngid tá tákón cow GEN DEM GEN 1PL 'The cow over there is ours.'
- (22) *\$\delta\delta\delta\tau t\delta\tau t\delta\tau k\delta\gamma\cow GEN DEM PRED GEN 1PL for 'The cow over there is ours.'

The preposition to may be used with other pronominal and all nominal possessors:

(23) ngàzù wà tú wàl nàn foot DEM GEN wife 1SG 'This is my wife's foot.'

5. Time coding in equational clause

Coding of time requires a verb, and equational clauses in times other than the time of speech are not verbless. Regardless of the tense to be coded, all tensed equational clauses use the verb $nz\dot{a}$ 'to stay, remain, be'.

5.1 Past in equational clauses

In natural discourse, the equational clause can be interpreted as having either past or present time reference:

(24) hìdì wàcin tùkùn skòn ngòn dá skù man DEM poor thing 3SG exist NEG 'This man was poor; he did not have anything'

One means of coding the past time of the state is through the addition of the adverb *kìdéy* 'in the past' after the equational clause:

(25) hìdì wàcín tùkùn kìdến skòn ngòn đá skù man DEM poor once thing 3SG exist NEG 'This man was poor, he did not have anything.' (he is not poor anymore)

5.2 Future in equational clauses

The future tense is coded by the verb nza 'remain' and one of the two means of coding the future in verbal clauses, viz. the end-of-event marker za, which follows the main verb, or the future marker n ka.

(26) hìdə tùkón à n ká nzà dám dámà compound 2SG 3SG PREP INF be good good 'Your compound will be well.'

6. Adjectival predicates

There are several types of constructions with predicates describing attributes of the subject. Which type is used depends on the inherent properties of the lexical attributes. These constructions force us to classify the attributes into three types.

6.1 Simple form of the predicate

The first type of lexical attributes includes those that are simply juxtaposed to the subject. To this class belong inherent adjectives (see Chapter 3, Section 5) nék 'good', pár 'another', báytàn 'large', fés 'small', gárţàw 'disorderly':

(27) gàdá ngàn fés ngà-ciŋ jar 3SG little like-that 'Her jar is small like that.' (accompanied a gesture of the hands)

- (28) à zá wàciŋ nék skù náz ká
 3SG COMP DEM good NEG throw POS
 dàwin dá
 behind house
 'He said it is not good. Throw it behind the house.'
- (29) mbà táŋ gárgàw dáy child DED disorderly too much 'The child is too disorderly.'
- (30) à zá skèn wà đámà 3SG COMP thing DEM good 'He said, "It is good.""

These predicates can have a proposition as the subject:

(31) dàr kó dàr bò tskò nèk dance INF dance ASSC evening good 'It is good to dance in the evening.'

The evidence that the predicate is adjectival is provided by the fact these forms can modify nouns and cannot serve as arguments. They do not have infinitive forms or indeed any other inflectional or derivational forms associated with verbs:

(32) sò n kò dĩn málày ngwáy pár 1SG PREP INF take Mala PL.ADDR another 'People, I will take another Mala.'

The categoriality of a lexical item as an adjective can be established through the examination of the segmental and tonal structure of the pronominal subject. If the third-person subject is \grave{a} , that indicates that the clause has in fact a verbal, not an adjectival, predicate:

(33) àmmá á n nòf nàn à gáy ngàm...
CONJ PRED PREP heart 1SG 3SG spoil because 'In my judgment it is bad, because...' (kò gáy 'spoil')

The predicate of an equational clause may be a numeral:

- (34) tètè mfád 3PL four 'They are four.'
- (35) sèfér m kwár mótà á wtó ká mfád driver REL drive car PRED village here four 'There is also the driver of the car. There are four of them in the village.'

The class of simple property concept predicates also behaves as a class when they modify a noun. They do not take any particles in modifying constructions.

6.2 Reduplicated form of the adjectival predicate

Some property concepts must be reduplicated in a predicative construction. Subjects of such predications may be plural and singular. Whether the property concept item is reduplicated is thus not a function of the subject:

(36) *i* prák prák 3PL equal equal 'They are all equal.'

Among the members of this class are židík židík 'heavy', kèféw kèféw 'light' (about weight), préw préw 'hard'. In the attributive function, these words occur in the simple form and must be preceded by the preposition tá:

(37) cìcélém žìdik žìdik wood heavy heavy 'The wood is heavy.'

Cf:

- (38) cicélém tó židik wood GEN heavy 'heavy wood'
- (39) cìcèlèm wà préw préw wood DEM hard hard 'The wood is hard.'

Cf:

- (40) cicélém tá préù wood GEN hard 'hard wood'
- (41) cicèlèm wà kèféw kèféw wood DEM light (weight) 'The wood is light.'

Cf:

- (42) cìcélém tó kèféw wood GEN light (weight) 'light wood'
- (43) dòk lìvèn lìvèn horse black black.
- (44) dòk ábà gà í lìvèŋlìvèŋ horse ASSC cow COP black 'The horse and the cow are black.'

Cf:

(45) rùkùtù wà tá lìvèŋ shirt DEM GEN black 'that black shirt.'

The reduplication of lexical items ending in a vowel results in the reduction of the final vowel of the first reduplicated item. Thus, dâmà dâmà 'good' is reduced to dâm dâmà in clause-final position, and dâmdâm in phrase-internal position:

- (46) pèl míndén dámdámà detach another normal 'He detached the other [it was] normal.'
- (47) màllúm dám dám skà vù marabout well well NEG Q 'Is the marabout not feeling well?'

7. Plurality coding through reduplication

The predicative reduplication of attributes formally involves multiple repetitions, and it indicates more than the normal amount of the attribute in question. The following example contains two attributive predicates: dáy dáy 'a lot' and fés 'little'. The first predicate is reduplicated; the second is not:

(48)wàží tùk-yíì dáy dáy dáy à 2SG children a lot for á t-án fes GEN:1SG little for 'For your children it is a lot, for me it is little.'

The reduplication of the attribute fés 'little' is considered internally contradictory.

8. Possessive propositions: X has Y

There are three means of coding possessive propositions. One is through the associative preposition b with the prefix \dot{a} for a singularpossessor subject and the prefix i for a plural-possessor subject:

(49)ngàm wàl áhà mhà ngàn ASSC child 3SG 3SG because woman ká gìz táŋ PREP INF tell **DED** 'Because the woman has a child and she will tell . . . '

The quantifier 'some' takes a singular subject pronoun:

(50)mìndín ábà bàtákàr dzàbán mìndín ASSC bag five some some ábà gàb ASSC ten 'Some have five thousand, others have ten.'

The notion of being pregnant is coded through the associative preposition followed by the noun damus 'stomach':

(51) ngalumbra wacin wala abə dəmus story DEM woman ASSC stomach mbuu a mbuu za beget 3SG beget EE 'Here is a story of woman who was pregnant and gave birth.' (written sources)

The third-person singular or plural subject pronoun occurs even if there is a nominal subject present:

- (52) mbà pár áb dàbàráy child other ASSC cleverness (F.) 'The other child is clever.'
- (53) mìnjé hìdì áb hìdó ngòn yóm now man ASSC compound 3SG also 'Now, if a man has his own compound.'

The quantifier $p\acute{a}t$ 'all' in the role of subject takes the plural associative marker i- $b\grave{a}$:

(54) pát í-bà pàtárì all PL-ASSC skirt 'All of them have a skirt.'

The associative marker with the first person singular is only $b\hat{\partial}$:

(55) àmmá số bà ìdá
but I ASSC house
'But I have a house'

Another means of coding possessive propositions is through the existential construction with the verb dáhà 'exist', where the subject of the verb of existence is modified by possessive pronouns:

(56) vòŋ ngòn đáhà cíŋ đáhà relative 3SG exist his father exist 'He has a relative, he has a father...'

The third means of coding the possessive clauses is through the locative construction: Subject Preposition (Preposition) Noun phrase $d\ddot{a}h\dot{a}$ 'exist'. If the possessor is human, the second preposition is r:

(57) fú dà fú á r tìn wà đáhà all kind (F.) PRED PREP 1PL.EXCL DEM exist 'We have all kinds of things.'

The negation of a possessive proposition is coded by the clause-final marker $sk\hat{u}$:

(58) á b dálà skù 3SG ASSC money NEG 'She doesn't have money.'

9. The locative proposition: X is located at Y

Propositions expressing the presence of a subject at a location may have two forms in the present tense. In one construction the locative predicator \dot{a} precedes the locative complement:

- (59) kwáyàŋ lw-á-k tìy njè say-GO-1SG squirrel look eyes 3PL gàmikìd gwád á dà dùwán plenty PRED behind compound monkey 'The squirrel looked. And as they told him there are many monkeys behind.'
- (60)bánày mbí pár à zá suffering 3SG COMP 3SG another tàlàn mbà-nàn á PRED head child-1SG 'The other said the suffering is on the head of my child.' (my child is suffering)
- (61) séy múà báytàŋ á dámù zìbír zìbír so tamarind large PRED bush dark dark 'There is a large tamarind tree in the bush, it is dark.'

- (62)mímèn à zá àmmá bìkáv à COMP truly God panther 3SG **3SG** gwád á mbál-á-kù nd-á Ьì bíŋ nàn like-GO-1SG go-GO meat plenty PRED room 1SG 'The leopard said, "God truly loves me, as there is a lot of meat in my room."
- (63) i zá mbò fés ngà cín á dámù
 3PL COMP child small like DEM PRED bush
 'They [shepherds] say there is a small child like that in the bush.'
- (64)kwáyàŋ kì mà màts-ví zá squirrel REL die-STAT EE meat báytàŋ dámù ά PRED bush large 'The squirrel said, "There is a large dead game animal in the bush."

10. Existential predication

The existential predication is coded by the verb dáhà 'exist':

(65) séy à gá skèn đá kàcíŋ so 3SG say thing exist DEM 'Then he said, "There is something here."

Evidence that the verb $d\hat{a}h\hat{a}$ is not a locative predicate is provided by the fact that it can cooccur with the local predicator \hat{a} :

(66) hágàm dáhà á bín ngàn daughter exist PRED house 3SG 'There is a girl at her house.'

11. Conclusions

The verbless clauses whose time is identical with the time of speech do not have a copula. If the predicate is a noun, the structure of the clause is Subject Predicate. Pronominal subjects of equational clauses, unlike

pronominal subjects of verbal clauses, have high tone. The coding of the future tense in an equational clause requires use of the verb $nz\grave{a}$ 'to live, to sit', and such clauses do not differ from verbal clauses.

There are two types of property concept predicates. Inherent adjectives follow the subject without any markers. Non-inherent adjectives are reduplicated for the predicative function.

Possessive propositions are marked through the associative preposition b, which precedes the possessum. The associative preposition is preceded by subject pronouns.

Locative propositions use the locative predicator \dot{a} before the locative complement.

Chapter 16

Interrogative clauses

1. Introduction

Mina has two types of interrogative clauses: clauses asking about the truth of the proposition ('yes/no questions', 'polarity questions'), and clauses asking about a specific element of the proposition ('whquestions', 'information questions').

2. Questions about the truth

Questions about the truth of a proposition are pragmatically independent clauses, in that no presuppositions are required for their interpretation. Independent aspects and tenses are used in questions about the truth. There are two means of coding a question about the truth. One is through tonal means; the other is through an interrogative particle $v\hat{u}$, which always comes at the end of the clause.

The tonal means of coding consists of raising intonation and the last high tone of the clause. We were not able to determine the functional difference, if any, between the interrogatives coded by intonation and interrogatives coded by the clause-final marker $v\hat{u}$:

- (1) kái ká nà INTERJ 3PL say 1PL lá βì nìnàŋ ká ndà meat 1PL MF go "Look," they said "We who own the meat, it is we who go?"
- (2) kàdám vl-á-k wùd gí calabash give-GO-1SG food POL 'Calabash, could you give me some food?'

(3) kàdám vl-á-k wùdá gí tsáy dàp calabash give-GO-1SG food POL finish only "Calabash, could you give me some food?", just like that."

Such questions usually express astonishment:

(4) hà gwád zá
2SG satisfy (about hunger) EE:Q
'Are you sated?'

Questions marked by $v\dot{u}$ alone do not imply any presupposition on the part of the speaker:

- (5) hà gwád zá vù 2SG satiate EE Q 'Are you sated?'
- (6) à gá skèn dá sùlúd vù 3SG say thing exist two Q 'He said, "Are there two things?"

The question about the truth of the proposition can also be marked by clause-final particle $v\hat{u}$:

- (7) lùw-á-ŋ ngásì kámbáy há say-GO-3SG like that stick 2SG n-dí ďál tá νù do it Q go "You say to it just like that, 'Stick, do it'?"
- **(8)** à lù-á zà hà nék skù ngà vù say-GO.2SG EE 3SG 2SG good NEG like Q 'Will he tell you that you are bad?'

'But you children, you are lazy. Aren't there plenty of fields in uncultivated areas?'

The interrogative clause may receive a raising intonation, realized as high tone on clause-final particle vú:

If the question is about alternative possibilities, i.e. if it consists of two questions in a sequence, the first marker vu has high tone, and the second marker vu has low tone:

The interrogative marker forms one phrase with the preceding proposition, as evidenced by the deletion of word-final vowels preceding the interrogative marker:

Grammatical morphemes are not deleted in phrase-final position:

An existential verb may be used in questions about the truth:

(14) bìbáv đá vù
God exist Q
'Is there God?' (elicited)

3. Questions about the truth with presuppositions

Incredulous questions are marked by the clause-final interrogative marker $y\hat{a}$:

- (15) kó mì đá skù yà even what exist NEG Q 'Isn't there anything?'
- (16)hì kà dzán-à nók kì zá yà PREP INF 2PL find-GO 1PL EE meat Q 'You found us meat?'

The clause-final marker ráy is the equivalent of the English rhetorical 'so what?':

(17) á zm-á-h wùdà zá ráy
3SG eat-GO-2SG food EE so what
'Even if he ate your food, it should not be taken against him'

4. Specific questions

4.1 Semantic categories of specific interrogatives

The specific interrogative marker is *i* suffixed to markers coding the grammatical role or the semantic properties of the argument or adjunct that the question is about. Some specific interrogative markers occur in clause-initial position and others occur in clause-final position. The position of the specific interrogative marker is not the same as the position of the corresponding arguments in the declarative clause.

The specific interrogative markers code the following semantic categories: human participant, the marker ν ; non-human participant, the marker m. The interrogative markers for place, time, reason, and man-

ner are formed through the addition of prepositions to the marker v or m or the use of other forms coding specific adjuncts.

4.2 Questions about the subject of an equational clause

Ouestions about the non-human subject of an identificational clause are formed by the demonstrative wà in subject position and mì in clausefinal position:

- (18)wà mí **DEM** what 'What is this?'
- (19)ží mí wà DEM EE what 'What is this?' (when the speaker knows the identity of the object and does not approve of what he or she sees)

The phrase-final form of the demonstrative may also be used in the interrogative clause, to code topicalization:

- (20)wàhin mi DEM what 'What is this?'
- (21) wàcin mi DEM what 'What is this?'

If there is a locative phrase in the clause, both wà and mì follow the locative phrase:

- (22)ngíd wà tá GEN DEM DEM what 'What is that over there?'
- (23)tá ngid wà mí GEN PREP DEM DEM what 'What is behind there?'

Questions regarding a human participant of discourse are marked by the interrogative vi in clause-final position. The third-person singular is coded by the third-person human anaphor mbi:

(24) mbi vi
ANAPH who
'Who is he?', 'Who is she?' (this expression is used if the speaker is told that somebody is calling him)

When people knock on the door one can simply ask:

- (25) *ví* who?
- (26) hà ví
 2SG who
 'Who are you?'

4.3 Aspect coding in specific interrogatives

A characteristic feature of specific interrogative clauses is that they have only the unmarked form of the verb in the past tense. The reduplicated form may not occur there. This indicates that the specific interrogative clauses are dependent clauses:

- (27) mà gáy ví REL spoil who 'Who spoiled it?'
- (28) mà mbád ví

 REL surpass who
 'Who is superior?'
- ngwáy (29)báy zá bàhámàn bákà bá chief COMP people Bahaman today still dzán-á nók mí 2PL what find-GO 'The chief said, "People, what else did Bahaman find us today?""

In the future tense, the specific interrogative clauses have the same sequence of morphemes as in independent clauses, viz. n ka:

(30)mà ká lùw-á-n νí séy bìkáv say-GO-3SG who PREP INF God REL SO 'Who will tell him, except God?' (Nobody can tell him, except God.)

4.4 Questions about subjects of verbal clauses

Questions about subjects of verbal clauses have the marker $m\hat{\partial}$ in clause initial position and the marker vi or mi, depending on whether the subject is human or nonhuman, in clause-final position. Since mò is identical with the relative clause marker, the interrogative construction may well be a form of the relative clause, corresponding to "the one who S is who/what?"

(31)bìkáv nàn 6èt-á-k áw тà mbà zà νí 1SG REL God take-GO-1SG child EE who oh 'O, my God, who took away my child?'

The end-of-event marker can be omitted:

(32)bìkáv nàn 6àt-á-k áw mà mhà νí oh God 1SG REL take-GO-1SG child who 'O, my God, who took my child?'

Questions about a non-human subject:

- (33)mìnjé wàcin hà lìm mà dál-á nàm mí DEM 2SG REL do-GO 1DU what now see 'Now, you saw, what happened to us?'
- (34)kwáykwáy ďáp wàn sùlúd sùlúd hyena 3PL ask sleep two two dál-á-n wà mà tàtà mí happen-GO-3SG but what 3PL what 'Hyena asked: they sleep in pairs, but what happened to them?'

Interrogative markers follow objects and adverbs of time or place, if any:

- (35) mà ŋ ká ntà gà n ví
 REL PREP INF pay cow 1SG who
 'Who will pay for my cow?'
- (36) báy zá mò y-á ví chief COMP REL call-GO.2SG who 'The chief said, "Who is calling you?"
- (37) mà ká ndà ká gàd-á wà pick fire-GO REL INF but INF go nòk kú νí 1PL fire who 'But who will go to find us fire?'

If there is an addressee in the clause, the addressee follows the specific interrogative marker. The addressee is thus outside of the propositional frame:

(38) séy ii zá mì yá ví kwáyàŋ so 3PL COMP REL call who squirrel 'Then, they said, "Who called you, squirrel?"'

The evidence that the question about the subject is coded by the relative clause plus interrogative intonation is provided by non-interrogative relative clause constructions, which have exactly the same form as interrogative clauses:

(39)ndà ká šì mà νí syì REL. INF who COM go run ká nď-á zà INF hit-GO EE 'The one who wants to run away, he hit him'

Compare the intonation in the interrogative clause:

(40) mà ndà ká šì ví REL go INF run who 'Who wants to go to run?'

4.5 Questions about the object

In questions about the object, the interrogative marker follows the verb or aspect marker, if any. If the object is human, the marker is vi; if the object is non-human, the marker is mi. The function of these markers as coding the object is assured by the presence of the subject in the position preceding the verb.

Human objects:

- (41)wà sà n ká gàr žì PREP INF 1SG search then who but 'But who am I going to search for?'
- (42)gómbòk hà zά **COMP** 2SG frog insult who 'Frog said, "Who are you insulting?"'

Non-human objects:

- (43)tàkár zá hà sáv kàp 2SG turtle COMP throw SO what 'So the turtle said, "What do you throw?""
- (44)à gàr ká ďál-á-h mí INF 3SG do-GO-2SG what want 'What does he want to do to you?'
- (45) mìsíl mí mìsil wàdá à 3SG steal what 3SG steal food 'What did she steal? She stole food!'
- (46) wàl ngàn zá áu sà wife 3SG COMP **INTERJ** 1SG ďál-á-h màná wá mí do-GO-2SG like DEM what 'His wife said, "What did I do to you?"'

The interrogative clause may have the marker $k \ge 0$ coding focus:

(47)à zá kà káwù tá S 3SG **COMP** 1SG INF hold **DEM** á rà wà mí n PREP PRED hand DEM what 'He said, "What did I hold in the hand?"

Questions about the object do not have to have a subject. Instead, the infinitive clause can be used alone. These questions end with the word vàngáy 'how':

- (48)ká lùw-á-ŋ kàđám tá wà n say-GO-3SG PREP calabash **GEN** but INF ží vàngáy bàháman then how Bahaman "What do you say to the calabash, Bahaman?"
- (49) ee, wà ká lùw-á-ŋ vàŋgáy well, DEM INF say-GO-3SG how 'But what does one say?'
- (50) wàl wà hán hán kờ đál vàngáy woman DEM cry cry INF do how 'This woman cried, "What [am I] to do?"

4.6 Questions about manner

The marker vàngáy 'how' codes questions about the manner. The habitual aspect is coded by the independent habitual marker ndí:

(51) i ndi dò máv vàngáy 3PL HAB cook EEer how 'How do they cook beer?'

The future tense is coded by the form involving the sequence $n k \delta$:

(52) hà n ká dál vàngáy 2SG PREP INF do how 'What are you going to do?'

Unlike in affirmative equational clauses and questions about the truth, in specific interrogative equational clauses, there is a copula, which in the present tense is marked by the verb nzà 'be':

(53)skàn tá nzá vàngáy thing GEN be how 'What is the form of this thing? (about object previously mentioned but not visible)

4.7 Questions about dative and benefactive argument

Question about the dative/benefactive must have the third-person dative pronoun η added to the verb, and the interrogative marker vi preceded by the preposition nà:

dáh-á-n (54)hà nà go-GO-3SG PREP who 2SG 'For whom did you bring it?'

Questions about the addressee are coded by the third-person singular dative pronoun η following the verb and the locative predicator \dot{a} and the preposition nò followed by the question marker about humans ví 'who':

ká lùw-á-n (55)hà žín nà νí PREP INF say-GO-3SG then 2SG PRED PREP who 'Who are you going to tell it to?'

4.8 Questions about locative adjuncts

Mina makes a distinction between directional and stative locatives. In both types of questions, the interrogative word occurs in clause-final position. In both types of questions, the interrogative word may be preceded by the local predicator \dot{a} and the prepositions, $n\dot{\partial}$, or $r\dot{\partial}$. Which marker is used depends on the presence of locative characteristics in the verb and in the locative complement.

Questions about the stative locative, i.e. about the location of an object or an event, are marked by the clause final tiki:

(56) skòn wà hà dá tíkì thing DEM 2SG bring where 'That thing, where did you take it from?'

If the clause is verbless, the local predicator \acute{a} must be used before the interrogative marker:

(57) à zá skòn wàcin á tíkì
3SG COMP thing DEM PRED where
'He said, "That thing, where is it?""

If the complement is human, a preposition r must be used before it:

(58) hà dà skèn wàcin á rè v-iti 2SG bring thing DEM PRED PREP whom 'To whom did you bring that thing?'

The directional interrogative is marked by clause-final váy:

- (59) hà ndà váy
 2SG go where
 'Where are you going?'
- (60)há nzà sàn ká dòk tá-kòn horse GEN-2SG 2SG 1SG sit as dé6-é-h há ndà váy sá 2SG where 1SG take-GO-2SG go 'You sit on me as on your horse. Where are you going? Let me take you.'
- (61) médìgì zá à tsú váv wàl 3SG COMP neighbor where woman go ngàn zá à ndà mhé skù 3SG recent NEG 3SG COMP go 'He said, "Where did the neighbor go?" His wife said, "He went a long time ago."

The marker $v \dot{a} y$ is not inherently interrogative, but rather is a marker of an unspecified direction:

- (62)kó wàl ngàn ndà váy íi gràb wife where 3PL 3SG go together even dàp always 'No matter where his wife goes, they are always together.'
- gràb (63) ndà váy hí hí gràb hí 2PL where 2PL together 2PL together go wà kàm DEM TOP(F.) 'Wherever you go, you are always together, therefore . . . '

The stative locative interrogative tiki can be used with verbs of movement, but only to code the starting point of the movement, not the direction to:

(64)báv zá nd-á zà tíkì à 3SG go-GO chief COMP where 'The chief said, "Where did he come from?"'

4.9 Questions about the possessor

Questions about the identity of the possessor are coded by the interrogative complex consisting of the possessum, followed by the marker v 'who' and by the clause-final particle ti.

- (65)hákèm báv zá vítì há dàm marry daughter 2SG chief COMP whose 'The chief said, "Whose daughter did you marry?"
- (66)wàcin á skàn vití DEM PRED whom 'To whom does this thing belong?'
- (67)zά rùkùt-yíì wàcin á à **COMP** clothing-PL 3SG DEM PRED whom 'He said, "To whom does this clothing belong?"

(68) séy báy à zá wàcíŋ bàhá á
so chief 3SG COMP DEM again PRED
vtì
whom
'So the chief said, "This one is for whom?'

The clause final particle ti can be analyzed as consisting of the interrogative marker i and the form t. Given the fact that t is a component of the genitive marker $t\acute{a}$, reduced to $t\acute{a}$ in phrase internal position, it is more than likely that the structure of the interrogative complex in questions about the possessor is: 'who'-GEN-Q. Of interest here is the fact that the genitive marker occurs after the possessor. In affirmative clauses, the genitive marker occurs before the possessor.

4.10 Questions about time

Questions about time are coded by the form pipi at the end of the clause:

(69) há dóm wàl pípí 2SG marry woman when 'When did you marry?'

Because of the nature of the questions about time, viz. lack of any assumptions about the possible time of the event, the end-of-event marker za cannot be used.

(70) há lìm-á gwág (*za) pípí
2SG see-GO elephant (*EE) when
'When did you see the elephant?'

The marker *pipi* is not inherently interrogative, but rather codes unspecified time, as evidenced by its use in non-interrogative clauses:

(71)ďál dàbàráy nám zàm wùdá tèmú sà 1DU 1SG do eat food 1DU plan jàm pípí gár ngùl ábà kó sà ASSC well (F.) search husband even when 1SG skù sév nàmú rà pár except 1DU D.HAB NEG other

'I have made a plan so that we eat well. I am never going to look for another husband. It is just the two of us.'

Questions about purpose and reason 4.11

Ouestions about reason are coded by the sequence kó mì, á gdán mì or frequently using a Fula word ngàm 'because' in the sequence ngàm kớ mì, occurring in clause-initial or in clause-final position. The marker mì is the non-human interrogative marker, k\u00e1 is the preposition "in."

- (72)hà gàr kímí nkwà à zá 2SG 3SG **COMP** why want goat 'The goat said, "Why are you looking for it?"
- (73)dòk zá hà gàr kímí horse EE whv 2SG want 'The horse said, "Why are you looking for it?""

The answer to the question about reason/purpose involves the infinitive verb:

(74)dzám à zá kà 3SG **INF** COMP wrestle 'He said, "In order to fight.""

Here are examples of the use of the lexeme ngàm 'because' (F.) followed by kimi 'why' to code the question about reason:

- á (75)góŋgà à ká vúrtàhà n PREP INF 3SG reality (F.) leave (F.) **PRED** tàlàn tètàn dúniyà gàm ká mì 3PL PREP what world head because à nzá kà mbín 3SG like that be 'The reality will come from their side. Why? Because that's how life is.'
- (76) 6ám kà kímí wà lèhék-lèhék wà **INF** eat why but but raw raw kà 6ám vàngáy INF eat how 'To eat [meat] why?, but how can one eat things that are raw?

4.12 Questions about quantity

For questions about quantity, the interrogative word corresponding to "how many, how much" is *vànú*:

(77) hà ká dè6-è-n ďálá nà hìdà wà bring-GO-3SG moneyPREP man 2SG INF **DEM** ďàl vànú makes how many 'The money that you brought for the man, how much is it?'

The interrogative marker vànú may be preceded by the preposition nà:

- (78) hà bèr nà vànú
 2SG sell PREP how much
 'For how much are you selling it?'
- (79) sò n kó bòg-á vànú
 1SG PREP INF smith-GO.2SG how many
 'How many [hoes] will I make?'

The marker *vànú* may occur right after the head noun or in clause-final position:

(80)ká ďálà vá vànú á Mókòlò hà make year how many PRED Mokolo INF 2SG 'How many years did you spend at Mokolo?'

Ouestions about the instrumental 4 13

The interrogative instrumental is marked by the associative marker $b\hat{\partial}$ followed by the non-human marker mi:

zàm skàn-yíì (81)skú ká svi thing-PL **NEG** COM INF eat wà bà mí DEM ASSC what 'Or else what to eat those things with?'

5. The categoriality of interrogative markers

The forms vi, mi, and perhaps other forms employed at the end of specific interrogative clauses are not inherently interrogative. Their inherent meaning is that of unspecified human and unspecified non-human entity. The evidence for the proposed functions of vi and mi is provided by the fact that these forms can also occur in non-interrogative functions, more specifically, in functions equivalent to "everybody," "everything":

(82)tì mbà ďá skù νí look child exist who **NEG** 'Everybody looks, there is no child'

6. Conclusions

Interrogative clauses are marked by clause-final markers, which differ for questions about the truth and for questions about specific components of a proposition. The marker of yes/no questions shares the initial consonant v with specific questions about humans. All specific questions share the final vowel i. The marker for questions about nonhuman participants is mi. All the interrogative markers are underlyingly

markers of an unspecified participant belonging to one of the semantic categories of human, non-human, place, direction, time, and manner.

The interrogative clauses do not code the past tense through reduplication. Instead, the simple form of the verb is used in the past tense. In the future tense the form $n \ k a$ is used.

Chapter 17

Reference system

1. Introduction

The description of the system of reference is crucial for the grammar of any language because it explains the role of lexical nouns in discourse, deictic and anaphoric elements, and the function of argument omission, if any. Mina codes the following domains in the system of reference: deixis; known referent; previous mention reference in discourse; These domains are coded by one of the following means: a noun alone; a noun followed by one or more determiners, a pronoun alone, a determiner alone or a sequence of determiners. The purpose of the present chapter is to describe each of these means, their functions, and how they interact with the other means.

2. Phrase internal and phrase final forms of pronouns and deteminers

From the point of view of phonological properties, pronouns and determiners behave in the same way with respect to the syntactic positions they occupy. In phrase-internal position, members of this class undergo phonological reduction, and in phrase-final position, they undergo phonological expansion.

The phrase-final variants are derived through the suffix n added to the underlying, not the phrase-internal, form of the pronouns and determiners. The evidence for this suffix is provided by the phonological changes that pronouns undergo. High vowels in closed syllables are lowered by one step; thus, i becomes e, and u becomes o. The nasal suffix is realized as a velar nasal, which may be an additional cause of vowel lowering. The vowel-lowering rule enables us to analyze the underlying form of the second-person singular pronoun hu. Subsequent

lowering of u to o occurs when the suffix n is added. The vowel-lowering rule has not yet been generalized to all dialects, and some dialects do not lower the vowel in closed syllable.

The form of the pronoun with the suffix n allows us to establish the underlying form of the first-person pronoun and the third-person anaphor as sa and ta respectively. When the suffix n is added, the forms become san and tan, but when they occur in phrase-internal position, the vowel a is reduced and the forms become s or t. Subsequent schwa insertion as required by syllabification rules produces the forms sa and ta:

Sing	Dual			Plural		
Internal	Final	Intern	alFinal	Internal	Final	
1 sà	sáŋ	nám	nàmú	nin	nènéŋ EXCL	
	_			nòk	nòkóŋ INCL	
2 hú	hó-n				hìnéŋ	
3 tə	taŋ			tàtà	tàtàŋ	
Anaphor					-	
mbí	mbéŋ					

The tone on forms to and tay is low after verbs and polar after nouns and other lexical categories.

The phrase-final variants of plural pronouns are formed through the addition of a velar nasal to the underlying form of the pronoun. To prevent a disallowed consonant cluster from emerging, an epenthetic vowel is inserted. The vowel is a copy of the vowel in the preceding syllable. The nasal consonant becomes velar in accordance with phonological rules regarding word-final position:

(1)
$$\emptyset \rightarrow V[\alpha \text{ high, } \beta \text{ front}]/V[\alpha \text{ high, } \beta \text{ front}]C_{\underline{\underline{\underline{\underline{\eta}}}}}$$

(2)
$$nin-n \rightarrow [ninin] \text{ or } \rightarrow [nenen]$$
 1PL.EXCL $nok-n \rightarrow nokon$ 1PL.INCL $hin-n \rightarrow hinin \rightarrow [hinen]$ 2PL $tata-n \rightarrow [tata]$ 3PL

The third-person plural $t \partial t \partial$ in phrase-internal position and $t \partial t \partial \eta$ in phrase-final position are most likely reduplicated forms of the deduced marker ta, realized as $t\partial$ in phrase-internal position. In the present grammar, the phrase final forms of these and other determiners are represented as one morpheme, instead of being divided into the base and

phrase-final suffix. The first person dual phrase-final form $n \grave{a} m \acute{u}$ does not have the velar suffix. That may indicate that the form does not belong historically to the class of pronouns.

A noun or a noun phrase may be followed by several determiners, including deictics, anaphors, and pronouns. The term "demonstrative" in the present grammar refers to a form that can modify another noun or be the head of a noun phrase. Some demonstratives may have both deictic and anaphoric functions. Anaphors have an anaphoric function only.

3. Deixis

The grammatical system of Mina makes a clear distinction between locative deixis (described in Chapter 7 on locative arguments and adjuncts) and entity deixis. Entity deixis is based on the forms wa for proximate and ta for remote. The form ta has the phrase-internal variant ta and the phrase-final variant tay. The phrase-final variant of wa is formed through the addition of interchangeable suffixes cin or hin. The same speaker may use hin or cin, sometimes even within the same sentence. The vowel a of deictics may be raised to e, and we have also recorded instances of raising to i when phrase-final suffixes are added. Thus the following phrase-final phonetic realizations have been recorded: [kèhín], [mèhín], [wàcín], [wèhín], and even [wìcín] and [kìhín]. The evidence that the form cin is a suffix rather than an inseparable part of the underlying form of the pronoun is provided by its occurrence with other demonstratives.

Each marker can occur by itself, thus serving as head of the noun phrase, or it can modify a noun. Our description starts with proximate deixis followed by remote deixis, and within each category the use of the deictic marker alone is followed by its use as a modifier.

3.1 Proximate deixis

The proximate entity deixis is coded by the form wa, whose phrase final variants are wahin or wacin:

(3) wècin kújì
DEM Kuji
'This is Kuji.'

(4) wà tèk wàcín tèk wà tèk bàhá yà
DEM sheep DEM sheep DEM sheep still also
'This one is a sheep, this one is a sheep, and this one also is a sheep'

The marker wa in clause-initial position, without any other elements preceding it within the clause, has low tone:

(5) séy báy zá wà dámà so chief COMP DEM good 'The chief said, "That is good."

The entity modified by deictic markers can refer to an object of speech:

(6) wàcín àládà tá kúlí-yíì
DEM custom (H., F.) GEN kuli-PL
wàcín tók zà
DEM finish EE
'That is the tradition of the kuli. It [the story] has ended.'

The deictic $w\dot{a}$ may be used as complement the preposition $m\dot{a}$ 'like' to give the meaning 'like that':

- hàŋ (7) hàn hàn á màná hàn 3SG like that cry cry cry cry wàcin syì DEM COM 'He cried a lot like that.'
- **(8)** hà ndí dzán-á nám skàn màná wà **DEM** 2SG HAB find-GO 1DU thing like tíkì where 'Where do you find us things like this?""

3.2 Deictic modification

The tone of the marker wa is low:

- (9) gì wà tók zà meat DEM finish EE 'This meat has finished'
- (10) \$\delta \delta w\delta t\delta k z\delta cow DEM finish EE

 'This cow is finished' (is sick, tired, etc)
- (11) wàcin ngàlámbrà wà tók zà
 DEM story DEM finish EE
 'And that is how this story ends.'

The marker wàcin and its free variant wàhin have low-high tone structure:

- (12) bà wàcin nék skù cow DEM good NEG 'This cow is not good'
- (13) bí wàcín nék skù meat DEM good NEG 'This meat is not good.'

If in the same sentence the full form of demonstrative is used more than once, the first has the form wàcin and the second the form wèhin:

wàcin mà (14)pár wèhin hán háŋ pár DEM REL other other DEM cry cry mà úlà dzREI. kill neck 'One is a weeper and the other is a screamer.'

The evidence that the form wa can code deixis is provided by its unambiguous use in discourse when the speaker refers to an object in the environment of speech. Thus people coming across a river that has filled up say:

- (15)nòk kà ďál žì vàngáy kà kán INF 1PL do then how INF cross làkwát wàcin river DEM 'How are we going to cross this river?' (žì phrase-internal, žèn phrase-final)
- (16)ķá nd-á skàŋ mák à tìy wà DEM won't you 3SG go-GO see thing say hìdì gènák tán ndà-há mhù tá á black go go-GO child GEN 3SG man mámáŋ tìv syì COM mother.3SG 'He said, "Come and look at this thing." The human child came and saw that it was his mother.' $(m \partial d \partial g \partial n d k) =$ something black, hìdì gànák 'black person' = 'human being')

Here is another example of this kind:

- (17) báy tì g-yíì dúngùr dá skù chief look cow-PL hump exist NEG 'The chief saw that the cows did not have humps'
- (18)kà düngùr tớ kà à zá mà wà νí COMPREL hump GEN 3SG cut cow DEM who 'He asked, "Who cut the hump[s] of these cows?"

The following example illustrates use of wàcin both as a modifier of another noun and as deictic complement of a preposition. The modifier function is marked by the phrase-final form because it marks the topic:

(19) gàlámbrá wàcin tòk zá ábà wàcin story DEM finish EE ASSC DEM 'This story is finished with that.' (or 'With that, this story is finished.')

The form wàcin may follow other modifiers, e.g. possessive pronouns. The following example contains the words of the subject upon noticing a horse grazing nearby:

(20)à Ьá màllúm úséní há sàn bìkáv 3SG say marabout please (F.) 2SG know God wàcin sà 6ám dòk túk zà vl-á-k DEM 1SG give-GO-1SG horse 2SG eat EE 'He said, "Marabout, please, if you know God, give me this horse of yours for me to eat." (The horse has not been mentioned in the conversation between the subject and the marabout.)

The deictic wà is used with the word bákàhà 'today'. This usage parallels the use of demonstratives to code the notion 'today' in many other languages:

(21)žéŋ kà bákà há zár zár wà whip today DEM then whip 2SG INF dál-á-k tàlàn kràp à zá à **COMP** head ache 3SG do-GO-1SG 3SG rà D.HAB 'Today, if you whip him, he says, "I have a headache."

3.3 Remote deixis

Remote entity deixis is coded by the form ta, realized as ta in phrase-internal position and tay in phrase-final position, with polar tones after nouns, and low tones after verbs. We have very few instances of remote deixis in natural discourse data. The following fragment provides evidence for the deictic modification function of ta. An object is brought into sight, and one of the participants speaks about it. The remote deixis is used with respect to the object that is closer to the listener than to the speaker:

(22)hìd-yíì kán 6àt kán ndə 3PL send 3PL send man-PL get go 6èt-á-n kàđám wàcin dà get-GO-3SG calabash DEM bring 3PL dà-há-w bring-GO-3SG

'They sent people and they went and got the calabash for him and brought it.'

(23)wà ká lùw-á-ŋ kàđám tà n say-GO-3SG PREP calabash INF **DED** but ží vàngáy bàháman how Bahaman then 'What do you say to the calabash, Bahaman?'

4. Full noun phrase as subject

Full noun phrases can be used as subject, object, locative argument, or the complement of a preposition. The constraints on the use of a full noun phrase differ for subjects and objects. The use of the pronouns also differs between subject and object. It is therefore useful to organize the description of the relevant constraints from the point of view of realization of various arguments and adjuncts.

Proper names, titles such as $b\dot{a}y$ 'chief', i.e. personalities that have unique reference within the society, and nouns that function as proper names within a discourse always occur without any determiners, regardless of whether they have been previously mentioned in discourse, regardless of whether they are present in the discourse environment, and regardless of their pragmatic role:

Full noun as proper name:

(24) Bàhámàn tíl á nd-á
Bahaman go 3SG go-GO
'Bahaman left.'

Full noun as title:

báy ngwáy (25)zá tàr láv month time chief COMP INTERJ tá mìtíš màná wàcin GEN hunger like **DEM** 'The chief said, "Oh, during the time of hunger like this"

Next is an ordinary noun anthropomorphized and serving as a proper name in a story. Notice, that after the first sentence that introduces the characters, the second sentence has the same names occur also without any determiners:

- (26) gómbòk íbà bàkàlàf ì-ďál PL.ASSC buffalo 3PL-make frog gáabà conversation 'A frog and a buffalo had a conversation'
- gómbòk kúl (27)bàkàlàf hà zá nà buffalo COMP PREP frog 2SG able kà ší skù INF NEG run 'The buffalo said to the frog, "You cannot run"

Here is another fragment, with ordinary nouns serving as proper names of characters in a story. Note, however, that there is no formal difference between the use of a noun as a proper name and as an ordinary name.

(28)tàkár tíl séy á nà yàm turtle leave PRED PREP water SO màl màl á màl-á dzàbán seize 3SG seize-GO five seize 'So, the turtle went in the water and caught five [fish].'

> séy kílìf-yíi dámdámà mà good good fish-PL 3PL 3PL REL SO nj-i be-STAT

'So, the fish are good. They are there.'

kwáyàn à zά tàkár màsáw kìléŋ nà squirrel 3SG COMP PREP fry turtle first 'The squirrel said to the turtle, "Fry them first."

The ordinary full noun is used without any determiners when it is a new subject but not a new paragraph topic. In the following sentence, the subject of the first clause is a pronoun; hence, there is no determiner. The subject of the second clause is dòmòs 'stomach', not a topic of the clause. In addition, the subject of the third clause, hátày 'nonblacksmith', is the subject and the topic as evidenced by the fact that it is marked by the demonstrative wà. It is also the focus, as evidenced by the use of the form k\u00e1 in the past tense:

(29)sà tál-áhà wà á tán svì dàmàs walk-GO PRED 1SG COM 1SG but stomach gwád zà hátày wà ká DEM INF nonblacksmith full EE máv vl-á-k zà give-GO-1SG beer EE 'I took walks, as for me, my belly is full, and the nonblacksmith³ gave me beer.'

In the following fragment, the subject of the embedded clause záván-yíì 'guinea fowl' occurs without any determiner (other than the plural coding). It also has no determiner in the subsequent main clause, where it also is the subject:

(30)fú kà ndà zá ndà dzáŋ INF find go EE each time go záván-yíì már rà guinea fowl-PL 3PL graze D.HAB 'Each time she went, she found guinea fowl grazing.' záván-yíì fəd-á zá ná COMP shave-GO guinea fowl-PL 1PL tàlàn ká gί POS please head 'The guinea fowl said, "Shave our heads, please."'

Here are examples of subjects that are not topics, used in the discourse:

(31) cìkid tó gwidin ndòv ká [ndòf] sesame GEN single fall POS 'A single sesame seed fell down.'

^{3.} The noun hàtáy 'a non-blacksmith' identifies a person as not belonging to the cast of blacksmiths, who are involved, among other activities, in handling of corpses. Blacksmiths are the untouchable cast among Hina. A hàtáy is not necessarily a Hina person. Any person could be a hàtáy provided the person is not a blacksmith. In the old days it was unthinkable to eat from the same vessel as a blacksmith or to accept food or beer from a blacksmith. Intermarriage between a member of the blacksmith clan and other people was still unheard of in 2000.

- (32) ván dá rà mòná á nò rain fetch:GO D.HAB like PRED PREP lúmò market
 'It was raining from the direction of the market.'
- (33) ván wilkil ká ndá-hà rain fail INF go-GO 'The rain failed to come in.'

The following sentence is preceded and followed by clauses each with a different subject:

(34) kwáykwá-yíì í má nd-à-y zá hyena-PL 3PL REL go-GO-STAT EE 'Hyenas came.'

5. Use of pronouns in reference system

In sequential clauses, if the subjects are the same, the pronominal subject is not used. This constraint applies to all persons. If sentences with the same subject describe different events, the pronominal subject is used. The following fragment illustrates three conditions in the use of subject markers: the use of the second-person pronoun in the first clause, its omission in the second, sequential, clause, then its use again in the third clause of the second sentence.

(35) hà bèt mávù dá nè mèŋ 2SG take beer cook PREP there 'You take wine, you cook it there.'

```
tùk-yíì
hà
      tós
            hìd-yíì
                                      ká
2SG
      gather man-PL
                         2SG-PL
                                      INF
      tàn
            ngàm
                                      mbén
sà
                                kà
                         á
      DED because
                                      ANAPH
                         PRED like
drink
wàhiŋ dámà àláadà
                                kéké
                         mí
                                             3PL
DEM good custom
                         REL
                                old time
ďál
      ngè
            híŋ
      like
do
            that
```

'You gather your neighbors to drink it, because it is good, like that. That was the custom of the old times.'

The third-person singular subject pronoun is unmarked before the subject focus marker $k\partial$, the perfect marked by the form $m\partial$, and in sequential clauses marked by $nd\partial$. The antecedent of the unmarked third-person subject is the last subject mentioned in discourse:

If the first clause has a nominal subject, the use of the third-person pronominal subject in the next sequential clause codes switch reference to another subject previously mentioned in discourse. The evidence that what follows is another clause is provided by the low tone on the verb tàŋ 'go':

The following fragment illustrates the use of the pronoun a to code a new subject (but not a new topic) as well as the absence of pronominal markers to code a continuing subject:

(38)sév bàhámàn páláh à zá wurtə leave(F.) 3SG COMP Bahaman out then séytíinà bá dàp ndà again 'call' go

'Then Bahaman went out. She said to him, "Go make that call again." (séytíinà 'name in Fula of muezzin's call in the morning')

bàhámàn nd-á gàr go-GO Bahaman stand 'Bahaman went there and stood'.

wàcin syì ɗiyà séitin go muezzin's call DEM COM start 'He started to make the call.'

The third person plural subject must always be coded overtly:

(39)tàtà màkád hìd-yíì wá DEM 3PL man-PL 3PL three 'There were three men.'

> ndà ká hèr-é cìkíd bùhù ntá sell-GO 3PL INF go sesame bag (F.) one 'They were going to sell one bag of sesame seeds.'

ngàd ngàd i ngàd cíkè' (zá) ká count count 3PL count all (be) POS

'They counted all [the sesame seeds].' (The form ká was first given when alanguage assistant repeated the recorded sentence.)

dzàw i dzàw-ú dùwán attach 3PL attach-3SG PRED back màdìngwàrzé donkey

'They attached it to the back of the donkey.'

```
í
      nd
              rá
                                  nd
                                          rá
3P1
      walk
              D.HAB
                            3PL
                                   walk
                                          D.HAB
vàn
       wà
              ká
                     ďà
rain
       start
              INF
                     fetch water
'While they were walking, rain started to fall.'
```

Note that the last clause of this fragment has a new topic introduced, $v\acute{a}n$ 'rain'. The subsequent coding of rain is done through the third-person singular pronoun:

However, the pronoun may also be used in the subject role even if the preceding clause had a different subject. The only condition for the felicitous use of the third-person subject pronoun is whether the situation gives an unambiguous interpretation of the reference. Consider the following fragment, where the subject of the third clause is identical with the addressee of the embedded clause:

dà á dà d-á-ŋ tá wùdà wàcíŋ cook 3SG cook cook-GO-3SG 3PL food DEM syì COM

'Then it made the food for them'

Such unambiguous interpretations also obtain if the two clauses have different numbers in the third-person. Thus in the following fragment, the first clause has a nominal singular subject, which is also the topic, the second clause has the third-person plural subject pronoun, hence a different reference, and the third clause has the third-person singular subject pronoun, whose antecedent is the subject of the first clause:

wàcin séy 6át (42)í hók rà wàl wà 3PI. lift D.HAB them then wife DEM take fòrém náká bé vènjéh ďiyà 6át – á REM ASSC pepper put 3SG horn take dì ká ná mà á 3SG put PREP PREP mouth

> 'When they were lifting the stones, the wife took the horn which contained pepper and put it in her mouth.' (high tone on $n\dot{a}k\dot{a}$ is a result of the fusion with the following \dot{a} of the associative marker)

áb dùwán mbí ká sév n ASSC after 3PL PREP INF then that hók ńvàŋ-yiì ndá-hà kò INF lift stone-PL go-GO 'Afterwards they came to lift the stones.'

tá íf íf-é fòrám wá blow 3SG blow-GO **GEN** PREP horn DEM only 'She blew that which was in the horn.'

6. Full noun phrase as the object

The full noun phrase is used as the object without any determiners if it is not marked as a topic of the new discourse, and if it is not marked as salient:

(43) ngád driš mà lám bín rá drìš house dig REL build mud mix mud 'The one who builds a house dug the mud, mixed the mud,'

> lám bín ká hàmás nd-á hàk straw go-GO thatch POS build house cut wán ká nà mán inside PREP LOC.ANAPH

built a home, cut some straw, thatched the roof, and lay down inside it.'

The object is coded by a full noun even when it has been mentioned in previous discourse but is not in focus and is not a topic of the proposition. The following sentences contained the noun bàtákàr 'bag' that has been mentioned a dozen sentences before, but which is not salient for the discourse, and which is not a topic as indicated by the absence of determiners:

(44) mà ngád ngád pàl á pàl

REL count count detach 3SG detach

bàtákàr ngàd ngàd

bag count count

'The one who was good at counting detached the bag and counted [the seeds].'

Even if the object has been mentioned in the immediately preceding clause, it may be repeated in the next clause without any determiners. This is the case with the object *rùkùt* in the following fragment:

(45)tsòk rùkùt fúu kà à zá. **POS** 3SG COMP cloth all take off 'She said take off all your clothes.' tsòk kà báy rùkùt fúu take off cloth **POS** chief all 'The chief took off all his clothes.'

7. Object coding in non-finite clauses

Non-finite clauses, such as infinitive complements and complements of auxiliary verbs, must have an object overtly coded. If the object was previously mentioned in discourse, such an object is coded by the deduced anaphora form ta (tay in phrase-final position, with polar tones):

(46)dzáŋ kwáykwá-yíi ndà í ká ngà hyena-PL 3PL find INF break go kì zá svì COM EE meat

'And she found some hyenas who had caught some meat.'

káyà ďiyà wállà tá bà dà help(F.) 3PL ASSC cook INTERJ (F.) start tàŋ **DED** 'She started to help them cook it.'

Compare the absence of the object in the final clause in final clauses:

(47) dzán kwáykwá-yíi í ká ngà ķὶ ndà hyena-PL 3PL INF break meat go find zá svi EE **COM**

'And she found some hyenas who had caught some meat.'

mbí mà dá zìn 3SG REL. cook then 'And then, it was she who cooked it.'

- *mbì (48) mà dá *tàn zìn 3SG REL cook DED then for 'And then, it was she who cooked it.'
- (49)dà rà cook D.HAB 3PL 'and they were cooking it'

The form ta is used as an object anaphor in complements of auxiliary verbs:

(50)kámbáy ɗiyà 6àt á 6àt ngàn žéß 3SG follow put stick 3SG get get tàŋ **DED**

'He got his stick and went to follow her.'

The anaphor ta cannot be used in finite clauses:

(51)wàl kà žé6 à lìm ngàŋ *tàn zà 3M wife 3M see INF follow DED EE 'He saw his wife and he followed her.'

The anaphor ta is used as an object marker in infinitival clauses:

- wàcin kúl (52)séy skù à dál-áhà wàl DEM able **NEG** 3SG make-GO SO woman dá6 làptál nà sév dá6 ίi á take 3PL take PRED PREP hospital SO hùrgà tàn ká INF DED cure
 - 'This woman was not well; she was sick. So she was brought to a hospital for treatment.'
- (53)kám tàt sév í ndí ngà á PRED 3PL TOP(F.) HAB then 3PL catch kì-yíì zá ká nd-á kà dá tàŋ meat EE INF go-GO INF cook DED 'Then, as for them [the hyenas], they just catch the meat [and] bring it for cooking.'
- (54)ķá kám tò à s-tsàf à **PRED** TOP(F.) okay 3SG 1SG-lie say káfkáfá pàt áz tèm ká šì morning tomorrow 1DU INF go run tàŋ DED

"Okay," he said, "if I lie--tomorrow morning let's run [a race]."

In the next clause, a reference is made again to a race, and again the same anaphor is used:

(55)á ká tèm ká šì áz tàn 3SG 1DU say INF DED go run 'He said, "Let's run."

The antecedent of the deduced anaphora marker may be a proposition:

'You say to it just like that, "Stick, do it?" (high tone on tá is a product of the penultimate raising in interrogative clauses)

- dzà tàtà cíké ' (57)bìkáf ká kà ká à POS 3SG INF kill 3PL all God say ká fin nàmú nám tìy tàn à 3SG remain 1DU 1DU INF see DED 'He said, "God has killed them all; there remains only us, we will see."
- (58)kwáykwáy mèď zá hyena **COMP** swear 'The hyena said, "Swear!"
- káy (59)ķá tátà fin nàm à 3SG INTERJ 3SG remain 1DU alone say mbémbé wá à ká ndá n immediately 3SG PREP INF but go:GO tàŋ **DED**

'He said, "Look, there remains only us, but very soon He [God] will come."

8. The domain of known referent

The deictic marker wà and its phrase-final form wàcin/wàhin follow a noun they determine. In addition to the deictic function described earlier, the marker indicates that the referent is to be treated as a known entity, regardless of whether the listener actually knows the referent. The source of the knowledge could be previous mention in discourse, regardless of the distance between the previous mention and the current mention. The source of knowledge could also be what is generally expected from any speaker of the language:

- (60) kwáyàŋ à ndíŋ bà làkáf wàcíŋ squirrel 3SG fear ASSC baboon DEM 'The squirrel was afraid of that baboon' (baboon mentioned in the immediately preceding sentence).
- (61) nd-á déw ká á bớr màllúm go-GO sit POS PRED side marabout wàcíŋ DEM

'He came to sit next to this marabout.' (The marabout was the topic of the previous paragraph, but last mention as *màllúm* was five sentences earlier. In between there were several other participants mentioned.)

(62) i kó mòl zá á n mìšil wàhin 3PL INF seize EE PRED PREP theft DEM 'They arrested him for stealing.' (The noun mìšìl was mentioned five clauses earlier, the act of stealing two clauses earlier.)

Consider the following fragment, where in the first sentence the noun fòróm 'horn' is coded by the remote previous mention marker nákáhà. In its mention in the next sentence, it is followed by the form wà:

(63)hók wàcin séy wàl wà ĺ rà DEM then 3PL lift D.HAB wife **DEM** fòrám **nákà** bá vènjéh ĥàt á *6àt* ASSC pepper take take 3SG horn REM divà ďi ká nà mà á PREP mouth 3SG put put in

'When they were lifting [the stones], the wife took the horn which contained pepper and put it in her mouth.'

if á *if-é* tó n fòróm wà dàp blow 3SG blow-GO GEN PREP horn DEM just 'She just blew out what was in the horn'

Here is another example of the proximate mention coded by the form wa (Both the antecedent and the anaphor are bolded):

lùw-á-n wàciŋ lù kàđám á nà 3SG say-GO-3SG PREP calabash **DEM** 'She addressed this calabash.'

The evidence that the form wà does not merely code previous mention in discourse is provided by the fact that the previous mention alone does not trigger the use of the demonstrative with the next mention. Thus in the first sentence of the following fragment the noun wirnjik 'ash' is mentioned. In the second sentence the same word occurs again, and it is not marked with a demonstrative, because the identity of the ashes has no specific role in discourse:

(65)hàk bàk bàk-á-ŋ wírnjìk ká á fill-GO-3SG **POS** fill fill 3SG ash nà màn PREP L.ANAPH '[while he was making the shoes] He filled them with ash.'

> wàl ngàn táŋ à nd-rá wàcin sév go-D.HAB 3SG wife 3SG DED DEM SO wirniìk ɗiyà bàkà-há svì COM ash pour-GO put

'When his wife was going, ash was pouring out of the shoe.'

The protagonists of a story often are introduced with the marker $w\dot{a}$, as in these opening lines of two different stories:

(66)tàtà màkáď hìd-viî wá DEM 3PL man-PL 3PL three 'There were (these) three men.'

> hìdè wècin i tàtàn fáď DEM 3PL 3PL four man 'There were (those) four men.'

In the following fragment, the first mention of noun $k \partial d \partial m$ 'calabash' is not accompanied by $w \partial a$ or any other determiner. Later in the narrative the noun 'calabash' is marked by $w \partial a$, indicating that the referent for this noun is to be treated as a known entity:

(67) à à dzán-á kàdám ah 3SG find-GO calabash "She found a calabash."

> àa ndà bàt-à nòk skú syì á vàngáy ah go get-OBJ 1PL NEG COM how "Ah, go bring it to us, otherwise what can we do?"

à zá hí h-án hìdì 3SG COMP 2PL send-3SG man 'He [the man] said, "Send somebody.'

ká n hìd-yíì ndá 6àt kán send 3PL send man-PL 3PL go get wàcín 6èt-á-n kàďám dà get-OBJ-3SG calabash DEM bring 3PL dà-há-w bring-GO-3SG

'They sent some people and they went and got the calabash for him and brought it.'

Further evidence that $w\grave{a}$ codes the category 'known' is that it cannot co-occur with a noun modified by a possessive pronoun. The reason for this constraint is that possessive pronouns also mark the noun as known, and two morphemes coding the same domain do not co-occur. In the following sentence, $w\grave{a}l$ $ng\grave{a}n$ 'his wife' is not followed by the marker $w\grave{a}$, even though 'wife' is a protagonist of a story and the topic of the paragraph and has been mentioned in the preceding discourse:

(68)ngàn ndà kà ďá tìpíd wàl ndí 3SG **HAB** INF termites wife 3SG fetch go 'His wife had the habit of going to fetch termites.'

Similarly, in the following fragment, $ngùl\ ng\partial n$ 'her husband' is not followed by the marker $w\dot{a}$:

(69)ngùl ngàn wàl nàn zá COMP husband 3SG wife 1SG 'Her husband said, "My wife,"

> nám skàn màná wà tíkì hà ndí dzán-á 1DU thing DEM where 2SG HAB find-GO like 'where do you find us things like this?"'

There is no case of a possessive pronoun being followed by the marker wà:

(70)kàđám dà dà séy wá á DEM cook 3SG calabash cook SO wùd màná wà mbá d-á-n рè cook-GO-3SG food like DEM much SO kàbám ngàn té té té té mà á PRED PREP face spread(x 4)3SG 'So the calabash made a lot of food for her [and] spread [it] in front of her.'

zàm zàm zàm zàm á zá 3SG EE eat eat eat eat

'She ate and ate and ate' (until she was satisfied).'

á kàđám ngàn 6àt PREP calabash 3SG 3SG take 'Then she took her calabash.'

- (71) dàp nàn ángà-cín tá tán nàŋ má only 1SG **GEN** 1SG:GEN like-DEM mother 1SG vá nàn íi ká nàz-á-k zà father 1SG 3PL **INF** throw-GO-1SG EE 'I am like that. My mother and father abandoned me.'
- déftá (72)6àt ngàn á 6èt *wa 3SG Koran(F.) take take 3SG **DEM** 'He took his Koran.'

9. The domain of deduced referent

Mina has a subdomain of 'deduced' reference that is marked by the form ta (phrase-internal form ta; phrase-final form $ta\eta$ and $ta\eta$). Two rules determine the tone of the deduced reference marker. When the deduced reference marker serves as the object of the verb it has low tone:

- (73a)žiŋ ngùl-yíi sùlúd tàn pár man-PL then other two DED nd-áhà hàhá 3PL go-GO again nd-á mábàr mbír bàhá ká màl tàn go-GO leap again INF lion **DED** seize 'Later, when the two men arrived, the lion jumped to catch them'
- (73b)mbigìŋ wàcin i ďál ngàm màts mbiguin DEM 3PL do because sickness kà hàyák í ďál nà hóvnà tàn PREP village 3PL calm (F.) INF **DED** do 'This mbiguin, they do it because there is sickness in the village. They cure it.'

When it follows nouns, the deduced reference marker has polar tone, opposite of the tone of the preceding noun. All examples in the present section support this hypothesis.

The deduced reference marker instructs the listener to identify the referent through a process of deduction using knowledge from various sources, including the listener's cognitive system, the speech environment, and previous discourse. The form $t\acute{a}$ may be the only component of a noun phrase or it may be a determiner, modifying another noun or a quantifier.

One piece of evidence for the proposed function of the marker $t\dot{a}$ is that its antecedent need not have been mentioned in discourse. In fact, the presence of $t\dot{a}$ explicitly tells the listener that the referent is not the noun marked by $t\dot{a}$ but some other referent associated with that noun. In the last line of the following fragment, $t\dot{a}$ follows the noun $b\dot{a}y$ 'chief', which has been mentioned several times in the preceding discourse. However, the form $t\dot{a}$ does not identify the chief but rather the chief's court, an entity that has not been mentioned in discourse at all:

(74)báv ngwáy bàhámàn bákà bá zá **COMP** 'People' Bahaman today still chief nòkmí dzán-á find-GO 1PL what 'The chief said, "People, what else did Bahaman find for us today?""

> hí ndàlùw-á-ŋ má ndà-hà 2PL go say-GO-3SG DEB go -GO "Go tell him to come here."

ndá yà í y-ù go call 3PL call-3SG 'One went to call him.'

tíl á nd-á á r báy tàn go 3SG go-GO PRED PREP chief DED 'He went to the chief's [court].'

In the next example, the Koran is the object of the first clause. The meaning of the second sentence is as shown in the English translation. However, the only overt object marker in the second sentence is the marker tay. Because the reduplication of the verb náz 'throw' indicates a repeated action, the antecedent of táy cannot be the Koran itself but must be some plural object associated with the Koran. This object can only be the pages of the Koran, even though the pages themselves have not been overtly mentioned. The use of ta thus instructs the listener to deduce the referent for the object:

(75) bòt á bòt déftó ngòn take 3SG take Koran (F.) 3SG 'He took his Koran.'

náz pàts ntá náz náz náz á náz took throw throw throw 3SG throw one yàm tàŋ á wàhiŋ nà PRED PREP water DEM

'He took one [page] after another and threw them upon the water.'

Here is another example in which the form *tay* functions as the head of a noun phrase, the referent for which does not overtly occur anywhere but must be deduced from the first sentence:

(76) à zá ngùl-yíì gámbáy tá
3SG COMP husband-PL stick GEN
màciŋ lùw-á-ŋ màk
DEM say-OBJ-3SG first
'She said, "My husband, this stick, say to it,

kámbáy nd-á-k gí syì à n kà stick hit-OBJ-1SG POL COM 3SG PREP INF dál-á tàn do-OBJ:2SG DED ""Stick, hit me," and it will do it to you.'

Another piece of evidence for the proposed function of the form ta is that it can co-occur with the marker wa, whose function is to code a known entity. Here as elsewhere, ta instructs the listener to associate the referent with some other entity:

(77)zàgíy tíl ndà 6àt-áhà-w 6àt courtiers (F.) go go 3PL take-GO-3SG take gáď wàl wà táŋ bà push ASSC woman **DEM** DED 'The courtiers went and brought it [the calabash] with the woman [the one associated with the calabash].'

Another piece of evidence for the proposed hypothesis is provided by the fact that the form $t\dot{a}$, unlike the form $w\dot{a}$, can co-occur with possessive pronouns to instruct the listener to interpret the marked noun in connection with some other element. The following is the tail end of a fragment in which the husband has been attempting to find out where his wife was going. The phrase $w\dot{a}l$ $ng\dot{a}n$ 'his wife' is followed by $t\dot{a}n$, leading the listener to interpret the referent not simply as 'the wife' but as 'the wife after her shoes had been filled with ashes':

(78) híhldib híhldib á híhldib-é-ŋ kràp wàhíŋ sew sew 3SG sew-GO-3SG shoe DEM 'He sewed and sewed her the shoes.'

bàk bàk á bàk-á-ŋ bà wirnjìk ká fill fill 3SG fill-GO-3SG ASSC ash POS nà màŋ
PREP LOC.ANAPH 'He filled them with ashes.'

ngàn táŋ sév w**àl** á nd rà so wife DED 3SG D.HAB 3SG go wàcin syì wírnjìk bàk-áhà diy-à DEM COM ash start-GO pour-GO cìďé' cìđé' kàtàf cìđé' cìɗé ' à pile PREP road pile pile pile 'As his wife was going along, ashes poured out in small piles on the road.'

The deduced reference marker is used with quantifiers when those are the heads of the noun phrase. The nouns that are in the scope of the quantifier are mentioned in preceding discourse, e.g. in the clause that precedes the clause with the quantifier:

hìdì wàcin tsáp wàl (79)sùlúd láh séy ngàn man DEM catch woman3SG two marry SO ngèn sùlúd tàn zà EE 3SG **DED** two 'So, the man caught his two women and married both of them.'

má-ŋ

(80)

ázá

ká

dzà

mother-1SG POS also go:1PLINF kill mámán nàm ďá skú nzà νí mother.3SG exist 1DU remain who **NEG** sùlúd tàn nàm **DED** 1DU two 'Let's kill my mother also. The two of us will remain, each without a mother, us two.'

ká

yàm

(81) wècin à lém mìsil wà báhà yò **INTERJ** DEM 3SG DEM steal other mean mìsil lém tàtà sùlúd tàn íi kàl kàl à 3SG mean 3PL DED 3PL equal (F.) steal two 'This one steals a lot, and this one steals a lot, the two are equal' (82) fúu tàŋ í kàlkàl all DED 3PL equal (F.) 'All of them are equal!' (about protagonists in a folktale). The Mina expression for 'equal' is prák prák

The deduced reference marker is used in reference to objects that are not known to the speaker, as evidenced by clauses where the speaker asks about the identity of the noun modified by the deduced reference marker:

(83)àa bárkàmà wàl nà kà dzán-á ah chief wife 1SG INF find-GO pár skàn zá ďáhà strange EE exist thing "Ah, my chief, there is something my wife found."

> skàn tá nzá vàngáy thing DED be how 'What is that thing?'

(84)mà nd-á tsáv tí tí go-GO then REL look look nástá nà vàm PREP water enter (F.)

'Then the one who was good at looking entered into the water.'

til dùwáŋ á nà vàm tá áh PRED PREP water DED ASSC back go mbén tìv tìv tìy-ú look 3SG look-3SG ANAPH look

'He entered into water and searched for it [the sesame seed].'

The deduced reference marker may follow a possessive pronoun. The antecedent of the deduced reference marker may be an entity whose existence can be reasonably deduced from the preceding discourse. Thus, in a discourse part of which is dedicated to the stupid behavior of a man, the following sentence is used:

```
(85)
      sév
             mà
                    ngùl
                                  ngùl
                                                ká
                                                       wà
             REL
                    husband
                                  husband
                                                INF
      then
                                                       start
                                                dàp
      kédén
                    ngàn
                                  zà
                           tá
                                         há
                           DED
      stupidity
                    3SG
                                  EE
                                         again just
       'Then the man started again with his stupidity.'
```

The deduced reference marker may have its antecedent in the speech of another speaker:

(87)í Ьá kái nà 3PL 1PL INTERJ say lá ká ndà ķὶ nìnàn **INF** 1PL meat go own "Look," they said, "we who own the meat, it is we who go?"

> kwáykwáy à ndà dáp gr-á nà PREP find-GO only hyena 3SG go nòkò 1PL "Let the hyena go to find it for us"

tàŋ kwáykwáy ká ndà ká kúhú grà DED go **INF** INF find fire hyena 'The hyena went to find fire.'

Here are examples of the use of the form tan with nouns that were not mentioned in the preceding discourse, but whose presence has been implied:

^{&#}x27;When his wife was leaving, the hyena went to find fire.'

(88)kà vàngáy dàbàráy nàm ďál tàn 1DU INF plan (F.) **DED** do how 'How are we going to realize that plan?' (the preceding sentences were talking about how to get food; the 'plan' was not mentioned by the word dàbàráy)

The marker $t\dot{a}$ also serves as the marker of a noun whose existence can be easily deduced from the general knowledge of the world. Thus in the following sentence the lexeme $f\dot{a}d\dot{a}$ 'court' is followed by $t\dot{a}$, although the noun $f\dot{a}d\dot{a}$ 'court' itself has not been mentioned in the discourse. In the preceding discourse, however, the chief has been mentioned many times, and it is a common knowledge that chiefs have courts:

- (89)kámbáy ndà diyà ďi wà put-GO 3PL stick DEM put go ká dàp fádè tá PREP court (F.) POS DED just 'They went and put the stick in the court [for the chief].'
- (90) nd-á náz á náz ká nà láy go-GO throw 3SG throw POS PREP place tàŋ
 DED

'He went and threw it into its place [in the bag].' (the precise place in the bag from which the sesame seed fell out)

10. The remote previous mention marker nákáhà

The reference to a noun mentioned quite a bit before in discourse is marked by the form nákáhà in phrase-final position and nákà in phrase-internal position. These forms are glossed as REM for 'remote previous mention'. The remote previous mention marker may modify a noun, including nouns followed by possessive pronouns:

(91)žèb žè6-û dzáŋ žè6 á ndà follow follow 3SG follow-3SG find go nákáhà wàl ngàn 3SG wife REM 'He followed and followd them [footsteps] and found his wife' The antecedent of the form nákáhà may occur quite a distance in the preceding discourse. Here is the first mention of the antecedent, cikid 'sesame seed':

(92a) ndà ká bèr-é cìkíd 3PL INF sell-GO go sesame hùhù ntá bag (F.) one 'They were going to sell one bag of sesame seeds.'

The reference to this sesame seed fifteen sentences later is made with the fom nákáhà:

gwidin nákà dzán-á tá (92b) dzáŋ mà REL single REM find 3SG find-GO GEN wèhin DEM 'He found the one sesame seed of those [that were counted].

The form nákáhà may have as its antecedent an event. Here are a few examples of a reference to an event mentioned some twenty sentence

before:

dzáŋ (93)sév tíl ndà dzán kílíf go find 3PL find fish go gwád ángè nákáhà plenty like REM 'So they went and found a lot of fish, as previously.'

(94)déw tàtà kà mána nákà màkèkè séy sit 3PL like DEM REM before 'They remained as before.'

The previous reference marker may be followed by the deictic wà coding the reference as known:

(95)nd-á zàm zàm nákà wà zá REM DEM EE eat eat 'They returned and ate that one' (i.e. the guinea fowl mentioned five sentences earlier).

- í (96)fúu tàŋ hìdì gànák diyà 6án séy háŋ black put think 3PL all DED man SO cry gárkàw nákà wàcin séy rá mbà diyà DEM disobedient DEM so D.HAB child start jí6 útà wàl rá ií6 í hós dig hole PREP hole arrive PRED house woman nákà wàcin mà 6át – wàží nákà wàcin REM DEM REM DEM REL take children 'All the people started thinking. Then, they were crying. The disobedient child started digging a tunnel to the house of the woman who took those children.' (jib i jib 'tunnel (hole in a hole)'
- (97) báhámàn là á lúw-á-ŋ nà gámbáy
 Bahaman say 3SG say-GO-3SG PREP stick
 nákà wà
 REM DEM
 'Bahaman spoke to the stick.' (how he was supposed to)
- (98) mà tá gwidin nákà wèhin REL GEN single REM DEM 'the single [grain] that was mentioned before'

The remote previous reference might be in the previous sentence but enough other noun phrases intervene to require the form nákáhà. Consider the following fragment, which contains six different nouns: 'chicken', 'feather', 'fire', 'bag', 'sorghum', and 'meat'. Two of these nouns, 'chicken' and 'bag', appear twice:

(99)	séy	gàmták	•	báhà	wérèh	wérèh	séy		
	so chicke		n again		clever		so		
	6át	ngèf	ngàn	tú	gùráy	tú	gùráy	6èk	
	take	feather	3SG	GEN	large	GEN	large	put	
	á	nà	kúhú	séy	tíl	ngàn	nà	•	
	PRED	PREP	fire	so	enter	3ŠG	PREP		
	bàkátà	r ⁴	ďiy-á		zèm	ndrì	ďiy-á		6ám
	bag		put -G	O	eat	corn	put-GC)	eat
	ķì	tá	n	bàkátà	r	từwáď	-	kà	
	meat	GEN	PREP	bag		finish		POS	
	'So the	clever	chicker	n took h	is large	feather	, put it	into the	fire.
	** *	1.0			·		• •		. 1

'So the clever chicken took his large feather, put it into the fire. He himself entered into the bag, started to eat sorghum, started to eat meat [and] finished everything that was in the bag.'

When in the next sentence the reference is made to $ng\grave{e}f$ 'feather' it is followed by $n\grave{a}k\grave{a}h\grave{a}$, because there were several noun phrases between its previous and the current mention:

wècin diyà (100)kwáyàn tì svì ngèf **nákáhà** squirrel COM feather REM DEM put see njìf gàmták grá njìf á kì tá smell 3SG smell like GEN chicken meat màsáw-yí zìdép mà zà REL grill-STAT EE already

'The squirrel saw that those feathers smelled like the flesh of the chicken.'

11. Coding indefiniteness

The existential verb dáhà is used as a marker of specifically indefinite noun phrase. The nouns modified by dáhà are referential, i.e. their referents actually exist. The function of the existential verb corresponds to the use of the modifiers 'some' and 'certain' in English. The noun phrase to be coded as indefinite functions as subject of the verb dáhà:

^{4.} The form bàkátàr represents a metathesis of the form /bàtàkár/.

nd-á dzán hídè (101) ábà nd-á ngèn tá go-GO find house GEN ASSC go-GO 3SG pár đáhà táŋ skàn hìdì ngàn hìdì ďá 3SG other exist DED thing exist man man skù NEG

'She came and found a house of a certain man who does not own anything.'

If in the above clause one modifies hìdì by the demonstrative wàcín coding the known referent, the form dáhà cannot be used:

tìpíd đáhà màcin à dzáŋ (102)sév á find termite exist DEM 3SG PRED SO zá ďiv-á-k ká á kàcin put-GO-1SG POS PRED DEM COMP 'Then she found a termite there and she said, "Keep it for me here."

The verb dáhà may not be used if its subject, in the clause above the noun tipid 'termite', is modified by wàcin. Here is another example:

(104) ká nàz ngùl á bíŋ đáhà
INF leave man PRED house exist
'She abandoned a man in the house.'

If one adds the third-person possessive pronoun $ng \partial \eta$ after the noun $ng \partial u$ 'man', one cannot use $d \dot{a} h \dot{a}$:

(105) kớ nàz ngùl ngàn á bín *đáhà
INF leave husband 3SG PRED house *exist
'She abandoned her husband in the house'

The use of the verb of existence to code indefiniteness is consistent with its use in existential clauses, where it can only be used with indefinite subjects.

12. Locative anaphora

The remote locative deictic $m\dot{a}(hin)$ has also anaphoric function:

(106) sà rà músà sà lím-é hàz tòk nzá 1SG EE PREP Musa 1SG see-GO dog 1PL mè-hín **ANAPH-DEM** 'I went to Musa and I found our dog there'

The locative demonstrative *màcin* can be used only if antecedents are inherently locative, as illustrated in the following fragment, The antecedent bin 'room' is mentioned in the first sentence (107) and repeated again in the third sentence (109), but this time followed by the demonstrative màcin:

- (107)á til ndá zá bíŋ depart 3SG EE room go bín dzán á mì dzáŋ ká PREP mouth room close 3SG 3SG close POS 'He went to the room and closed the door.'
- (108) báhámàn kámbáy lù á lùw-á-n nà say-GO-3SG PREP stick Bahaman 3SG say nákà wà REM DEM 'Bahaman spoke to the stick'
- (109)kámbáy wà mál á mál-á-n DEM catch 3SG stick catch-GO-3SG nďá bíŋ màcín ngàn 3SG DEM beat room 'The stick started to beat him in the room.'

If the antecedent is not inherently locative, the anaphor is $m \ge n$, and it must be preceded by the preposition nà:

hítdìb hítdìb á hítdì6-é-n (110)kràp wàhin 3SG sew sew-GO-3SG shoe **DEM** sew hàk bàk wírnjìk bàk-á-n 6à á fill fill fill-GO-3SG ASSC ash 3SG ká nà màn PREP LOC.ANAPH POS

'He sewed and sewed her the shoes. He filled them with ashes.'

13. Entity anaphor and switch reference

The form and the function of the anaphor

The form mbi (mbi phrase internal, mbin phrase final), glossed as ANAPH, for "anaphor," always functions as the head of the noun phrase. It may also be preceded by a preposition. Its antecedent may be a noun or a proposition. The function of the anaphor is to code switch reference to a previously mentioned entity:

- wilè dámù mbí báv á (111)still PRED bush ANAPH chief nd-á 6èt wàdá go-GO eat food 'The chiefi is still in the bush. He; came to take the food.'
- (112) *báy* mbá zá gár kà zá chief COMP EE leave POS **ANAPH** gár ábè nd-á ngàn stand ASSC go-GO 3SG 'The chiefi said, "Get out of here." Hei stood up and went back.'
- (113) à-ndà mbí skù r **ANAPH** 3SG-go D.HAB NEG mì zèbér tá tkón REL follow GEN 2SG 'If it does not go, she should follow your [advice]'

The phrase-final form of the anaphor, i.e. the form with the suffix n, is used to code the topicalization of the anaphor. Like other topicalizations of the subject, the switch reference marker is followed by the subject pronoun:

vál-á-n (114)séy рá give-GO-3SG ax give 3PL 'So, they gave him an ax.'

> mbén à tìk-é tàlàn káyàk kà jénì 3SG 3SG tilt-GO head earth PREP ax 'He inclined his head because of the ax.'

The switch reference marker is not marked for number and can be used with respect to both singular and plural antecedents. In the topicalization function, the switch reference marker may be followed by the noun that otherwise is its antecedent:

- (115) báy ábà nd-á ngàn sév mbéŋ ASSC go-GO 3SG **ANAPH** chief SO gàmíkìd-yíi nd-à-y mà zá go-GO-STAT EE chimp-PL REL pày wàcin kà бáт **DEM** INF eat tree 'The chief went back. Then, the monkeys came to eat the fruit of that tree.'
- yà-há-ú 6àt í 6àt (116) káf уà call-GO-3SG take 3PL 3PL take morning call dzáŋ ká bín zá á EE close POS PRED room 'He was called in the morning: he was locked in a room.'

tíl á dámù leave PRED bush 'He [he one who was doing the locking] went into the bush.'

6àt sév mbán nèwén tá díndèmdívà бáт ANAPH take salt GEN sweet start eat 'He [the one who was locked in] took the sugar and started eating.'

tíl ngàn gàk gàk wtá ván báy leave 3SG PRED home rain hit hit chief kàtàf mbán zèm wàdá tók ANAPH PRED road food finish eat tók ván zà finish EE rain

'When hei returned home, the rain; hit the chief on the road. Hei finished eating and the rain also finished.'

(117)tséy wàží bá-y-yíì zá vl-á chief-PL give-GO children-PL EE SO mbéŋ zá nènén à 3SG **COMP** ANAPH 1PL.EXCL kàciŋ gwád á bín plenty PRED room DEM 'The children of the chief said, "Give [it] to us." He said, "There is plenty here at home."

13.2 Anaphor in a prepositional phrase

One of the functions of the form mbi is to code the third-person singular pronominal object of a preposition as anaphora to a preceding argument:

(118) hìdì bàŧ mindén à ká dàvàr n other 3SG PRED INF make hoe man gá sùlúd ábà gá mbén rà hand two ASSC 3SG 'Another person will make twenty hoes with that.' (gá comes from gáb 'ten')

The antecedent of *mbi* in a prepositional phrase could be either the subject or the object of a preceding clause:

- (119) à mìnjé sà hìdì zά mái gàr 3SG **COMP** mother now 1SG want man bílèn kà mbén tá dzám bà ASSC ANAPH strong INF fight 'He told his mother, "Now I am looking for somebody strong to fight with him."
- (120)sév dî ngàŋ k-víi zà kà **POS** then cow-PL EE 3SG put á nà mbén PRED PREP 3SG 'Then the cows, he kept them, for himself'

Consider the following fragment of discourse: In the first sentence, hìdì 'man' is mentioned. In the second sentence, the man is an object of the

verb and it is not overtly coded. In the fourth sentence the man is an object of a preposition and is coded by the form mbén:

gànák vù (121)há hìdì black O 2SG man 'Are you a human being?'

> dòk há kímí zá gàr horse COMP 2SG want why 'The horse said, "Why are you looking for him?"'

dzám à kà zá 3SG **COMP INF** wrestle 'He said, "To fight."

dòk kúl kà dzám zá hà 2SG able INF horse COMP wrestle ábà mhí skù ASSC ANAPH **NEG**

'The horse said, "You can't fight with him."

In the next clause, with the topicalized object, the same subject is coded by the form a:

kwár-á-k (122) sán kà à n 1SG 3SG PREP INF drive-GO-1SG dál-á-n kwár kwár kà kúl kà S **AFF** do-GO-3SG drive drive 1SG able INF skàn skù nzà kà nd-á à rà thing NEG stay POS go-GO D.HAB 3SG 'Me, he makes me run, run, run. I cannot do a thing. Wait, he's coming.'

The function of the marker is to code previous mention in discourse, but not the last one. The marker mbi thus functions as a switch reference marker. Compare the following fragment: In the first sentence, the topic is hyena. In the second sentence, it is still hyena. However, in the third sentence, the form mbén is used. Its antecedent is the other protagonist of the discourse.

kwáykwáy (123)tsáy mà ndàv-á-y zà fall-GO-STAT hyena REL EE SO káyàk á hìtìríd PREP earth heavily 'So, the hyena; fell down heavily on the ground.'

> tséy mbí fát fát bákùl tó kwáykwáy so 3SG skin skin hide GEN hyena wàcíŋ nd-á DEM go-GO 'Then hej skinned that hyena . . .'

13.3 The event anaphora

The anaphor *mbi* can be used as referring to an event mentioned in discourse rather than to a noun phrase:

- (124) áb dùwôŋ mbéŋ ASSC back ANAPH 'after it'
- (125) séy áb dùwán mbi í then ASSC back ANAPH 3PL 'After that they . . .
- (126) ángà hìdà nd-á ngàn
 if man 'from his birth'
 à sán mbí sku
 3SG know ANAPH NEG
 'If somebody says that since his birth he does not know that.'
 i.e. 'that he has never encountered such a thing in his life'
- (127) séy à ndí fàd-á-ŋ tà so (H.) 3SG HAB shave-GO-3SG 3PL tàlàn fàd fàd fàd head shave shave shave 'So, she shaved and shaved and shaved their heads.'

lìm-é té gwidin ngà ká 6àh break POS see-GO only hide one kà POS 'Each time she kills just one and hides [it].'

ďál kà túm ndí mbén à always (F.) 3SG HAB do PREP ANAPH 'She always did like that.'

ďál-yí kà skù (128)ďá mbí mә do-STAT like **ANAPH NEG** exist REL 'It is not done like that.'

14. Conclusions

The system of reference in Mina consists of the following means: the full noun; deictic and anaphoric markers; nouns followed by a deictic or anaphoric markers; pronouns; absence of any markers.

The language codes the following subdomains within the domain of reference: deixis; known referent; deduced referent; remote previous mention; indefinite referent; and switch reference.

The system of deixis consists of place and entity deixis. Place deixis has a distinction between proximate and remote. Entity deixis, at least for independent markers, does not have a distinction between proximate and remote.

The system coding anaphora distinguishes between the markers for entity and place.

Chapter 18

Focus constructions

1. Introduction

Focus is coding of an element as particularly important or relevant for the given stage in the discourse. The term "contrastive focus" designates a function whereby one of the elements of a proposition is provided as information to contradict what the speaker believes is the hearer's presupposition, assumption, belief, etc. A test of which argument is in contrastive focus is a negative clause that denies the hearer's alleged presupposition.

The focus function has several markers, depending on which element of the proposition is selected as the most salient. Markers of focus include the use of dependent aspects and tenses and other means that differ for different elements of the clause in focus.

2. Focus on the subject

There two means to code focus subject. One construction has the form S REL VO. The focused subject is followed by the relative clause:

(1) hìdì wà mò nd-á-kù déb nò kítà man DEM REL beat-GO-1SG lead PREP justice(F.) 'It was this person who hit me. Take him to be judged.'

If the verb in a focus construction is transitive and there is no nominal or pronominal object following it, the verb must be followed by the definite object marker -u:

- (2) mìtis mò már-ù hunger REL graze-3SG 'It is hunger that nibbled at him'
- (3) vl-á-k mbà tán kúl kà 6át bìkáv mà REL give-GO child DED **INF** take God can hà déwlì skù ASSC force (F. dole) NEG 'It is God; that gave me this child, he; cannot take it away with force'

Cf.:

- (4) bìgáv vàl-á-k mbà tán God give-GO-1SG child DED 'God gave me that child...'
- mámán **(5)** hà tál ká màl bà wàdá ASSC food 2SG INF seize his mother try d-ú mà REL cook-3SG 'If you try to discipline [children] with food [by refusing food] it is the mother who cooks it'
- (6) hà m bốt-á-k pám á wùtá 2SG REL take-GO-1SG until PRED house 'It is you who took me up to the house.'

If a first- or second-person subject is in focus, the independent firstor second-person pronouns are used and are followed by subject pronouns:

(7) sáŋ mbà à k-á sà mà káp-ù 3SG 1SG REL break-3SG child say-GO 1SG 'The child said, "It is me that broke it."

The third-person pronominal subject in focus constructions is marked by the anaphor *mbi*:

(8) mbí mà tr-á-k kà
ANAPH REL save-GO-1SG POS
'It is he who saved me!' (tár 'separate people who are fighting';
'save')

The first and second person object pronouns are coded overtly, and also followed by the relative clause marker (only second person illustrated):

ngàz-á-kù (9) hà mà teach-GO-1SG 2SG REL 'It is you who taught me.'

The second means of coding focus on the subject is through the use of the dependent aspect, as in the following example, where the only marker is the dependent habitual rà:

(10)hìdì wàk à zá wà á 3SG COMP DEM 3SG man go crazy rà D.HAB 'She said, "This man is crazy."

Focus on the subject may be used in a yes/no interrogative clause. When that is the case, the verb is not followed by the definite object marker:

- (11)dàp hà mà sá νú 2SG REL drink only Q 'Is it you that drank again?'
- wàcin mà hìdá ngàz-á-h (12)DEM REL teach-GO-2SG man 'It is this man that taught you?'

3. Focus on the object

Several means are used to code focus on the object, depending on which other pragmatic functions are involved for both the object and the other elements in the clause.

One means of coding focus on the object is through the position of the object before the verb. Putting the object noun phrase before the verb results in two noun phrases preceding the verb. The distinction between the two arguments is coded by the locative preposition n preceding the object noun phrase. Thus, the clause has the form S n OV.

The preposition n otherwise codes locative arguments when the head of the locative phrase is inherently non-locative.

- (13) bàt á bàt-á-ŋ ndà n záván-yíì
 get 3SG get-GO-3SG beat PREP guinea fowl-PL
 wàcíŋ
 DEM
 'He grabbed it [his stick] and beat those guinea fowl.'
- (14) á n kàdám ngàn bàt 3SG PREP calabash 3SG take 'She took her calabash.'
- (15)6àt dé6 kàđám báy nà ngàn PREP calabash chief 3SG take carry á déb ìdá kά á carry POS 3SG PRED home 'The chiefi took hisj calabash and carried it home.'
- (16)til á ndà zá biŋ depart 3SG EE room go bín ká à mì dzáŋ á dzán n 3SG close PREP mouth room 3SG close POS 'He went to the room and closed the door.'

4. Focus on object pronouns

The focus on object pronouns is coded by forms drawn from the set of independent pronouns. These pronouns occupy the position of the object in the clause. Unlike object pronouns in a pragmatically neutral clause, object pronouns in a focus clause are not preceded by the goal marking form \acute{a} :

- (17) à n ká màl sàn 3SG PREP INF catch 1SG 'It is me that he is going to catch.'
- (18) à tàw hòŋ
 3SG hit 2SG
 'It is you he hit.'

máv hòn ná 1PL.EXCL choose 2SG It's you that we(excl) choose

The third-person singular independent form is mbin or mben, depending on the dialect:

(19)à tàw mbín 3SG hit 3SG 'It is him that he hits.'

The first person dual object pronoun is preceded by the goal orientation marker á:

ká màl-á nàmú (20)à PREP INF 3SG catch-GO 1DU 'It is the two of us that he will catch.'

5. Focus on an adverbial expression

Focus on an adverbial expression is marked by fronting the adverb and using dependent aspect coding.

(21)wà ndà gár á ká dàp píč gár DEM go stand 3SG stand POS only Sun 'Under this sun he went out and stood.'

6. Focus on the predicate

Focus on the predicate has different forms, depending on the aspect of the clause. In both past and present, focus on the predicate is coded by the dependent aspects.

In the past tense, focus on the predicate is coded through the marker ka, which precedes the verb phrase. The third-person singular subject is unmarked. The nominal, subject precedes the marker ka. For all other persons, the subject pronouns precede ka.

There is an important difference in the behavior of subject pronouns between the Marbak and Kefedjevreng dialects. In Kefedjevreng all subject prefixes have a nasal preceding ko-. In this dialect, all other

forms that are preceded by a prefix also have the alveolar nasal occurring between the prefix and the stem. In Marbak, there is no nasal prefix. For the dialect that has the nasal component, we transcribe the subject-focus marker as $nk\delta$. For the Marbak dialect, on which most of our description is based, the marker is $k\delta$. For the Kefedjevreng dialect, we postulate the following rule:

 $\emptyset \rightarrow n/PREFIX \#__STEM$ (elicited examples):

- (22) í ká dzà hàz tá bíč kà 3PL INF kill dog GEN Bitsi POS 'They killed Bitsi's dog.' (Marbak)
- (23) í nká dzà hàz-yîî tì bičì ká 3PL INF kill dog-PL GEN Bitsi POS 'They killed Bitsi's dogs.' (Kefedjevreng)

The form $k\partial$ can be used in various aspectual forms, which provides evidence that it is not an aspect marker. The evidence that the form codes focus is provided by the semantic content of the clauses used and by the discourse contexts where they are used. Natural discourse clauses with the non-infinitival form $k\partial$ describe something that normally would not be expected. This is illustrated in the next five examples:

- (24) ngùl-íyì s kà dzán-á nám skàn zá husband-PL 1SG INF find-GO 1DU thing EE 'My husband, I found us something.'
- (25) kớ fàk wàl zá
 INF give neck EE
 'He started to yell.' (from joy)
- (26)àa hárkàmà wàl nà kà dzán-á ah chief wife 1SG INF find-GO skàn pár zà ďáhà strange EE exist thing "Ah, my chief, there is something my wife found."

- (27)séy kámbáy nákà ká *6àt* zá REM INF take EE stick SO dàp immediately 'So the stick took off immediately.'
- nà kà dzán-á (28)wàl áá 1SG INF find-GO ah wife skàn pár zá bàdáp EE another again thing "Ah, my wife found another thing again."

The focus clause may be an interrogative clause expressing astonishment:

- (29)kà dzán-á nòk skàn pár zá find-GO INF 1PL thing another EE bádàp again "She found us something else again?"
- (30)kà dzán-á nòk hàrkámà áa zá INF find-GO 1PL chief (F.) EE ves "Yes, she found us something, my chief."

The focus clause describes unusual events and situations:

- (31)táŋ ngàn hìd-víì wà kà dà tàlàn zá EE DEM return INF 3SG man-PL cook head 'Those people returned, and she cooked herself.'
- ţà (32)kàbám ká á ahead **INF** 3SG say 3SG mbàd-á-k zà surpass-GO-1SG EE 'He [the buffalo] said, "He[the frog] is ahead. He surpasses me."'

The focus clause is also used for the things that the hearer has reason, based on the preceding discourse, not to expect to happen:

- (33)à kά bìkáf ká dzà tàtà cíké' kà INF 3SG God kill 3PL all **POS** say fin nàmú nám ká tì à tàn 3SG remain 1DU 1DU INF see DED 'He said, "God has killed them all; there remains only us, we will see."
- (34)séy mà ngùl ngùl ká wà REL husband husband INF then start kédén zà ngàn tá bá dàp stupidity DED EE 3SG again only 'Then the man started again with his stupidity.'
- (35)kwáykwáy ngàn tò kà ndá hyena 3SG D.HAB okay INF come zá hí ďál mí hì n **PREP** COMP 2PL make what 2PL kà dzán-à nók kì zá và 1PL EE INF find-GO isn't it meat 'Okay, a hyena came and said, "What are you doing? You found us meat! How nice of you!""

The focus clause is used to code an affirmative denial of somebody's wrong presupposition:

(36)ķì háá nók kà dzán-à nók zá 1PL INF find-GO 1PL EE meat ves 'Yes, we found the meat for ourselves' (not for you).

The focus clause may be used with iterative constructions:

(37)tàl tàl án ndà ngàn ká tàl á INF 3SG 3SG 3SG walk walk walk go tàl tàl walk walk 'She walked and walked.'

In the present tense, the focus on the predicate is coded by dependent habitual aspect:

(38)à zèbér mà tùk rà follow speech 2SG D.HAB 3SG 'By golly, he follows your word' (said in astonishment, about the translator present at the recording)

Interestingly, in the process of elicitation when the speaker provides isolated clauses, most clauses in the past tense are given with the form ko. The explanation for this fact follows from the function of the construction. Each individual, isolated sentence is conceived as expressing something special, an unusual event.

7. Conclusions

Focus on the subject is coded by the relative clause. The subject remains in its pragmatically neutral clause-initial position. Focus on the object is coded through the position of the object before the verb, and the use of a preposition to code the additional argument. Focus on the predicate is coded through the deployment of the infinitival marker ka after the subject. In all focus constructions only the dependent aspects are used.

Chapter 19

Topicalization

1. Introduction

This chapter deals with the problems of establishing the discourse topic, changing the discourse topic, and topicalization within the sentence. The issues of establishing the discourse topic are very much linked with the problem of reference, since one of the markers of topicalization is identical with the entity deixis marker.

One may find scattered approaches in the literature whereby the subject of a clause is automatically treated also as the topic of the clause if there is no other topic. The natural discourse data in Mina clearly indicate that the subject must be topicalized first in order to serve as the topic of paragraph.

2. Establishing the topic of a story or narrative

The discourse topic is typically established at the beginning of the discourse. Nouns that are marked as discourse topics have not been mentioned before in discourse. The topic noun phrase is followed by the entity deictic wà or wàcin. Here is the first line of a story:

(1) hìd-yíì wà í tètè màkád man-PL DEM 3PL 3PL three 'There were three men.'

Once the topic has been established, further reference to the same referent is coded by subject pronouns:

(2) i ndà ká bèr-é cìkid bùhù ntá 3PL go INF sell-GO sesame bag (F.) one 'They were going to sell one bag of sesame seeds.'

The forms wa and wàcin are free variants in establishing the discourse topic. Here is the first line of another story:

- (3) hìdè wècin i tàtà nfád man DEM 3PL 3PL four 'There were four men.'
- (4) ngàlámbàr wàcín ngàlámbàr tá kwáyàn story DEM story GEN squirrel 'This story is the story of the squirrel.'

3. Establishing the topic within a discourse

The main topicalizing means is the use of the demonstrative wa or its phrase final form wacin following the noun. In addition to the marker wa, the topicalization may also involve the use of the full noun followed by a subject pronoun coding the number of the noun. The following example contains both means of topicalization: were in the matrix clause and the subject noun followed by the subject pronoun in the embedded clause:

á (5) hìdì wèhin à ká zá ván COMP rain PREP INF DEM 3SG 3SG man gàr kàsám ďà á kà nd-á-k touch-GO-1SG fall 3SG INF want body skù **NEG**

'This man said, "Rain, when it falls, will not touch me."

Once the discourse topic has been established, the establishing of the topic of the first paragraph, which may be different from the discourse topic, may follow. If the new topic happens to be the subject, it has to be topicalized. Consider the following beginning of a story. The first clause introduces the story:

(6) wàcin mòndòvòn

DEM rabbit

'This one [is about] a rabbit.'

The second clause introduces the topic of the first paragraph of the story, which is also the subject. The identity of the topicalized noun as subject is assured by the absence of any other subjects in the story:

(7) màllúm wàcín gár á ndà jáangàl marabout DEM leave 3SG go voyage (F.) 'This marabout left to go on a trip.'

The marabout is the subject of the next four clauses in the story.

wàcin à

(8)

kwáyàn

In the following fragment, each sentence has a new subject and a new topic. Each new topic is marked by the form wàcin. Once the subject has been topicalized, it must be overtly coded again by the pronoun preceding the main verb of the clause:

ndà

ká

n

ká

- squirrel DEM 3SG INF PREP INF go màrà-há á dámù ndà dzáŋ á dzán graze-GO PRED bush find 3**S**G find go làkáf baboon 'The squirrel went to graze in the bush and found a baboon.'
- (9) làkáf wàcín à zá hà nd-á
 baboon DEM 3SG COMP 2SG go-GO
 kímí
 why
 'The baboon said, "Why did you come?"

Proper names, even when coded by ordinary nouns, as well as titles and the name for God, cannot be followed by the deictic wa. In such a case, the only marker of topicalization is the third-person pronoun preceding the verb. The following example illustrates such a case in the main and the embedded clause:

(10)mímèn à zá àmmá bìkáv COMP 3SG leopard 3SG truly God mbál-á-kù gwáď nd-á ķì á like-GO-1SG go-GO plenty meat **PRED** nàŋ bín 1SG room

'The leopard said, "God truly loves me, as there is a lot of meat in my room."

4. Borrowed markers of topicalization

Topicalization of the subject is also coded by the marker $k\acute{a}m$, borrowed from Fula. Pronominal and deictic or anaphoric subjects occur in the full, rather than the phrase-internal, form. The topicalized element is still in clause-initial position:

(11) séy báy zá wàcíŋ kám dámà so chief COMP DEM TOP (F.) good 'The chief said, "That, at least, is good."'

The form kám may follow the deictic topicalizer wa:

sév wàl (12)kám ká wá nàz tál the DEM TOP INF walk woman stop ďá skù dáp NEG exist only 'Then, that woman did not stop taking her walks.'

5. Topicalization of pronominal subjects

Topicalization of pronominal subjects can be coded through several means. For the third-person plural subject, topicalization is coded by the independent pronoun $t \partial t \dot{a}$ realized as $t \partial t \dot{a}$ in phrase-internal position:

(13) tàtà gwád á bíŋ á màcíŋ
3PL plenty PRED room PRED DEM
'As far as they are concerned, they are numerous in that room over there.'

Compare the use of the subject pronoun in a non-topicalized function:

(14) i gwád á bín á màcin 3PL plenty PRED room PRED DEM 'They are numerous in that room over there.'

The pronominal subject may also be topicalized by the deduced reference marker ta. Just as after a topicalized noun, the subject pronoun must be used again before the verb:

- (15)tàŋ mbál tàtà nfáď í DED 3PL four like 3PL ká vl-à-ŋ ží wàl tán ná νí give-GO-3SG then DED INF PREP who woman á mbál-ù νí mbál-ù νí 3SG 3SG like-3SG who like-3SG who 'The four of them liked the woman. Who to give her to? Everyone liked her. Everyone liked her.'
- (16)táŋ hà tùwớr á nà fálà tètàn suffer PRED PREP among 3PL 2SG DED gàzàd tátàn žìŋ wà νù DEM work good time 'You suffer a lot among them, is it then a good work?'

The subject may also be topicalized through the forms borrowed from Fula $k\acute{a}m$ and $b\grave{o}$:

- (17)sà bó sà mìŋ tátà n kí 1SG 1SG also PREP INF 1SG stay alone "I also will stay alone."
- (18)báytà gómbòk-yíì mà zá zá large frog-PL REL EE **COMP** hí kám fú hí svì tàn wàn COM 2PL TOP sleep:IMPER all DED 2PL mùkàdkádán sùlúd sùlúd kà upside down two POS two 'The largest of the frogs said, "You all lie down on your backs in pairs."

- í (19)sév á tà-t kám ndí ngà 3PL then PRED 3PL TOP (F.) HAB catch dá kì-víì zà ká ndá kà tàn EE INF INF cook DED meat-PL go "Then, as for them [the hyenas], they just catch the meat [and] bring it for cooking.' (i.e. they have no shortage of meat)
- kwáykwáy ķì (20)zá mbin kám hyena TOP **GEN** COMP ANAPH meat kínìŋ nzà hí ká mú 2PL 2SG DEB here stav 'Hyena; said, that as for him; your meat should remain with you.'

If the new, but previously mentioned, subject is also the topic of the clause, that is marked by the phrase-final form of the determiner:

- (21) àjíyà nd-á rà sév 3SG go-GO D.HAB messenger (F.) SO nd-á dzán wàl wàciŋ go-GO find DEM woman So, when the messenger came, he found that woman.'
- wàcin à tsók-ó (22)wàl zá DEM 3SG **COMP** remove-GO woman rùkùt tók kà 2SG POS clothes 'That woman said, "Take off all your clothes."'

6. Non-propositional topics

As in some Southeast Asian languages, the topic does not have to be an argument or an adjunct of the comment clause. The non-propositional topicalized element occurs in clause-initial position and is followed by demonstrative wa. The following sentence has two such topics preceding the comment clause: "the male cow" and "the udder":

(23) tá ngúlà lwá ká wà kà à 3SG GEN male udder say but cow ká ďà wà wà á tìkì à n 3SG PREP INF fetch milk DEM PRED where 'He said, "The bull, regarding the udder, where will the milk come out?""

Here are other examples of non-propositional topics:

- wàcin wàl-yii mbigin ndí (24)ng-àŋ break 3PL HAB mbiguin DEM woman-PL cicélém tár vàn á báv kà n PRED PREP wood INF rain firewood pray 'This mbiguin [a ritual], women go break wood for the chief to pray for rain.'
- (25)wáyàk wàcin à dà bàl tár à DEM 3SG wayak 3SG bal pray prepare nkwà màsádàf-yíì p'à mà màl á spirit-PL give PRED PREP REL seize goat dà màsádàf ká dà tàŋ spirit **INF DED** prepare prepare 'This Bul Wayak, one prays, one makes sacrifices to the spirits. One takes a goat and gives it to the person who prepares the sacrifice, and he prepares it.'

7. Aspect in the comment on the topic

A general characteristic that distinguishes topicalization-of-subject from focus-on-subject constructions is the use of aspect in the comment clause. Unlike in the comment-on-focus clauses, the comment-on-topic clauses have aspects from the independent set. Thus, the independent habitual rather than the dependent habitual aspect is used in the comment on the topic:

(26)wàl wá ndí tàl ngàn dáp à walk only wife DEM 3SG HAB 3SG dámù à ndí tàl dáp ngàn á 3SG still 3SG HAB walk PRED bush 'The wife still took walks in the bush'

Here is an example of the use of reduplication of the verb to code the past tense:

lùw-á-ŋgù (27)lù í sav-GO-3SG 3PL sav kámbáy wà á màl màl-á-n tà DEM catch 3SG catch-GO-3SG 3PL stick nda mècin tàtà hit 3PL there 'They said [it] to the stick, and the stick went on to hit them there.'

The pragmatically dependent aspect can be used in the comment-ontopic clause if the clause has to be interpreted with another clause for some reason, e.g. clauses that have explicit reference to something that was said before:

(28) séy wàl wà gíž-é-ŋ kì mbíŋ so woman DEM tell-GO-3SG like ANAPH So, that woman told him like that.'

If the comment is itself a focus on the predicate clause, it has the marker ka:

(29) wàl tùkón kà mìsìl zá woman 2SG INF steal EE 'Your wife, she has stolen.'

Cf.:

(30) wàl tùk kà mìsìl zá woman 2SG INF steal EE 'Your wife has stolen.'

8. Topicalization of the object

Topicalization of the object may have two forms, depending on the position in which the object is first mentioned in the text and on the scope of the topic. If the scope of the topic is limited to the clause in which the object occurs, it is topicalized through clause-initial position and the deictic wà or wàcin or wàhin following it. The object role is deduced from the fact that there is a subject in the clause. In the following exam-

ples, the subject is the unspecified human coded by the third-person plural i:

- wèhin i (31)dár dár ná dance DEM 3PL dance D:HAB DEM hìdà ntá skù NEG one man 'This dance, one does not dance it just by one person.' (One needs many people for this dance.)
- mbigin wàcin i màts (32)ďál ngàm mbiguin DEM 3PL do sicknes because hàyák í hóynà kà ďál nà tàn INF do PREP village 3PL calm (F.) DED 'This mbiguin, they do it because there is sickness in the village. They cure it.'
- (33) mìnjé bàgám nò wà kó bìm zó skò vù now speech 1SG DEM INF get EE NEG Q 'Now, my words, he understood, didn't he?'

If the object is focused and topicalized, it occurs in clause-initial position:

- (34)hál tá kámbáy ngàn fúu tàn GEN limit stick 3SG all **DED** ván ká mhàlém ďá skù INF touch exist **NEG** rain 'The area delimited by his stick, the rain did not touch it.'
- (35)dè6 Κì tètàn fü tàn GEN:3PL all DED bring meat dèh ká vàm n 3PL bring INF PREP water 'They brought all of their meat into the water.'
- (36) wàl gim mà r skú
 woman hear mouth D.HAB NEG.Q
 kà gám kà
 INF chase POS
 'The woman who does not obey, should be chased away.'

(37)'nkwà tá lìvèn hì ká skèm-á zà 2PL GEN black **INF** buy-GO EE goat hì káyàk fàt kà á 2PL POS skin PRED earth 'A black goat, when you buy it, you skin it on the ground.'

Topicalization of the object may also be coded by a comment clause marked through the comment-clause marker syì:

- (38)mímèn tílèbék syì 6ám zá hà leopard COMP fresh COMP 2SG eat ská rà νù D.HAB **NEG** 0 'The leopard asked, "You do not eat raw things?"'
- í (39)à zá kà lù rá INF 3SG COMP 3PL D.HAB say gánàk hìdì há syì vù person **COMP** 2SG man O 'He said, "The one who they call man -- is it you?"
- (40) ták tár láy tá mìtíš mànà wàcíŋ in month time GEN hunger like DEM 'In a time of the famine like this...'
- (41) dzáŋ gáy skàn nàm skàn svì há ďiyà thing COM 2SG thing find 1DU spoil put kà POS 'The thing we found, you are ruining it.'

9. Topicalization of adjuncts

Topicalization of adjuncts is coded by the fronting of the phrase, by the deictic form wàcin, or by the borrowed marker kám.

- (42)gèlbé kám há pàts-á nòk mbà ntá TOP(F.) better 2SG take 1PL child one nòkóŋ hà dá 2SG cook 1PL "You better take one of your children and cook it for us."
- (43)kám màkéké sá tìy ďám tìy tìy 1SG TOP old days good see see see wàcin há kúl dáy ngám màkéké old days DEM 2SG because surpass can ngámbà ká đàb túkòn INF neighbor 2SG ask

'I realize that the old times were better, because in old times you could ask your neighbor.'

Topicalization of an instrument may be coded by fronting and use of the phrase-final form of the element. In the following sentence, the adjunct kúlí 'ceremonial clay pot' is in sentence-initial position, but there is no overt marker of its role in subsequent clauses:

tùkwóŋ (44)kúlí wàhín màná hìdì màts-í mà **GEN-2SG** like die-STAT kuli DEM man REL há kà tón zà kà n EE 2SG PREP INF POS represent

'These kulis, like when somebody in your family dies, you represent him [with those kulis].1

10. Conclusions

The main means of topicalization is the use of the demonstrative wa, or its phrase-final form wacin after the topicalized element. Topicalization of the nominal subject may also be coded by subject pronouns preceding the verb. The object may also be topicalized by the demonstrative wa. The topicalized noun phrase does not have to be an argument or an adjunct of the comment clause. The comment-on-topic clause is characterized by the use of the pragmatically independent aspects.

^{1.} The custom of establishing ceremonial pots is done only for mother and father. The representation is a small clay pot. For a period after the death of a parent, a portion of each meal is set aside for the spirit of the parent.

Chapter 20

Parataxis

1. Introduction

The term "parataxis" is used for all types of constructions where two or more clauses are part of the same sentence, but where each clause preserves its independent status. There are several types of paratactic clauses: clauses without a conjunction, asyndetic conjoining; sequential clauses; and conjoined clauses, with several types of conjunctions.

2. Asyndetic conjoining

Several issues are relevant with respect to asyndetic conjoining. The most important is a distinction between asyndetically conjoined clauses and sentences in discourse that merely follow each other. In clauses that follow each other in discourse, the subject is repeated, and the tense, if any, is marked. In asyndetically conjoined clauses with the same subject and tense, the subject and the tense markers are not repeated. Here is an example of sentences that follow each other in discourse:

- (1) míndén à ndí téwél gámbáy another 3SG HAB twirl stick 'Another twirls a stick.'
- (2) mindén à pàdák njûl another 3SG split grass (a certain variety) 'Another splits a stalk of grass.'
- (3) mindén à ndi mbir another 3SG HAB jump 'Another jumps.'

(4) *ii* zék yàw [žék] 3PL make competition 'They had a competition.'

Here is an example of asyndetically conjoined clauses:

- (5) gáw pàpáł páy bák nà yàm hunter detach wood throw PREP water 'The hunter detached the bark of a tree, threw it into water'
- (6) mà lớm bín rá drìš ngád drìš

 REL build house dig mud mix mud

 'The one who builds a house dug the mud, mixed the mud,'

lớm bíŋ gá hàmás nd-á hàg ká
build house cut straw go-GO thatch POS
wán kó nò mớŋ
lie inside PREP LOC.ANAPH
'built a home, cut some straw, thatched the roof, and lay down
inside it.'

2.1 Same subjects

When the subjects of two asyndetically conjoined clauses are coreferential, no overt pronouns are present in the second clause, regardless of its tense:

- **(7)** 6èt kámbáy ngàn ďiyà žé6 á 6àt 3SG stick 3SG put follow get get tàŋ DED 'He got his stick and went to follow her.'
- (8) tàk dá klíf wùtá tàk wàndàn wà Z fish DEM EE house crush peanut bring crush 'He brought the fish home, he crushed peanuts.'

(9) séy kàđám wà dà dà á DEM cook cook 3SG calabash SO mbá té té té té wùd màná wà pè d-á-n DEM cook-GO-3SG food like much spread(x 4) SO

> á kàbám ngàn mà PRED DEM 3SG face

'So the calabash made a lot of food for her and spread it in front of her.'

fàd-á-ŋ tàlàn (10)tà à ndí séy shave-GO-3SG 3PL head 3SG HAB SO fàď gwidin fàď fəɗ lìm-é té shave shave only see-GO shave one Бá ká ká ngà break POS hide **POS** 'So, she shaved and shaved and shaved their heads. Each time

she killed just one and hid it'

(11)màdáràf ngàn 6át skàn wàl tá 3SG favorite take thing **GEN** woman ngùl ngàŋ káts cíkè á wtá gather all PRED house husband 3SG mámán mother.3SG

> 'His favorite wife took her husband's things and collected them all at her mother's house.'

6àh 6àh cíkè kà POS hide hide all 'She hid everything'

Here is an illustration with a third-person plural subject, which is unmarked in the second clause:

(12)6àt 6àt dìgid tsàp kà tsàp fúu **POS** take 3PL take thorn close close all 'They took thorns and they closed everything.'

Asyndetic conjunction can have the deontic mood in both clauses. Interestingly, however, the mood in the first clause is imperative and in the second, subjunctive:

(13)báv zá tàp-á nà mpáy wàciŋ climb-GO chief **COMP** PREP tree **DEM** mbál-á-h kà 6ám há pick-GO-2SG INF eat 'The chief said, "Climb that tree and pick something to eat."

2.2 Different subjects

When two clauses have different nominal subjects, each subject precedes the verb of its clause. Without any conjunction the sequentiality in time or cause-and-effect relationship are not overtly coded:

(14)nd nd rà rà vàŋ D.HAB 3PL DHAR 3PL walk walk rain ká wà ďà start INF draw water 'While they were walking, rain started to fall.'

3. Conjunction mid

The conjunction *mid* has been found at the beginning of a sentence in narratives and between clauses within the same sentence. In both syntactic positions, its function is to conjoin propositions that are not dependent on each other, that are not in cause-and-effect relationship or in temporal relationship.

mindén kámbáy (15)6át mìd žì mà téwél and then other REL twirl stick take ďiv-á téwél diy-á téwél kámbáy stick start-GO start-GO twirl twirl díy-á téwél tàlàn ngàn PRED head start-GO twirl 3**S**G

'The other, the one who twirls the stick, took the stick and started to twirl, started to twirl, started to twirl [it] above his head.'

màgúdầh (16)tàlàn bín mìd páláh outside head room and tail 'The head is inside but the tail is outside' (a riddle—the answer is 'fire')

4. Sequential events coding through the auxiliary nd 'go'

The temporal sequence of events is coded through the marker ndà, most probably derived from the verb nd 'go'. The most important characteristic of ndà as a sequential marker is that it can be followed by another verb:

(17)ndà lùw-á-n ndà-hà hí má say-GO-3SG DEB 2PL go -GO go 'Go tell him to come here.'

> ndà v-ù vá call call-3SG go 3PL And they called him.'

- (18)zágìyì tíl 6àtà-há-w ndà 6èt í courtiers (F.) go take 3PL take-GO-3SG go gáď hà wàl wà táŋ ASSC woman DEM DED push 'The courtiers went and brought the calabash with the woman.'
- (19)kámbáy nd-á diyà ďi wà ká stick go-GO put 3PL DEM POS put fádà tá dàp n PREP court (F.) iust DED 'They came and put the stick in the court of the chief.'
- (20)wàl wà ràz màbín ndà tsáp á màl door 3SG wife go DEM open tsap catch ká **POS**

'The woman opened the door, went [in] and tsáp caught [it].'

This marker can be used when the subjects of both the antecedent and the sequential clause are the same. Since the subject is the same, it is coded only once, in the first clause of the sequence:

- (21) hós ndò đếw kà arrive go stay POS 'He arrived and stayed.'
- (22) dzán á dzán-á mò tó gwidin find 3SG find-GO REL GEN single nákà wèhin REM DEM

'He found the one sesame seed of those [that were counted].

nd-á náz á náz ká nà láy tàŋ go-GO throw 3SG throw POS PREP place DED 'He went and threw it into its place [in the bag].'

žè6-ú dzán (23)žè6 žè6 á wàl ndà follow follow 3SG follow-3SG wife find go ngèn nákáhà 3SG REM 'He followed [the footsteps] and found his wife'

The sequential clause is also used after a temporal protasis clause, which indicates that the sequential clause has a temporal nature, coding the event occurring after another event:

(24)kà ndà zá fü ndò dzáŋ záván-yíì guinea fowl-PL all (F.) go INF find EE go màr rá graze D.HAB 3PL 'Each time she went she found guinea fowl grazing.'

The marker $nd\hat{\partial}$ may also code the effect clause in a cause-and-effect relationship, where the subjects can be different. In such a case, the marker $nd\hat{\partial}$ precedes the subject; if the subject occurs between the reduplicated parts of the verb, the marker precedes the predicate:

á (25)6èt 6èt káyyà hí màl ká INTERJ 2PL 3SG start start catch POS 'He started, "Yikes! stop (PL) it."

> sév ndà màl wàl wá màl ká catch womanDEM catch POS so

'So the woman stopped it.' (Although the order is given to plural participants, only one person executes the order)

A piece of evidence that the form $nd\hat{\partial}$ is not merely a verb of movement is provided by clauses that rule out any movement interpretation for ndà:

dzáŋ tíl dámù ndò cín (26)séy á father.3SG leave PRED bush find so go wùtá à zá váv ndà daddy go 3SG **COMP** house 'When he went into the bush, he found his father and said, "Daddy, return home."

If one chooses kə instead of the ndò above, the clause would mean: "He went for the purpose of finding his father," i.e. no implication that the goal was accomplished.

The sequential marker is used to code the temporal sequence of events in a discourse:

(27) wàl wá tàl à ndí ngàn dáp only wife DEM 3SG HAB walk 3SG ndí tàl ngàn dámù à dáp á 3SG 3SG HAB walk still PRED bush 'The wife still took walks in the bush'

> séy dzáŋ dzáŋ-á kàđám ndà á find-GO find 3SG calabash SO go dámù á PRED bush

'While walking, she found a calabash in the bush.'

ndá déв á dé6-ù ndò go:GO bring 3SG bring-3SG go lw-á ngùl ngàn tell-GO husband 3SG 'She brought it and told her husband.'

(28)tál-à tál-à á à à ndà dzán 3SG walk-PAST walk-PAST 3SG go find dzán-á kámbáy làkwid làkwid làkwid làkwid straight straight straight find-GO stick 'She walked and walked and she went to find (and found) a very straight stick.'

The verb of movement $nd\partial$ and the sequential marker $nd\partial$ differ in that the former may be followed by possessive subject pronouns. Both functions of $nd\partial$ are illustrated in the following example:

(29) ábà nd-á ngàn wùtá then go-GO 3SG village 'Then she returned to her village'

ndá yá ngùl ngèn á bíŋ go:GO call husband 3SG PRED room 'and called her husband into the room.'

gómbòk-yíì (30)nd-á cìbéw á páláh frog-PL PRED outside go-GO all fàt fàt Ьì tètàn fàt skin skin 3PL skin meat 3PL 'All the frogs went out and skinned their meat.'

The sequential marker, unlike the verb "go" does not take aspectual markers:

'They were going, going, going, till they came to a river, which filled up.'

If the events are not connected, the sequential marker $nd\hat{\partial}$ does not occur:

(32) báy bàt zá ngàn déb ìdá chief get EE 3SG carry home 'The chief took it [the stick] and carried it home'.

'Then she carried her calabash, and returned home with it'

The form $nd\partial$ has acquired also the function of simply conjoining two propositions, without the implication of temporal sequentiality, as evidenced by the following example. Here the form $nd\partial$ precedes the clause that complements the first clause, from which it is separated by an intervening proposition:

(33)mbùw-ví zà kó ί tàlàn mà svì REL COM QUANT unite-STAT EE 3PL head ndà í tsúk tàlàn váv ndò isolate head where 3PL go go tàtà dáp skà vù just 3PL NEG 0

'If they unite themselves, no matter where they go, they isolate themselves.'

4. The propositional relator ko

The marker ko, which otherwise is a polarity marker, may also be used as a propositional relator, and its function as such may include counter-expectation:

(34)wùtá kìm hí ndà kò rà 3PL 2PL go home but hear D.HAB skù **NEG** 'Go home! But they will not listen.'

The form ko indicates that the conclusion surpasses the expectation:

(35)gàdéd diyà klíf sév 6át 6ál 6ál 6ál take arrow put kill fish kill kill SO gwáď klíf-yíì kó kúl kà plenty fish-PL but able INF 6ál tà skù kill 3PL **NEG**

'So he took his arrow [and] started to kill fish. He killed very many, but he could not kill them all.'

(36)ďi nà mà kál kál kó 3PI. PREP mouth equal (F.) even (F.) put sàn ďá k skù INF know exist NEG

'They put [something] in their mouth at the same time, and he did not recognize them.'

The marker $k\partial$ occurs in Fula and in other Chadic languages. It may represent either a common Chadic retention or a widespread borrowing in the area.

The marker àmmá denies a presupposition of a preceding statement, including the immediately preceding clause:

(37) hà zá ááá mhí sà nà kí **COMP** ANAPH 1SG PREP INF ah. you ìdá vàn-á tàn àmmá sà há DED 1SG ASSC house but move-GO 'She said, "I would have moved but I have a house."

As in other Chadic languages, the marker àmmá is borrowed from Arabic via either Hausa or Fula or both.

5. Conclusions

Paratactic constructions may be asyndetic, sequential, or conjoined. Asyndetic constructions do not indicate any specific relationship among clauses. Sequential clauses, marked by the verb ndà 'go', code temporal and cause-and-effect relationships between clauses. The markers $k\acute{o}$ and àmmá, both potential borrowings, deny speakers' possible presuppositions.

Chapter 21 Complementation

1. Introduction

The chapter on complementation is organized as follows: We first describe complements of verbs of saying, since these complements represent the greatest variety of forms and functions. A number of issues that emerge in the complementation of verbs of saying are also relevant in the complementation of other verbs. We then describe complements of volitional verbs; complements of verbs of perception; complements of verbs of knowing; and finally the infinitival complements.

2. Complements of verbs of saying

Complementation of verbs of saying is important for several reasons. They are the verbs that take complement clauses most often. Complement clauses after verbs of saying may have different modality values. The complements of verbs of saying, more than complements of other verbs, have to resolve the problem of coreferentiality and switch reference between the subject of the matrix clause and the subject of the embedded clause and the addressee of the embedded clause.

2.1 Verbs of saying and the complementizer

There are several verbs of saying, $k \hat{\sigma} l \hat{u}$ 'address somebody', $k \hat{\sigma} g \hat{\iota} z$ 'say, tell' and $k \hat{\sigma} g \hat{\iota} z$ 'talk with' (which takes the preposition $g \hat{\sigma} m$ 'with' and has the citation form $k \hat{\sigma} g \hat{\sigma} g \hat{\sigma} m$). The first two verbs can have prepositional or clausal complements. The verb $g \hat{\sigma} a$ can have only a prepositional complement:

- (1) i lù kì mbéŋ
 3PL say like that
 'They said like that.' (i.e., they all said the same thing.)
- (2) dáy ká gìz too much INF tell 'It is too much to say.'
- (3) à gà góngà 3SG say truth 'He told the truth.'

2.2 The de dicto complementizer

The most frequently used verb of saying among older speakers is the form $bar{g}$. Younger speakers do not use the form $bar{g}$ and instead use the complementizer $bar{g}$. The form $bar{g}$ is not a verb as there is no infinitival form $bar{g}$ to be a verb either; the citation form that they give is $bar{g}$ to speak'.

An explanation for the syntax of the forms $k\acute{a}$ and $z\acute{a}$ and their perception follows. The verb $k\acute{a}$ came to acquire the function of a grammatical marker meaning something like "here is what X said"; in other words, it acquired the function of complementizer. As a grammatical morpheme, it has undergone a phonetic simplification from a voiced lateral continuant to a voiced alveolar continuant. Once the phonological change set in, the connection between the form $z\acute{a}$ and the verb of saying ceased to exist.

The form $z\acute{a}$ is used only with de dicto complements, i.e. complements of verbs of saying that represent a proposition. In the speech of older speakers, instead of the form $z\acute{a}$, the form $\not b\acute{a}$, segmentally identical with one of the verbs of saying, but with high rather than low tone is used. Younger speakers systematically substitute $z\acute{a}$ for $\not b\acute{a}$.

Older speakers do not use the complementizer $z\dot{a}$. Younger speakers, however, use $z\dot{a}$ as a complementizer after verbs of saying:

(4) à lùw-á-h zá hà nék skù ngà vú 3SG say-GO-2SG COMP 2SG good NEG DUB Q 'Will he tell you that you are not good?' (I doubt he will).

Consequently, we gloss zá as COMP. The complementizer zá may not follow other verbs in the past tense, but in the future tense it may not be used without a verb:

(5) lù zá à 3SG **COMP** sav 'He will say ...'

The most important piece of evidence for the complementizer rather than verb function of the form $z\dot{a}$ is provided by the manner in which the addressee is coded.

2.3 Coding of the addressee of the verbs of saying

If the speaker chooses the complementizer zá instead of a verb of saying, the nominal addressee may be coded by the preposition n. The presence of the preposition is justified by the following facts. The addressee is conceived of as a locative complement, as evidenced by the presence of the locative preposition n. The addressee is not inherently locative; therefore, the preposition n is required. The locative predicator a is optional, although it is possible that its presence is often masked by the preceding complementizer which also has the vowel \dot{a} with high tone. Natural discourse most often has the third-person addressee coded by a full noun. This results in many sentences having two full noun phrases:

- ngàz (6) sév gáw dàɗ zá hunter remove leg 3SG **COMP** SO kwáyàŋ hàt-ú PRED PREP squirrel take-3SG 'Then, the hunter took off a leg [of a game animal], [and] he said to the squirrel, "Take it."
- **(7)** tàkár hà à zά nà gàr 3SG COMPPRED PREP turtle 2SG want kà ďá vàm skù water NEG INF draw 'He said to the turtle, "Don't draw any water!"

- (8) kwáyàŋ à zá nò tàkár mòsáw squirrel 3SG COMP PREP turtle fry kìléŋ meantime 'The squirrel said to the turtle, "Fry it in the meantime.""
- (9) kwáyàŋ à zá nò wòdó gàmták bàh squirrel 3SG COMPPREP food chicken hide kò dùwóŋ ńvòŋ
 PREP back rock
 'The squirrel said to the caterpillar, "Hide behind a rock.""
- (10)bàkàlàf zá nà gómbòk hà kúl kà buffalo COM PREP frog 2SG able **INF** ší skù **NEG** run 'The buffalo said to the frog, "You cannot run"

The addressee may be omitted:

(11)bàhámàn sév wurtə páláh à zá Bahaman leave(F.) 3SG **COMP** then out bá dàp ndà sévtíinà go 'call' again 'Then Bahaman went out. She said to him, "Go make that call again."

If instead of the complementizer $z\dot{a}$ a verb of saying is used, the nominal addressee is coded as indirect object, i.e., the verb has to have the pronominal object suffix, and the addressee is coded only by the preposition n:

(12)lù wàl wà lù á lùw-á-n say-GO-3SG PREP wife DEM 3SG say say kàđám dá-n gwáď wá má cook-3SG DEM DEB food calabash 'The woman told calabash to prepare her a lot of food.'

2.4 Direct speech

Direct speech is characterized by the use of the first-person and second person pronouns, referring respectively to the speaker and the hearer of the ongoing conversation. Direct speech may follow the complementizer zá, or it may follow the verb of saying without a complementizer:

- (13)ngùl ngùl zá kàđám mà calabash DEM husband husband COMP vl-à-k wùdá gí give-GO-1SG food **POL** 'So, her husband said, "Calabash, could you give me some food?"
- kwáykway-yíì wà (14)há mbàl-ù zá ángà DEM COMP 2SG hyena-PL want-3SG if kàcin há vàn á move PRED here 'The hyenas said, "If you want you can move in here."
- (15)kwáykwá-yíì bá zá á tùk kám ASSC 3PL COMP PRED 2GEN TOP(F.) hvena-PL hí hì ndà-há fú tàn 2PL all (F.) 2PL go-GO DED 'As for the hyenas, they said, "Come you all."
- (16)kóo νí zá sà dév **QUANT** who COMP 1SG also PRED kì mbén **ANAPH** like 'Each one of them said, "Same with me."
- (17)zá hà à gàr mí 3SG COMP 2SG wish 'He said, "What do you want?""

(18)séy vígìn pár ɗáhà à ķá hákèm bird SO other exist 3SG daughter say tá báv bákàhà í nd-á GEN chief today 3PL go-GO D.HAB fát-á-h kà INF skin-GO-2SG

'Then a certain bird told the daughter of the chief, "Today people will come to kill you."

The direct speech may also consist of idiomatic expressions without a subject:

(19) kwáyàŋ zá á pàt mbáŋ squirrel COMP PRED tomorrow cut 'The squirrel said, "Never again." (lit. 'tomorrow cut')

Here are examples of the direct speech following directly the verb of saying, without the complementizer:

- (20) à gá tò 3SG say okay 'He said, "Okay."
- (21) lù á lùw-á-ŋ nà kàdấm wàcíŋ say 3SG say-GO-3SG PREP calabash DEM 'She addressed this calabash.'

kàdám vl-à-k wùd gí calabash give-GO-1SG food POL "Calabash, could you give me some food?"

- (22) à gá như tó mó mòts-yíz à 3SG say goat DED REL die-STAT EE 'He said, "The goat is dead."
- (23) à gá nó hìdì wàcín nók
 3SG say PREP man DEM 1PL.INCL
 gr-á dàbàráy
 search-GO plan (F.)
 'He said to him, "Let's find a plan . . ."

(24)màllúm ká tán kám à 3SG 1SG:POSS TOP(F.) marabout say sà sòk zà á zú EE 1SG support let's go 'The marabout said, "As for me, I will bear it. Let's go."

2.5 Cross reference and disjoint reference coding

Disjoint reference between the third-person subject of the main clause and the third-person subject of the embedded clause, if it is coded at all, is marked by the use of the full noun in the embedded clause. The full noun is used when it is topicalized, as evidenced by the use of the demonstrative wa:

(25)à zá hìd wà wák rà crazy D.HAB 3SG COMP DEM 3SG man 'He said, "That man is crazy . . . "

The full noun is also used if, in the given setting, it is the first mention of the referent:

(26)k-á ván nàn gàr 3SG father 1SG 3SG sav want kà mhú INF give birth 'He said, "My father will give birth."

If the full noun is not used in the embedded clause, there are two possibilities. The use of the pronoun a leaves the interpretation of referentiality to the listener's analysis, based on the circumstance of speech and the discourse context. In the following sentences the third-person singular subject marker a in the embedded clauses is coreferential with the subject of the matrix clause:

(27)séy wàl wà à zá à ndà DEM 3SG COMP 3SG SO woman go ngàŋ ngùl dám bàhá zá nd-à again husband bush 3SG **COMP** go-GO sà ďál-áh ná ngàz kràp 1SG do-2SG shoe PREP foot 'Then, that woman said that she was going to the bush again. Her husband said, "Let me make you some shoes . . .""

(28)à zá ká ĥàl-á à 3SG 3SG PREP INF **COMP** shoot-GO gwák vám elephant also 'He said he will also kill the elephant.'

In the following sentences, the third-person singular subject a in the embedded clause has a different reference from that of the subject of the matrix clause. The evidence that a disjoint reference for the third person pronoun is involved is provided by the use of the first-person object pronoun in a clause with the third person subject pronoun:

(29)á kà hám Ьá à 3SG 3SG PREP front say ká mbàd-á-k zà EE INF surpass-GO-1SG 'He [the buffalo] said, "He [the frog] is ahead, he surpasses me."

Although the use of the third person pronoun in the embedded clause may be ambiguous with respect to coreferentiality or disjoint reference with the subject of the matrix clause, Mina has grammaticalized a means of disambiguating between coreferential and non-coreferential third-person subjects through the use of the first-person singular pronoun in the embedded clause, i.e. through the use of direct speech. Such a pronoun codes coreferentiality with the third person singular subject of the matrix clause:

- (30)kwáyàŋ zá à ká lù 3SG **COMP** squirrel PREP INF say ďál tífilì sà mà calumny (F.) 1SG REL do 'The squirrel; said, that he; will say that it's he; who made the calumny.'
- (31) gèlbé áz tàmù à zá better go 1DU:POSS 3SG **COMP** óó ndà skù sà rà go **NEG** 1SG D.HAB no "We'd better go." He said, "No, I'm not going."
- (32)tár-áh zá sà ndà kà à á ask-GO COMP 1SG INF **PRED** 3SG go pàt tàr nàn collective work 1SG tomorrow 'He said, "I came to invite you for common work.""1
- (33)kά à sà gàr kà tár skù 3SG 1SG ask **NEG** want INF say nd-á wàláŋ tár ask cat He said, "I'm not going to invite [him]." He went and asked the cat.'
- (34) à zá s idá 3SG COMP 1SG home 'He said, "I'm at home."
- (35) à zá sò mìsíl-é í mìsíl 3SG COMP 1SG steal-GO PREP steal 'He said, "Stealing, I stole by theft."

^{1.} Common work involves the help of friends in work in the fields. One cannot decline an invitation for common work unless one is sick. If the man in the household cannot come to the common work, he will send his wife or children.

2.6 Deontic complements of verbs of saying

A direct order is coded by the imperative clause:

- (36) à zá hí gán hìdì
 3SG COMP 2PL send person
 'He said, "Send somebody."
- (37)lúw-á-ŋ à zá hí ndà say-GO-3SG 3SG COMP 2PL go d-àhá-w má bring-GO-3SG DEB 'He said, "Go tell her to bring it here."

Polite imperatives in embedded clauses, just as in matrix clauses, are coded by clause-final marker gi:

- (38) á zá kámbáy ỳd-á-k gí 3SG COMP stick hit-GO-1SG POL 'She said, "Stick, beat me, please."
- (39) záván-yíì zá fəd-á ná guinea fowl-PL COMP shave-GO 1PL tàlàn ká gí head POS please 'The guinea fowl said, "Shave our heads, please."

Wishes with respect to the third-person are coded by the subjunctive marker $m\acute{o}$ preceding the verb of the embedded clause:

- (40) hí ndà lùw-á-ŋ má ndà-hà
 2PL go say-GO-3SG DEB go-GO:IMPER
 'Go tell him to come here.'
- (41) à zá hí ndà lùw-á-ŋ
 3SG COMP 2PL go say-GO-3SG
 mó dà-há-w
 DEB bring-GO-3SG
 'He said "Go (pl) tell her to bring it here."

(42)lù lù wàl wà á lùw-á-n say-GO-3SG DEM 3SG wife say say kàďám dá-n gwáď wá má cook-3SG PREP calabash DEM DEB food 'The woman told the calabash to prepare her a lot of food.'

The form with gi may be used when a wish is expressed with respect to the first person:

(43) sév lù á lù bákà gwáď ná 3SG today 1PL.EXCL satisfy say SO sav hìdà áhà wà gí ASSC man DEM POL 'So she said, "We have to sate ourselves with that man." (The man is the one who is also going to be sated)

The mood of obligation may also be marked by a modal adverb that precedes the imperative:

(44)bákà skù kwáykwá-yíì wá zá ķì ďà DEM COMP today hyena-PL meat exist **NEG** 'The hyenas said, "Today, there is no meat."

> pàts á nòk gèlbé kám há mbà ntá take-GO 1PL child better TOP 2SG one hà d-á nòkón cook-GO 2SG IPI.

"You'd better take one of your children and cook it for us."

2.7 Interrogative complements of verbs of saying

Complex sentences with embedded interrogative clauses may have no complementizer or one of several complementizers, including the comment marker syì. This fact is justified by at least two factors: The main clause verb is a verb of saying, and the embedded clause is also in the domain of speech. There are significant differences between yes/no questions and specific questions in the complex sentences.

2.7.1 Polar questions

General interrogative clauses are formed by adding the general interrogative marker $v\hat{u}$ at the end of the embedded clause.

- (45)wunwunad nd-a kwayan a za3SG squirrel go-GO **COMP** pigeon rə vu D.HABIT Q 'He [Turtle] asked Pigeon whether Squirrel would come' (written sources)
- (46)lùw-á-ŋ ngásì kámbáy há say-GO-3SG 2SG like that stick n-dí ďàl tá νù do DED Q go 'You say to it just like that, "Stick, do it"?'

2.7.2 Specific interrogatives in embedded clauses

Questions about a human participant in the event are marked by clause final vi, as in the main interrogative clause. The embedded clause begins with relative marker $m \partial$, as in simple interrogative clauses with verbal predicates.

wàhin dàh k-yíi báv 6àt (47)séy DEM bring chief take cow-PL SO páláh à dúngùr ká á ķá mà ķà POS PRED outside 3SG REL hump say cut tá βà wà νí hìdì tá mà GEN DEM who DEM REL cow man gìžé-hé-ù ábà má ngàn kó ví à zá tell-GO-3SG ASSC mouth 3SG **COMP** anyone 3SG kó ví à skù sà skù zá sà 1SG 3SG COMP 1SG **NEG** NEG anyone

'The chief brought the cows outside. He said, "Who cut off the hump of this cow? Let him reveal himself with his own mouth." Everyone said, "Not me."

(48)báy 6èt hákèmà ķá mà ká sév à daughter chief take 3SG say REL INF SO báyt-víi klíf syì màl-á νí large-PL COM fish seize-GO who hákèm kà wà zà vál-á-n give-GO-3SG daughter INF DEM EE 'The chief took the daughter. He said, "Whoever catches big fish, I will give him this daughter." (syì cannot be omitted)

2.7.3 Questions about nonhuman participant

Questions about nonhuman participants are coded by the embeddedclause-final marker mi. Unlike in questions about human participants, there is no relative clause marker mò at the beginning of the embedded clause, again a situation identical to that of simple interrogative clauses:

- (49)kwáykwáy sùlúd sùlúd đáh wàn sleep hyena ask 3PL two two wá dál-á-n tàtà mí mà REL make-GO-3SG 3PL what but 'The hyena asked, "They sleep in pairs, but what happened to them?"
- (50)hà cín zá gàr 2SG father.3SG **COMP** what want 'His father asked him, "What do you want?""

Questions about possessor

Questions about possessor are coded by the locative predicator \acute{a} followed by the human interrogative marker vi followed by the genitive marker t with the interrogative marker i:

(51) à zá rùkùt-yíì wàcin á và tí DEM PRED who 3SG COMP clothes-PL GEN:O 'He asked him whose clothes these are?'

2.7.5 Questions about the topic

If the question is about a topic, equivalent to "ask about", the embedded clause has the form of a relativized clause, ending with a demonstrative, or anaphoric markers, such as wàcin:

- (52)dəb-á-k skàn à (syì) sà ask-GO-1SG COM thing 1SG kà hám-áhá w PREP INF eat-GO DEM 'He asked me about the thing I had eaten.'
- (53) ngámbà-n dəb-á k ná à 3SG ask-GO-1SG friend-1SG 1DU ká mókòlò bám-á tá wàcin GEN Mokolo INF meet-GO DEM 'He asked me about the friend I met in Mokolo.'

2.7.6 Questions about the place

The embedded question about place has the marker (á) tíkì 'where', with the locative predicator á often omitted for stative interrogatives, and vày for directional interrogatives, as is the case in simple clause interrogatives. Both interrogative markers occur in clause-final position:

(54) gìmígìd-yíi í ndá wàláf
monkey-PL 3PL go-GO blindman
hàz và káy
dog where
'The monkeys came to ask the blind man, "Where is the dog?""

3. Complements of volitional verbs

There are at least two volitional verbs: *mbál* 'love, like, want' and *gòr* 'search, like'. There are different means to code same-subject and different-subject embedded clauses.

3.1 Same subject

When the subjects of the main and of the embedded clause are identical, the subject is not repeated in the embedded clause either as a full noun or as a pronoun. Instead, sentential complements have the infinitival marker ka. The verb gar is used in affirmative main clauses, and the verb mbál 'want' in negative main clauses. Here are examples of affirmative matrix clauses:

- (55)kà ďál-á-h gàr mí à 3SG INF do-GO-2SG what want 'What does he want to do to you?'
- ďál skàn kà nà (56)sà gàr 1SG INF do thing 1SG want ɗáhà tsév zà exist finish EE 'I would like to do one thing'
- (57)ndí gàr ká dà wàkáf 3PL **HABIT** search INF make God ábà mbén ASSC 3SG 'They are looking to prepare kuli with it.'
- (58) wàcin à mhál gàr hìdì í DEM 3SG like 3PL man want hàɗ ká wàl ngàn skù INF seduce wife 3SG NEG 'This guy, he didn't want anyone to seduce his wife.'
- (59) mhál žébèr vá-n há kà skù **INF** 2SG like follow father-1SG **NEG** 'You don't want to follow my father.'

The negation of the matrix clause is coded through the negative marker at the end of the embedded clause:

- (60)tàkár há mhál kà mín-é-k like turtle 2SG INF reserve-GO-1SG ká skà νù NEG POS Q 'Turtle, don't you want to leave something for me?'
- (61)kwáykwáy mbál ká sà vàm like INF drink hyena water skù gár ngàn 3SG NEG leave 'The hyena did not want to drink water. He left.'
- (62)màllúm gìž-é-ŋ kìmbén á mbál tell-GO-3SG like that 3SG like marabout kà vál-á-n mìnjìvèk skù már give-GO-3SG medicine INF NEG control kóydèm ngùl ábà ASSC ease(F.) husband 'The marabout told her he didn't want to give her the medicine. She controlled her husband easily.'
- (63) i mbál kà vl-á-ŋ wàl skù
 3PL like INF give-GO-3SG woman NEG
 'They do not want to give him the woman.'

3.2 Different subjects

There are very few examples in our data of volitional verbs followed by a complement with a different subject, because wishes with respect to another person are coded by verbs of saying followed by the imperative or the subjunctive mood. Nevertheless, we did find one example with the verb *mbál* followed by a complement clause with a different subject:

(64)wàcin à gàr hìdì mhál DEM 3SG 3PL like man want ká hàɗ wàl skù ngàn **NEG** INF wife 3SG court 'This guy, he didn't want anyone to court his wife.'

4. Object-to-object raising

If the verb of the infinitival complement has an object, that object may occur before or after the infinitival verb. The infinitival preposition ka occurs before the verb, never before the fronted object. If the object of the embedded clause is fronted, it becomes the object also of the main clause. The evidence for this conclusion is provided by the fact that the aspectual marker za of the main clause occurs after, rather than before, the raised object of the embedded clause:

- (65)sà kám mpáy-víì à ķά gár tá TOP 3SG say 1SG tree-PL **GEN** want dám-yíì wàcin sà gár má 6ál cíkè bush-PL DEM 1SG want DEB cut all kà **POS** 'He said, "I want the trees in the bush to be all cut down."
- (66)ká dü kì ká zá Ьà begin meat INF EE INF cut 'He started to cut meat.'
- (67)làm kú bín ká z build **INF** house EE INF start 'He started to build a house.'

5. Complements of verbs of perception

5.1 Verbs of perception and complementation without raising

The verbs tiy 'look, see' and lim 'get, perceive' may be followed by clausal complements. The verb lim is used most often for coding the notion of perception. Our data do not contain evidence for the distinct coding of direct and indirect perception. The following examples imply direct perception:

fault.'

'If you see that the intestine has spilled out, if you see that the blood has spilled out, that means I am dead.'

ngàz (69)mbú màl tá màkwádàk 6át – fir child foot GEN vulture take fly seize ίi tì íi séy syì fir tàtà rà COM 3PL D.HAB 3PL fly 3PL SO see 'The child grabbed the leg of the vulture, they flew away, and the people saw them fly.'

The following examples may involve indirect perception, and yet it is coded in the same way:

- (70) tì á tì í gèr kè zámbè cíŋ see 3SG see 3PL want INF devour father.3SG 'He saw that they wanted to deprive his father of everything.'
- gár (71) skà áybì hà tì mbí tá mà 3SG **GEN** 2SG REL fault (F.) see want ngùl ďá skù exist NEG husband 'You see that it was she who searched. It is not the husband's

Verbs of perception can be followed by an infinitival clause to code the whole event:

(72)séy í lím ká 6èt-á yàm zá 3PL INF take-GO EE see water SO kúhú kà màts fire INF die 'They saw them fetch water to extinguish the fire.'

The complement clause may precede the matrix clause:

kwàlkwàl-yíì bákàhàká (73)kwík màl tà pát leper-PL today INF kwik seize 3PL tomorrow kà rèh-é tìkì nók n escape-GO PREP where 3PL PREP INF 3PL tìvú see:3SG

> 'Lepers. Today we will catch them. Tomorrow we will see through where they will escape.'

The predicate of perception may be used as a hedging means:

kám (74)tìy tìy sà tìy TOP (F.) 1SG see see see màkéké ɗám dáv old days surpass good 'In my view, the old times were better.'

5.2 Subject-to-object raising

Subject of the embedded clause may become the object of the main clause. The morphological evidence for the raising of the subject is provided by clauses with pronominal subjects of the embedded clause. When these subjects are raised, they have the form of object rather than of subject pronouns. The subjects are also coded in the embedded clauses. All examples with pronominal subjects of embedded clauses have been elicited and should be taken with caution:

ká (75)sà tà zá kìm 1SG INF hear 3PL EE nd-á rà 3PL go-GO D.HAB 'I heard them coming' or 'I heard that they were coming'

(76)zà kí kìm-é-k sà hear-GO-1SG EE 3PL INF 1SG nd-á rà go-GO D.HAB 'They heard me coming' or 'they heard that I was coming' The non-raised variants have also been elicited:

- (77) sò kó gìm zó i nd-á rà
 1SG INF hear EE 3PL go-GO D.HAB
 'I heard him coming' or 'I heard that he was coming'
- (78) í kí gìm zó sò nd-á rà
 3PL INF hear EE 1SG go-GO D.HAB
 'They heard me coming' or 'they heard that I was coming'

The syntactic evidence for raising the subject to object is provided by the fact that the subject of the embedded clause occurs before the auxiliary za of the matrix clause, a position occupied by objects in simple sentences. In addition to the examples above with raised pronominal subjects, compare the following with a raised nominal subject:

Here is a natural discourse example:

Given the paucity of natural discourse data we are unable to determine the function of subject-to-object raising.

6. Complements of verbs of knowing

The verb $s \partial n$ 'to know' may be followed by nominal or clausal complements. Clausal complements of the verb $s \partial n$ 'to know' may follow the

main clause directly or they may be preceded by a complementizer. When the embedded clause follows the matrix clause directly, the sentence codes the modality of certainty:

- (81)báv há sàn há mìsil zá **COMP** 2SG know 2SG chief steal 'The chief said, "Do you know that you are a thief?"
- (82)sà kim ká skù syì hí **NEG** COM 2PL **PREP** 1SG hear POS sàn-á wàl mà màts-í kà wà zà DEM REL die-STAT EE INF know woman vàngáy wà DEM how

'If I didn't hear, how would you have known that that woman is dead?'

The complement clause of the verb san may be preceded by the demonstrative wa and by the comment marker syì, reduced to -s when following the demonstrative wa. It appears that the function of the form wa is to code indirect knowledge, at least as evidenced by the following example:

(83)mà tíy njè à zá ángá sà eye 3SG **COMP** if 1SG REL see njè ká skù syì hí ká tì n COM 2PL PREP INF POS **NEG** eye see sàn wà-s mà máts wá know DEM-COM **REL DEM** die wàl wàcin wá vàngáy womanDEM DEM how

'The person who sees well said, "If I didn't see, how would you know that the person who is dead is the woman there?"

7. Infinitival complements

The complement clause may be marked by the infinitival marker ka. Several verbs can take infinitival complements only. These verbs include wilkil 'fail' and kúl 'be able'. The complements cannot be considered adjuncts, because omitting them would result in ungrammatical clauses.

- (84) ván wilkil ká nd-áhà rain fail INF go-GO 'The rain failed to come in.'
- (85)mìnjée hìdì kúl kà gám-á-k chase-GO-1SG now man can INF zá νù nà màn PREP ANAPH EE 0 'Now, can anybody chase me away on that?' (Nobody can prevent me from doing it.)

The complement clause of the verb $nd\hat{\sigma}$ 'go' must also be marked by the infinitival marker:

- (86) i ndà ká bèr-é cìkid bùhù ntá 3PL go INF sell-GO sesame bag (F.) one 'They were going to sell one bag of sesame seeds.'
- (87)ngàn ndí kà ďá tìpíd wàl à ndà wife 3SG HAB INF draw termites 3SG go 'His wife had the habit of going to look for termites.'

The complement of the verb $\theta \delta \eta$ 'to think' is also introduced by the infinitival marker:

6èn-ú ká (88)séy 6èŋ 6èn á 3SG think-3SG think think INF SO wáŋ mhù hákké kù ábà kà wàl sin(F.) sleep child INF ASSC woman cut wàhin hákké kə mávù mbál skù sà à 3SG like DEM sin INF drink beer **NEG** 'He thought, thought. To kill a child is a sin; to sleep with a woman is a sin; to drink beer, he does not like it.'

7. Conclusions

Complements of verbs of saying are marked by the complementizer zá. The coding of the addressee of the verb of saying depends on whether the verb of saying or only the complementizer is used. The most frequent means of coding the identity of the subject of the embedded clause with the subject of the matrix clause is through the use of the firstperson subject pronoun in the embedded clause.

There are two volitional verbs, mbál and gàr, the former used in the negative clause and the latter, in the affirmative matrix clause. The two verbs are used only when the subjects of the matrix and embedded clause are identical.

Complements of verbs of perception have the complement clause without any marker, or it may be preceded by the comment-clause marker svì.

A number of verbs take infinitival complements.

Chapter 22

Temporal and conditional clauses

1. Introduction

In the present section we describe the coding of the temporal and the conditional protasis and apodosis. There are two means used in such coding: interplay of tenses and aspects from the dependent and independent set, and morphological markers of specific time relationships. Some of these are clause-initial temporal markers, and others are clause-final demonstratives. The protasis clause always precedes the apodosis clause.

2. Temporal protasis

In temporal clauses, the protasis clause may be marked either by dependent aspects or tenses or by morphological markers specifically coding the protasis. The two means of coding are in complementary distribution. We begin with examples where the protasis is coded by dependent aspects.

Here are examples of the temporal protasis coded by the infinitive form ka and the end-of-event marker za:

mbà (1)ngàn ká tà zà cín father 3SG child MF EE pay ďá ká náwdùm kìm skù INF hear suffering exist **NEG** 'After his father paid, the child did not suffer.'

- **(2)** nkwà tá lìvèn hì ká skèm-á zà goat GEN black 2PL INF buy-GO EE káyàk hì fàt kà á 2PL skin POS PRED earth 'A black goat, when you buy it, you skin it on the ground.'2
- (3) ndə hàzá kà kim zà ίi 3PL dog INF hear EE go rà kà sà mávù PREP INF drink beer 'If the dog understands, they will drink beer.'

The habitual aspect in the protasis clause is coded by the dependent habitual aspect marker $r\acute{a}$:

(4) mbír mbír ván mà ď∂ rá jump jump draw D.HAB REL rain ďiv-á mbír nà máŋ jump PREP ANAPH start-GO cìdek cìdek cidek cidek ideophone 'The one who jumps, when the rain was falling, he started to jump in it.'

One cannot omit the dependent habitual marker from the above sentence. Nor can one use the independent habitual aspect marker *ndi* instead of the dependent habitual marker *rá*.

Here are examples of the coding of the protasis clause through the dependent future:

(5) á hìdì wèhin à zá ván DEM 3SG COMP 3SG rain man ká ďà gàr á PREP INF fall 3SG want nd-á-k kà kàsám skù touch-GO-1SG body NEG INF 'This man said, "Rain, when it falls, will not touch me."

^{2.} Other goats are usually skinned on a piece of seko (material used in fences) or a mat. A black goat or even a black chicken causes trouble.

```
(6)
      díkà
            mànjé wìhín sà
            DEM DEM 1SG
                                PREP
      from
                   gómbòk
      kà
            dzáŋ
                                zá
      INF
             find
                   frog
                                EE
                   ká
                         ndràk mbàd
      sà
                                             ká
                                                   wirnjìk
             n
            PREP INF
                         smash become
      1SG
                                             PREP ashes
      'From now on, if I find a frog, I will smash it into ashes.'
```

```
ngùl-yíi
(7)
      žíŋ
                                 sùlúd tàn
                          pár
             man-PL
                                       DED
      then
                          other
                                 two
             nd-áhà
                          hàhá
             go-GO
      3PL
                          again
      nd-á
                    mábàr mbír
                                 bàhá
                                       ká
                                              màl
                                                     tàŋ
                                 again INF
      go-GO
                    lion
                          leap
                                              seize
                                                     DED
      'Later, when the two men arrived, the lion jumped to catch them'
```

The protasis clause may also be coded by the use of one of the auxiliary verbs that together with their non-auxiliary counterparts form reduplicated verbs. However, the protasis is coded only by the auxiliary, as in the following fragment, where the temporal protasis is in the second sentence:

(8) tsáy mà tìy tìy nd-á look look go-GO then REL nástá nà yàm enter (F.) PREP water 'Then the one who was good at looking entered into water.'

```
dàwán mbí
til
     á
           nà
                 vàm
                       tá
                             ábà
     PRED PREP water DED ASSC back ANAPH
go
tì
     tì
           á
                 tìv-ú
                 look-3SG
     look
look
           3SG
```

'Having entered into water he searched for it [the sesame seed].'

3. Temporal protasis coding through demonstratives

The clause-final demonstrative wàcin codes the temporal protasis:

píč (9) ánà mhé ká nd-á wàcin PREP day go-GO close INF DEM bàf-áhà wàl wà báf á bà náf dàp wife DEM leave 3SG leave-GO ASSC heart only 'When the day of their [the hyenas'] return was approaching, the wife left abruptly with a lot of courage.'

The demonstrative marks the end of the protasis clause as evidenced by the fact that it is used in the phrase-final form wacin, rather than the phrase-internal form wacin, even though it is followed by other material in the sentence. However, this other material is the beginning of another clause:

- (10)séy wàl ngàn táŋ nd rà á wife 3SG DED 3SG D.HAB SO go wàcín syì ďiv-à bàk-áhà wirnjìk DEM COM ash pour-GO start-GO cìđé ' cìɗé ' cìđé' cìdé' á kàtàf pile PRED road pile pile pile 'When his wife was going, ashes poured out in small piles on the road.'
- (11)Bàhámàn túk á bákà ták ah svi PREP GEN.2SG oh Bahaman today COM all píč wàhin syì DEM COM sun 'Oh, Bahaman, for you, with all this heat?'
- (12)túk há báŋ rà skù wúl à 2SG think D.HAB NEG for neck you béł rà wá svì DEM COM break D.HAB "You are not thinking, you are yelling with joy."

4. Temporal apodosis

In temporal clauses, the temporal apodosis uses aspects and tenses from the independent set, as can be seen in the examples given above.

If the verb of the apodosis clause is intransitive, the simple rather than the reduplicated form of the verb is used:

(13)hìd-yíì wá í ďiy-á làkwát kán man-PL DEM 3PL start-GO river cross gwidin cìkíd [nd\()f tá ndàv ká single GEN fall POS sesame

> 'When the men started crossing the river, a single sesame seed fell down.'

The apodosis clause may also have the marker séy or tséy, probably borrowed from Hausa sai 'then':

- (14)wàciŋ séy hók rà wàl wà DEM then 3PL lift D.HAB wife DEM fòrám nákà bá vènjéh 6át 6át á ASSC pepper DEM take 3SG take horn diyà dì ká ná mà á PREP mouth 3SG in put put 'When they were lifting the stones the wife took the horn which contained pepper and put it in her mouth'
- fàk (15)sév ká wàl zá mìď EE give neck then wind INF 'When he started to scream, the wind blew.'

5. Specific time relationships

When the protasis clause is coded through dependent aspectual markers and the apodosis clause has no special markers, it indicates that there is only a very general time relationship between the two clauses. A specific time relationship between two events involves more precise time concepts such as "before," "after," and simultaneity, "while." In all such sentences, the protasis clause precedes the apodosis clause.

The succession of events in time may be coded by past tense in the protasis clause and the end-of-event marker, followed by the verb díyà in the apodosis clause:

The notion 'after' is coded by the associative preposition *áb* preceding the noun *dùwán* 'back'. If the apodosis clause has such a marker, the protasis clause does not have to be marked as such in any way:

ngùl-yíì (17)wàživiì gán rà rà children man-PL dig dig 3PL even címéd-ká iíb around (of them) hole 'Children and also men dug a hole.'

áb dùwáŋ mbí á n
ASSC back ANAPH 3SG PREP
ńvàŋ tá tápá bát
stone GEN tobacco take
'Afterwards, they took the tobacco stone.'

The protasis clause may also be marked by the phrase áb dùwón:

(18)dùwán mhí ká áb séy n PREP INF then ASSC after ANAPH 3PL ńvàn-viì ndá-hà hók ká kò n PREP INF go-GO INF lift stone-PL íf á íf-é blow 3SG blow-GO fòrám wá tá dàp n GEN PREP horn DEM only 'After they came to lift the stones, she blew that which was in the horn.'

6. Conditional clauses

There are two means of coding the conditional protasis clause. One is with tenses and aspects from the dependent sets, and the other is with clause-initial particles.

6.1 The use of the dependent aspect

The dependent aspect is the unmarked aspect, i.e. verb alone, or verb preceded by the focus marker ko. For both of these situations, viz. verb alone or verb with the focus marker, the condition is already likely to exist, and the protasis clause means something like: If from the existing set of possibilities, the possibility X is chosen, then Y.

Consider the following examples, which describe situations that are actually occurring:

- (19)mármár ká nàz-á mìnié mbà mà child REL shepherd INF abandon-GO now nkw-yiì zà ná láv hà kà goat-PL EE PREP field 2SG PREP INF ďál-á-n láway móná mókéké kám whip TOP (F.) do-GO-3SG like the old days 'Now, if a shepherd boy abandons the goats in the field, and you whip him, like in the old days.'
- ndà (20)dámù mà hìdì ká zà pár ká INF **PREP** EE bush REL first man go báv í kà dál-á-n mà n 3PL PREP INF do-GO-3SG chief mouth 'If anybody goes to the field before the chief, they will cause him a lot of problems.'
- (21) kàgám á νó hìdì sàn 3SG O.K. know speak 3SG man gày-á-h gàr ká náf skù spoil-GO-2SG heart INF **NEG** want 'Well, someone who knows how to converse, he won't make you mad.'

Here are examples of the coding of conditional sentence through the dependent future in the apodosis clause. The independent future may not be used in the apodosis clause:

mbál

(23)

hà

(22) hà ká fàk-á í n kà
2SG INF leave-GO 3PL PREP INF
bàs-á-h
laugh-GO-2SG
'If you leave that they will mock you.'

hákèm

daughter **3SG.Q 3SG** 2SG like PREP INF zά sá ndà-r ká vàl skù COMP 1SG INF give **NEG** go-D.HAB ngàm ká r-á-k zà insult-GO-1SG EE INF because 'If you love his daughter he will say, "I do not give [her], because he insulted me."

ngàn

á

n

kà

The dependent future is used to code conditions that do not yet exist. They have the meaning: If there ever will occur X, then Y:

- (24)mànjé wàhín sà dzáŋ ndìká kà n better (F.) DEM 1SG PREP INF find now gómbòk zá sá ká ndrák n EE 1SG PREP INF smash frog wìrnjík mhàd become ash "From now on, when I find a frog, I will smash it to ashes."
- (25) hìdì wèhin à á zá ván n DEM **3SG** 3SG **PREP COMP** rain man ká ďà á gàr nd-á-k kà fall touch-GO-1SG INF 3SG want INF kàsám skù **NEG** body 'This man said, "Rain, when it falls, will not touch me."

6.2 Conditional protasis coding through the particle ángà

The conditional protasis can be marked by the particle ángò followed by various tenses and aspects, all, however, drawn from the dependent sets. The future describes a hypothetical situation:

```
(26)
      ángà
            hì
                   ká
                         dzàgón má
                                      á
            2PL
                                mouth PRED
      if
                   INF
                         learn
            màn
                         màllá
                                      wir
      nà
                   skù
                                             tàŋ
                                             DED
                         or else (F.)
      PREP LOC
                   NEG
                                      gravy
                   ká
                         lá
                                      hìdì
                                             tán
      à
            n
            PREP
                   INF
                         give diarrhea man
                                             DED
      3SG
                                wàcin đá
                   tá
                         nákà
                                             skú
      mà
             zèm
                                                   má
                         REM DEM
      REL
                                      exist
                                             NEG
                                                   or(F.)
             eat
                   DED
      wás
             ķà
                   hìdì
                          kà
                                'nkù
                                      tá
                                             lìvèn
                                                   nék
                          POS
                                             black
      knife
             cut
                                goat
                                      GEN
                                                   good
                   man
      skù
      NEG
```

'If you do not oppose it, then the gravy will give diarrhea to the man who eats it, or else the knife will cut the person [skinning the goat]. The black goat is no good.'

The unmarked aspect, i.e. the form that is used in dependent clauses, can be used in both the protasis and the apodosis clause. The unmarked aspect describes the situation that exists or is likely to exist and the results that one could expect were this condition to be met:

- (27) kwáykwáy-yíì wà ńgà zá há mbàl-ù hyena-PL DEM COMP if 2SG want-3SG há vàn á kàcin 2SG move PRED here 'Those hyenas told her, "If you want, you can move in here."
- (28)ángà hì kindin ábà gúzàk skù if 2PL fear ASSC maternal uncle exist NEG áhà kíndín zà νí EE ASSC who fear 'If you do not fear your maternal uncle, who are you going to fear?'

- (29)ángà kéké hà gál á ìdá if 2SG grow PRED house past tàŋ grá gúzàk-áh á ìdá céh maternal uncle-2SG DED like PRED house father.2SG νù ská **NEG** 0
 - 'In the past, if you grew up in the house of your maternal uncle, that was like in the house of your father.'
- ángà (30)gúzàk-áh mà lùw-á-h kà ďál say-GO-2SG INF uncle-2SG REL do if ďál gàzàd má há zà COMP(F.) 2SG do EE work túk žìdép 2SG:GEN now

'If it is your maternal uncle who told you to do the work, you can do this work now'

The conditional particle $\acute{a}ng\grave{a}$ is a necessary marker of all clauses that do not have a verb, i.e. clauses that cannot use dependent tense and aspects to code the conditional protasis:

- (31) ángò kò mávù á ìdá
 if even beer PRED house
 'Even if there is beer in the house...'
- nkw-yiigwad a (32)ángà ìdź hìdì tán plenty PRED house man if goat-PL DED 'nkù nà kám tá lìvèn máŋ á PRED PREP LOC.ANAPH TOP GEN black goat kó ká mìsíl 'nkù táŋ n 3PL PREP INF DED even steal goat 'If there are many goats at a compound, and there is one black goat among them, this is the one that will be stolen.'
- (33)ángà màná hóŋ sà kà dzán-à n 2SG PREP INF find-GO if like 1SG láv á tíkì **PRED** field where 'If I were like you, where would I find a field?'

6.3 Conditional protasis coding through the particle má

The conditional protasis may also be marked by the particle $m\dot{a}$, borrowed from Fula, occurring at the end of the protasis clause. The protasis clause occurs in sentence initial position:

àmmá gúzàkú žìné séy hà tàn (34)má 2SG return just (Fula) maternal uncle COMP then 'If it is your maternal uncle [that calls you], then you have to re-

7. Conditional apodosis

The conditional apodosis clause may be unmarked, except for dependent aspect, as in the examples above, or it may be preceded by the commentclause marker svi:

- (35)ήtèk ángà hìdì ká skèm à gàr syì sheep COM 3SG INF if man want buy tá kwèdék kà mbàd lìvèn tá zà GEN white INF surpass GEN black EE 'If someone wants to buy a sheep, the white ones are better than the black ones.'
- (36)báts ángà há sàn tá svi há if 2SG blow DED COM 2SG know ngàn ngàk-á-k rá accompany-GO-1SG PRED PREP 3SG 'If you know how to blow, we will go to him.'

It is important, however, to note that the marker syì is not narrowly a marker of the conditional apodosis clause, but rather a marker of a speaker's comment. This marker may occur in both the conditional protasis and the conditional apodosis clause:

(37)	kàđám	thing	DEM vl-á	ĆOM	2SG nòk	INF wùdà	say-G	Ö-3SG syì	zá EE
	calabash		give-GO		1PL	food	POL	COM	
	à	ndí	dá	tà	dàp				
	3SG	HAB	make	DED	only				

'Here you have this thing. If you say to it, "Calabash make us food, please," then it just cooks.'

The habitual aspect in the apodosis clause is coded by the dependent habitual because the event has to be interpreted in conjunction with the event of the protasis clause:

The hypothetical mood in the apodosis clause is coded by the dependent future:

'But if the woman says that her gravy is too little, kuli will get her'3

^{3.} During the sacrificial meal, when the offerings are made to *kuli*, everybody gets his portion to eat. One should not complain during this meal about not getting enough to eat. Such a complaint is said to provoke the wrath of the *kuli*.

'But if hei caught it for himi, hei will come again to cook it, won't he?

If the condition already exists or is likely to exist, the apodosis clause has the unmarked aspect:

- (41)wàl ká vàl-á-h wàdá ďá skù give-GO-2SG food exist **NEG** INF woman vù hà mbál 2SG like 0 'If the woman does not give you food, will you love her?'
- hínà (42)bàkàlàf ká dèf-é à ķá call-GO buffalo INF 2PL 3SG say gómbòk zá kám hí тù mouth COMP frog TOP 2PL *tété* òhók ohok (frogtalk) answer 'He said, "If the buffalo calls you frog, you answer yes."

8. Conclusions

The conditional protasis clause may be coded by a dependent aspect or tense, by the conditional protasis marker ángò, or by both. In verbless clauses, where the dependent aspectual markers cannot be used, only the particle ángà is available as a coding means. Through the system of aspectual and tense markers, Mina indicates whether the condition already exists and may be selected in a given situation, or whether the condition does not exist yet. The conditional apodosis clause may also have different tense and aspectual systems, again coding the same temporal properties of the conditions.

Chapter 23

Purpose, reason, and conclusion clauses

1. Introduction

The present chapter we describe three types of functions coded by different means. The purpose and reason clauses serve as adjuncts of matrix clauses. The conclusion clause does not function as adjunct, but rather as a co-dependent clause.

2. Purpose clause

For sentences with a purpose clause, the order of clauses is matrix adjunct. The adjunct clause may be preceded by the infinitive marker $k\partial$ or by the locative preposition n:

- (1) hà y-á-k kà dál mí 2SG call-GO-1SG INF do what 'Why do you call me?'
- (2a) nzà ká ká vàm ká à gàr sà POS INF INF drink 3SG stay search water 'She stayed to look for water to drink.'
- (2b) zá v-á-h à wàciŋ SƏ call-GO-2SG DEM 3SG COMP 1SG ká sà máv wàciŋ INF drink beer DEM 'He said, "If I called you, it is to drink this beer."

The purpose clause may also be coded by the locative preposition n:

(3) kwáykwáy à ndò dáp nò gr-á nòkò hyena 3SG go only PREP find-GO 1PL 'Let the hyena go to find it for us'

3. Reason clauses

The term "reason clause" is used for embedded clauses that describe the actions, events, and states that are the motivations for the main clause. In our data, the marker $(n)g\grave{a}m$ borrowed from Fula is used to mark reason. This marker may be used alone or be followed by m ka. This sequence precedes the embedded clause. The complement clause may occur before or after the matrix clause. Here is an example of the reason clause preceding the matrix clause:

(4) ngàm minié s kà nzá r remain D.HAB now 1SG INF because wàcin ván hákà hà má bà ASSC mouth ASSC DEM father: 1SG today táŋ hìdì **DED** man

'Because I am here now, my father had a problem with that man.'

Here is an example of the reason clause following the matrix clause:

(5) séy mó ndá ngàm à dòm-á-ŋ rà so DEB go because 3SG ache-GO-3SG PROG 'He should go because it hurts him.'

Another marker of the reason clause is the clause-final demonstrative wàcin:

(6) nd-á-k hà ká ngámbù tá ngùl husband 2SG INF kill-GO-1SG friend GEN wàcin ndà tàkòn nà ká DEM go 1SG POS 2SG:POSS 'As you have killed my husband's friend, go away.'

4. Conclusion clause

We have recorded only one instantiation of a conclusion clause, but this instantiation represents a type consistent with other co-dependent clauses, such as temporal and conditional protases and apodoses. The conclusion clause is coded by the clause-final determiner. The example we have deploys the deduced reference marker tan. The deduced reference marker is not an object of the verb, because the verb already has an object, the second person singular h. The deduced reference marker cannot have another object as its antecedent, as evidenced by the nature of the verb bád 'seduce'. However, the clause marked by tan must be interpreted in connection with the preceding clause. It constitutes a conclusion from the preceding proposition:

```
(7)
                          á
                               nà
                                      wàl
      sév
            à
                   zá
            3SG
                         PRED PREP woman
      SO
                   sav
      wàcin skèn
                   wàcin kúl
                               ká
                                      nzàr-áh
      DEM thing DEM
                         be able INF
                                      take care of-2SG
      vù
      Q
```

'So he said to the woman, is this thing able to take care of you?'

```
sà
       ká
              ndə
                     ká
                            ná
                            1PL(excl)
1SG
                     POS
       INF
              hit
       kà
              háď-á-h
                            tàn
PREP INF
              seduce-2SG
                           DED
I have killed it and I am going to seduce you.
```

5. Conclusions

Purpose clause is marked by the infinitive marker ko. Reason clauses may be marked by the borrowed particle ngàm. The matrix clause in both types of sentences may end with the demonstrative wàcin. Both purpose and reason clauses are adjuncts, in that they both can be omitted from the sentence.

Chapter 24

Comparative constructions

1. Introduction

The number of comparative constructions in our data is not very large, and we had to supplement naturally occurring data with elicited examples. We describe first equal comparisons and then unequal comparisons.

2. Equal comparisons

Comparison of equal predicates can be realized by various means. One is by the verb $gr\acute{a}$, most probably derived from $gr\grave{a}$ "search, like" with the goal-oriented marker. Given its use in comparative constructions, it is glossed as "be like":

- (1) bítsì grá kásòmà
 Bitsi be like Kasuma
 'Bitsi is like Kasuma.'
- (2) séy wàl ngòn zá ngùl-yíì wàcíŋ so woman 3SG COMP husband-PL DEM grá kwáyàŋ be like squirrel 'So his wife said, "My husband, this one is like a squirrel."

(3) kwáyàn tì svì ngèf nákáhà squirrel COM feather REM see wàcin diyà njíf á DEM put smell 3SG grá gàmták niíf ķì tá like chicken smell **GEN** meat

'Squirrel saw that the [burned] feather smelled like the meat of a chicken.'

The form $(\acute{a})ng\grave{a}$, identical with the one used in conditional protasis clauses, can also be used in equal comparisons:

- (4) bícì ngà kásàmà
 Bitsi like Kasuma
 'Bitsi is the same size as Kasuma.'
- (5) ká và zá dàdiyè bògó ngà sán INF spend time EE much Bogo like 1SG 'He spent much time in Bogo, just like me.'
- (6) mimèn zá mbiŋ tséy mímèŋ à 3SG **COMP ANAPH** leopard leopard then ɗiyà ángà dzà tá rà like start sing GEN **PREP** wàl nákà wàcin REM DEM woman

'The leopard said, "That's it." Then the leopard started to sing just like that woman.'

The comparative construction where the standard of comparison is a deictic expression is marked by the forms $m \partial n a$ 'like' and k i mbin 'like that':

(7) séy dú tòtò ká mòná nákáhà mògégé so sit 3PL POS like REM past 'So they remained, as in the past.'

- **(8)** há tì tì mánà sà wà ká lìm 2SG like 1SG DEM INF see see see mbà vù child 0 'Do you think that a person like me can have a child?'
- (9) sà déy kóo νí zá á also **PRED QUANT** who COMP 1SG kì mbén **ANAPH** like 'Each one of them said, "Same with me."
- (10)à ndí ďál kà mbéŋ túm always (F.) 3SG **HAB** do PREP **ANAPH** 'She always did like that.'

3. Unequal equational clause predicates

Unequal comparison of equational predicates involves the use of two morphemes: z with báytàn 'big' to mean 'more' and zín with fés 'small' to mean 'less', both in a relative-clause-like construction:

- nàn báytàn (11)zrúmbà mhà má mà z mother 1SG **REL** Zurmba big son 'Zurmba is my oldest brother from the same mother' (z cannot be omitted if $m \hat{\sigma}$ is used)
- (12)zrúmbà mhà má nàn mà zìn fés mother 1SG REL. Zurmba small son 'Zurmba is my younger brother.'

The importance of these constructions, lies in the fact that the first provides evidence that z may actually be a copula 'be'. The second construction is important because it poses a question about the identity of the form zin, which remains obscure.

4. Unequal comparison with verbal predicates

For clauses with verbal predicates, the comparative construction involves the use of the verb $d\dot{a}y$ 'surpass' following the predicate of the standard of comparison. There are two comparative constructions involving the verbal predicate. In one, the target of comparison is marked by the locative preposition $k\partial$:

- (13) sò n kó ší dáy kò hóŋ 1SG PREP INF run surpass PREP 2SG 'I will run faster/more than you'
- (14)kái šì ká dáy à 3SG surpass 3SG INTERJ say run kà sán PREP 1SG 'He said, hey, he runs faster than me'
- (15) bánày tá ngùl dáy ká suffering GEN husband surpass PREP tá wàlà
 GEN woman 'The suffering of man is greater than that of woman.'

The verb dáy 'surpass' may be used as the final verb of the predication, its standard being put before the comparison clause:

lìvèn kám hánà kà ďál (16)tì à GEN black TOP 3SG suit (F.) INF do màsádàf-yíì mà nà nákà wàcin devil-PL REL REM DEM of dáy àmmá tá kwèɗék svì ɗám GEN white COM good surpass but 'The black one is convenient as an offering for the devil, as in the past, but the white one is better.'

For clauses with adjectival predicates the comparison is marked by the preposition $k\delta$ 'like'. The structure of the clause is: Noun phrase Predicate $k\delta$ Noun phrase:

- (17)bitsì fés ká kásèmà small like Kasuma Bitsi 'Bitsi is smaller than Kasuma.'
- (18)6ip ká bítsì kásàmà Bitsi fat like Kasuma 'Bitsi is fatter than Kasuma.'

Instead of the verb day one can also use the verb mbad 'surpass' to code unequal predicates:

dàgànàk (19)màkéké mbàd kám ká mà TOP REL black INF surpass past zá kéké wàciŋ rùkùt mà dàgànàk ká DEM clothes REL black INF EE past mhàd kwèdékzá tá white surpass GEN EE 'In the past black clothes surpassed white clothes'

5. Conclusions

Equal predicates may be coded by the use of the verb grá 'search, like' or the particle ángà 'like'. The unequal comparisons use the verbs dáy or $mb \partial d$, both meaning 'surpass'. The standard of comparison may be marked by the locative preposition ka.

Chapter 25

Relative clause

1. Introduction

Since only certain types of relative clauses occur in natural discourse, we elicited examples for the types of relativization that are not attested in our corpus. The elicited examples should be used with extreme caution, because we do not know how natural they are.

The general structure of a relative clause is Head relative clause, although we have noted one exception to this order.

If the head of the relative clause is the subject and subject only, it is followed by the relative marker $m\dot{\partial}$. The third-person pronominal subject is unmarked, and $m\dot{\partial}$ alone is used. The verb in the relative clause has high rather than low tone:

(1) hìdì mà tí man REL look 'the person who looked'

Cf.:

(2) kớ tì zá
INF look EE
'He looked.'

The relative marker $m \partial$ is not used if the relative clause is marked for focus. This may be a result of a constraint whereby $m \partial$ cannot be followed by $k \partial$. The reason for this constraint could be that both of these forms belong to the same functional domain:

- ká (3) án ndà ngàn tàl á tàl tàl 3SG walk walk 3SG 3SG INF walk go dzáŋ kwáykwá-yíì tàl tàl ndà í hyena-PL find 3PL walk walk go kà ngá kì zá svi INF EE **COM** break meat
 - 'She walked and walked and walked. She went and found some hyenas who had caught some meat.'

2. Clause-final demonstratives

If the head of the relative clause is non-referential, the relative clause does not have clause-final demonstratives:

(4) mèkwádàk ká hìdì mà 6ám gàr ká nzà search INF REL eat vulture be like man ngámbà-n skù friend-1SG **NEG**

'The man who ate/eats vulture cannot be a friend of mine.'

Clause-final demonstratives code the existential status of the relativized head (cf. Frajzyngier 1996 for a comparative study of relative clauses in Chadic). More specifically, they code the head of the relative clause as referential. Referentiality means a specific entity, previously described, or present in the environment of speech.

- (5) hìdì mò giž góngà wàcin man REL tell truth(F.) DEM 'the man who tells the truth'
- (6)hìdì mà Ьà kàsáf wàcin séy grass **DEM** REL SO man cut nàŋ à zá wàcin tá 3SG COMP DEM GEN 1SG 'The man who cuts grass said, "This is for me."

```
wàcin ábà
sév
      á
            nà
                  và
                                    báy
                                           mà
      PRED PREP year
                        DEM ASSC chief REL
SO
            kéké
                        wàcin
      mà
máts
            long time ago DEM
      REL
'except for the year with the chief who died a long time ago'
```

The clause-final demonstratives are not used with pronouns as heads of the relative clause, because pronouns are inherently referential. Subject pronouns are followed by the relative marker mà:

- **(7)** ďál sà mà tifilì REL do calumny 'I am the one who spread the calumny.'
- ďál (8) hà mà tífilì 2SG do REL calumny 'You are the one who spread the calumny.'
- (9) mbí mà ďál tífilì REL do calumny 3SG 'It is he who spread the calumny.'

The third-person subject pronoun \dot{a} is unacceptable in this clause:

(10)*à mà ďál tífilì REL do calumny 'It is he who spread the calumny.'

Headless relative clauses do occur. Since their subjects cannot be referential, such clauses do not end in a demonstrative:

(11)rn-á-k ńtá mà kó make love-GO-1SG REL exist even one nà skù mán PREP LANAPH NEG 'There is not even one among them who made love to me.'

(12)	mà	ndà	ká	šì	νί	S	ká	'nďá
, ,	REL	go	INF	run	who	then	INF	hit:GO
	zà	mà	ndà	ká	šì	ví	ská	
	EE	REL	go	INF	run	who	thing	
	'nďá		zà	mà	ndà	ká	šì	ví
	hit:G0)	EE	REL	go	INF	run	who
	S	ká	ndá		zà			
	COM	INF	hit:G	0	EE			

^{&#}x27;Whoever wants to run away, he hits him.' (repeated three times)

The relative clause may have the independent habitual aspect marker ndi, but it occurs as a means of modifying construction where the modifier is a general characteristic, coded in the verb and its object:

The relativized subject of the verbless clause must be followed by the form za. This is one of the few pieces of evidence that the form za may actually be the verb 'to be':

3. Relativization of the object

Relativization of the object appears to consist of placing the object at the beginning of the relative clause. The relativized object may be coded twice, once at the beginning of the clause as the head of the relative clause, and the second time after the verb, in the position of object. The

^{&#}x27;But you children, you are lazy. Aren't there plenty of fields in the bush?'

object role of the head of the relative clause is computed from the fact that the relative clause has a subject and that it has a transitive verb:

dzán (15)skàn skàn nàm syì há diyà gáy find thing COM 2SG spoil 1DU thing put kà POS 'The thing we found, you are ruining it.'

In the future tense, as in the hypothetical mood, the relativized object is represented in the relative clause by the definite object marker u:

- hákèm wàcin ángà (16)ká dámà há 3SG daughter DEM if good 2SG say vàl-á-n hìdà kà give-GO-3SG PREP man 3PL INF zámb-ú wàciŋ cheat-3SG DEM 'He said, "That girl, normally, you will give to the man who was cheated."'
- (17)dáh-ák ánà dàvàr sà nká à PREP hoe 3SG ask-1SG 1SG INF hèr-áh-ù sell-GO-3SG 'He asked me about the hoe I sold.'

In our data, we have an example where the object of the relative clause is preceded rather than followed by the relative clause:

míndì yám (18)gúzàk-áh ká hìdì other also maternal uncle-2SG INF man vàl-á-h láv wàcin kà ďál-á-h zà give-GO-2SG field DEM INF do-GO-2SG EE ndá-hà sớ 6əran ha vàl-á-h mán nà go-GO 1SG give-GO-2SG PREP L.ANAPH little 2SG 'The other [said], "If the field that your maternal uncle gave you is too small, I will give you more."

4. Relativization of the dative

The dative role of the head of the relative clause is coded by object pronouns added to the verb:

- (19)hídà ká vl-á-n dálù wà give-GO-3SG money DEM 1SG INF man ká zìn-é ďá skù INF return-GO exist **NEG** 'The man to whom I gave money never came back.'
- dál-á-ŋ gàzàd wà (20)hídà ká (má) S do-GO-3SG REL 1SG **INF** work DEM man ká méd ká vl-á-k dál ďá skù INF never INF give-GO-1SG money exist **NEG** 'The man for whom I worked never gave me money'

5. Relativization of the instrumental

The instrumental role of the head of the relative clause is marked by a construction consisting of optional preposition $t\dot{\delta}$, associative marker $\dot{a}b\dot{\delta}$, and anaphoric marker mbi, which is a resumptive pronoun for the head of the relative clause. The relative clause ends with a demonstrative, if the head of the relative clause is referential. The end -of-event marker za follows the demonstrative:

- (21)ká lím hìjí hà ká hàl-á 1SG INF sickle 2SG INF cut-GO see ndìr (tá) há mbí wà zά sorghum ASSC ANAPH GEN DEM EE 'I saw the sickle with which you cut the sorghum.'
- (22)há ká ká hìií sá ķá n n 2SG PREP INF PREP INF sickle here cut ndrì (tá) ábà mbin **GEN** ASSC ANAPH sorghum 'Here is the sickle with which you will cut sorghum.'

6. Relativization of possessor

Relativization of the possessor involves the fronting of the possessor, following it with the possessum, and then the relative clause:

(23)mbuu məmən wacin sev məts məts mə mother:3SG REL. **DEM** child die die SO za a 3SG COMP 'So, the child whose mother is dead said:' (written sources)

7. Relativization of the topic of a verb of saying

The role of the head of the relative clause as the topic of a verb of saying is computed from the meaning of the verb and from the presence of other arguments in the clause, and from the fact that dependent rather than independent aspects are used. Most interestingly, the head of the relative clause may follow the relative clause. The structure is as follows: Subject Infinitive marker Verb Dependent habitual marker Head Noun phrase:

(24) kà lù rà hìdì zá 3SG COMP 3PL INF say D.HAB man gànák syì hà vù person COMP 2SG 0 "He said, "That person that they are talking about, is it you?"

8. Relativization of locative and temporal adjuncts

The locative role of the head of the relative clause is marked by a locative anaphoric expression at the end of the clause:

(25)kù láv sà ká gár-r gò stop-D.HAB clean place 1SG 3PL INF INF wá kà DEM here 'They cleaned the place where I stopped.'

(26)ká gw-á láv sà ká n 3PL PREP INF clean-GO place 1SG INF ndà gár-r ká ná mà go PREP L.ANAPH want-D.HAB INF 'They will clean the place where I want to go.'

9. Conclusions

In most cases, the relative clause follows the head, but the reverse order has also been recorded. Relativization of the subject differs from relativization of the object and adjuncts in that the subject must be followed by the relative marker $m\grave{\partial}$, and the other relativized heads may not be followed by the marker $m\grave{\partial}$. The referentiality of the head of the relative clause or its previous mention in discourse is coded by the deictic marker $w\grave{\partial} cin$ occurring at the end of the relative clause.

Chapter 26

Elements of discourse structure

1. Introduction

The present chapter describes two elements of discourse structure: One deals with the category of comment clause, a category that re-occurs in a number of syntactic environments. The second, unrelated, category is labeled here provisionally "change of scene."

2. Comment clause

Mina has grammaticalized a clausal category called here the 'comment clause'. The comment clause may be a complement of another clause, but it also may be a matrix clause. The comment clause is marked by syì, the same marker that codes the emotive modality.

3. Comment on topic

The comment clause marker may occur after the topicalized element:

(1) skàn lùw-á-ŋ sá wà syì há ká zá say-GO-3SG EE thing DEM COM 2SG here INF kàđám vl-á nòk wùdà gí svì give-GO food POL COM calabash 1PL ndí dá dàp HAB make DED only 'Here you have this thing. If you say to it, "Calabash make us food, please," then it just cooks.'

- skàn **(2)** skàn nàm dzáŋ syì há diyà gáy thing COM 2SG thing 1DU find put spoil kà POS 'The thing we found, you are ruining it.'
- (3) skàn-yíì hà ká zàm wà skú svi thing-PL COM INF DEM **ASSC** NEG eat mí what 'Or else what will we eat those things with?'

4. Comment in parataxis

The comment clause may be used after another clause, where its relationship may be construed as taking place simultaneously with another clause, or as being a consequence, causal or temporal, of the preceding clause.

Here are examples of simultaneity of the events in two clauses:

- **(4)** ndá svì fú tàtà tàn í mà à go:GO COM 3PL 3SG all DED 3PL REL sùlúd sùlúd mùkàdkádán wàn-i upside down sleep-STAT two two 'She came -- all of them were sleeping on their backs in pairs.' (about turtles)
- (5) ká mà ndà šì νí syì ká 'ndà zá COM INF REL INF who hit EE run go ká zá mà ndà ká šì νí syì nda INF who COM INF hit EE REL go run 'The one who wants to run away, he hit him.' (repeated twice)

Here is an example of a causal relationship:

(6) ὴd-á-k kámbáy svi gí n hit-GO-1SG POL COM 3SG **PREP** stick kà ďál-á tàn INF do-GO:2SG DED "Stick, hit me," and it will do it to you.'

Here is an example of counterexpectation:

(7) diyà wàcin syì séitin go DEM COM Muezzin's call start kó wàl nd rà skù but neck D.HAB **NEG** go 'He started to make the call, but the voice did not go out as before.'

Here are examples of temporal consequence:

- (8) kwáykwáy dùwán syì žíŋ bà cíkè return ASSC back COM 3PL hyena all yàm í tàtà nà tsù PREP water 3PL went 3PL 'The hyena returned after they all went into the water.'
- kwáykwá-yíì (9) ndà dzáŋ kà zá ngá hyena-PL EE find 3PL INF break meat go svì COM

'And she found some hyenas who had caught some meat.'

kávà ďivà wàlla tà dà hà tàn INTERJ (F.) start 3PL ASSC cook help(F.) 3PL 'She started to help them cook.'

5. Comment with complementation

The marker syì is also used with complements of verbs of saying:

(10)bàhámán hí ká lùw-á-ŋ zá n say-GO-3SG Bahaman COMP 2PL PREP INF bárkàmà kàđám vl-á svi nà COM chief give-GO calabash 1PL.EXCL wùdà gí tsáy dàp food POL finish only 'Bahaman said, "You say to it, my chief, "Calabash give us food." That is all."

(11)mà zá báytà gómbòk-yíì zá svi frog-PL **COMP** REL EE large COM hí tàn kám fü hí wàn kà TOP 2PL all DED 2PL sleep:IMPER POS mùkàdkádán sùlúd sùlúd upside down two two

'The largest of the frogs said, "You all lie down on your backs in pairs."

The comment marker may occur without the de dicto complementizer:

(12)kwáykwáy žiŋ bà dùwán cíkè svì í COM 3PL all hyena return ASSC back tàtà nà vàm tsù 3PL went 3PL PREP water sé dzàk-á-kù à 3SG then 3PL cheat-GO-1SG

'The hyena returned after they all had gone into the water and said, "They cheated me."

6. Comment marker and emotive modality marker

again.'

Although, the phonological shape of the emotive modality marker and the comment clause marker is the same, their specific functions, or the scope is different. The comment clause marker occurs at the beginning of the clause, while the emotive modality marker occurs at the end of the clause. Because of this property, the two markers may occur in the same sentence and even in the same clause, one at the beginning of the clause and the other at the end:

(13)*kàgám* màl màl-á-ŋ tà ndà syì á talk 3SG hit-GO-3SG 3PL COM hit go tàtà 'nđà mà bá syì strike 3PL there again COM 'They talked [to the stick]. It started beating them over there

<i>séy</i> then	mà REL	<i>ngùl</i> husband		<i>ngùl</i> husband		ká INF	wà start
kédéŋ		ngàn	tá	zà	bá	dàp	
stupid	lity	3ŠG	DED	EE	again	just	
'Then	the mar	n started	1 again	with h	is stunidi	tv '	

7. Change of scene

It has been noted across languages that the associative preposition becomes a nominal and a clausal conjunction (Mithun 1988, Frajzyngier 1996). A superficial examination of Mina discourse may lead to a similar conclusion, because the associative does serve as nominal conjunction and from time to time one does indeed find forms that would be translated as clausal conjunctions:

(15) bàt á bàt-á-ŋ ndà n záván-yíì
get 3SG get-GO-3SG beat PREP guinea fowl-PL
wàcíŋ
DEM

'He grabbed it [his stick] and beat those guinea fowl.'

ká lìm ntá INF see one 'He hit one.'

záván-yíì í-bà fir tàtàn guinea fowl-PL PL-ASSC flight 3PL:POSS 'And guinea fowl flew away.'

A careful examination of the discourse data points to a quite different function of the associative preposition, a function that we believe has not yet been noted in the literature. Recall that there are two forms of the associative preposition: \acute{a} - $b\grave{a}$, for singular subjects and \acute{i} - $b\grave{a}$, for plural subjects. The associative preposition forms a construction with the pre-

ceding subject and the following verb, in that the preposition codes the number of the subject, and it ends in the phrase-internal form, viz. the consonant b, or the consonant followed by schwa, $b \ge 0$.

The function of the construction is to indicate that a participant has moved from the place where it has been at the last mention in discourse. The participant is represented by the subject of the clause

- (16)á kám í sév tàt ndí ngà then PRED 3PL **TOP (F.)** 3PL HAB catch dá zà ndá kà kì-víì ká INF INF meat-PL EE cook:GO go tàn DED
 - "Then, as for them [the hyenas], they just catch the meat [and] bring it for cooking'
- (17)hìd-yíì í-hà èе wá yáŋ tàtà man-PL DEM PL-ASSC 3PL:POSS ah move á màcin PRED there "Those people moved over there." (i.e., the woman with her family)

If the subject is third person pronominal, only the associative preposition with the third-person singular or plural pronoun is used:

kàđám (18)ngàn á 6àt n PREP calabash 3SG 3SG take 'She took her calabash.'

> ngàn áhà nd-á wùtá ASSC go-GO 3SG.POSS village 'She returned home.'

In the texts we gathered, the associative preposition following the subject and preceding the predicate does not occur very often, which is evidence that it is not a clausal conjunction. In each case when the preposition is used in this specific syntactic environment, at least one of the participants changes place. The following example, the eighteenth sentence in a narrative, contains the first use of the associative preposition in this specific environment:

'He took the water, threw it into the river, and they went away'.

The following fragment contains the first use of the associative preposition after the subject and before the verb in a text that before this fragment had about 25 sentences:

(20) bàt á bàt-á-ŋ ndà n záván-yíi
get 3SG get-GO-3SG beat PREP guinea fowl-PL
wàciŋ
DEM

'He grabbed it [his stick] and beat those guinea fowl.'

ká lìm ntá INF see one 'He hit one.'

záván-yíì í-bà fir tàtàn guinea fowl-PL PL-ASSC flight 3PL.POSS 'The guinea fowl flew away.'

The next two clauses again have participants leaving the scene:

(21) ngàn wàl zá áu sà ďál-á-h **COMP INTERJ** 3SG 1SG wife do-GO-2SG màná wà mí like DEM what 'His wife said, "What did I do to you?"'

> *i-bà* ndà tàtà wùtá PL-ASSC go 3PL.POSS village 'They went home.'

Since the category of change of scene is not one that is frequently encountered in languages, it is important to provide convincing evidence for the hypothesis. Such evidence would have two components: The first is to show that all constructions of the type Subject Associative Verb

involve the subject leaving the previously mentioned scene. The following examples represent all of those occurring in the Texts section:

(22)dáb-ú ndà dáh á ndà lw-á bring bring-3SG 3SG tell-GO go go ngùl ngàn 3SG husband 'She brought it and then she went to tell her husband.'

> yá i-bà ndà tàtà bíŋ call PL-ASSC go 3PL.POSS room

'They went into the room.'

(23)lù-á dà dà d-á-ŋ sév á zà cook-GO-3SGEE ask cook cook 3SG then syì COM

'Then the woman asked. It [the calabash] cooked for her [the woman].'

bàhámán ábà ndá ngàn Bahaman ASSC go 3SG.POSS 'Bahaman went home.'

(24) ndàd ká n skàn ngàn bàt lay down PREP thing 3SG take 'She put it down [and] took her thing.'

ábò ndá ngòn wùtá ASSC go-GO 3SG village

'Then she returned to her village.' (She had been in the bush with the stick.)

kàgám syì màl-á-ŋ (25)màl á tà ndà COM hit 3SG hit-GO-3SG 3PL talk go nda tàtà mà há syì again COM strike 3PL there 'They talked [to the stick]. It started beating them over there again.'

kàyifi i-bà nd-á tàtàŋ strange (F.) PL-ASSC go-GO 3PL 'Never seen before [a stick hitting people on its own]. They left [the court].'

(26) áa dámà wàl wà bà á ah, good woman DEM again 3SG lúw-á-ŋ tàŋ say-GO-3SG 3PL "It's good," the woman told them again.'

ábà ndà ngàn n kilvid-yiì
ASSC go 3SG PREP trash heap-PL
'She went to the trash heaps.'

(27) if á if-é tá n fòrám wá dàp blow 3SG blow-GO GEN PREP horn DEM only 'She blew that which was in the horn.'

vènjéh tûl kwáykwá-yíì tín tín tín pepper spread hyena-PL heap heap heap màts dead

'The pepper spread, and the hyenas were lying around dead,'

séy mòtábù ábò šì ngòn except last born ASSC flee 3SG 'except for the last born: he fled.'

If the subject is the same, the sequential clause is marked by the verb $nd\acute{a}$ 'go': The next example follows the preceding one in the narrative:

- (28) ndà dzáŋ á dzáŋ dàkáy t-yíì dámù go find 3SG find other PL bush 'He went to search for others in the bush.'
- (29) mbí fàk á fàk fàk-á-ŋ kà ábà
 3SG discard 3SG discard-GO-3SG POS ASSC
 nd-á ngàŋ
 go-GO 3SG
 'He left it for him, and he returned.'

The change of scene is not constrained by any temporal factor, as evidenced by the following example, where the subject leaves the scene immediately after he has arrived:

kúrák (30)mbí ábà nd-á ngàn tsév 3SG ASSC go-GO 3SG descend SO 'When he came down, he returned.'

8. New action and its consequence

The verb diyà 'put' can function as an auxiliary verb. The evidence that the verb diyà is the verb "to put" is provided by clauses where it is followed by the object that is put down:

(31)kámbáy nd-á ďivà í ďi wá go-GO 3PL stick **DEM** put put fádà dàp ká tá POS PREP court (F.) DED only 'They came and put the stick in the court of the chief.'

As an auxiliary, the verb divà is used under two simultaneous conditions: when the activity is new for the subject and when the listener should expect some follow-up on this activity. Since the proposed category is not commonly encountered in linguistic literature, the following discussion includes all the examples found in the "Texts" appended to the grammar. The support for the proposed hypothesis consists of three arguments: (1) All clauses where divà is used are followed by another clause that is logically linked with the clause with diyà. (2) The clause with divà is never used as the last clause of a narrative. (3) The clause with divà is never followed by the end-of-event marker za:

(32)dùwán mbén làkwát mà sév, áb then (H.) ASSC back ANAPH river REL nd-à-y zá go-GO-STAT EE 'And afterwards a river came.'

hìd-víì wá div-á kán làkwát man-PL start-GO DEM 3PL river cross 'When the men started crossing the river,'

cìkíd tá gwidin ndàv kά GEN single fall POS sesame 'a single sesame seed fell down.'

Here are two fragments illustrating the logical linkage of the clause marked by div-a. An action of the subject in the first clause brings through consequences described in the second clause:

đà (33)mà mbír mhír ván rá jump jump rain draw D.HABstart-GO REL máŋ mhìr nà jump PREP ANAPH cìdék cìdék cìdék cìdék ideophone

'The one who jumps, when the rain was falling, he started to jump in it.'

ván ká mbàlém skù ďá INF touch exist **NEG** rain 'The rain did not touch him.'

(34)mìd žì mindéŋ téwél kámbáy 6át mà and then REL twirl stick take other ďiv-á téwél kámbáv stick start-GO twirl ďiy-á ďiv-á téwél téwél start-GO start-GO twirl twirl ngàn tàlàn PRED head 3SG

'The other, the one who twirls the stick, took the stick and started to twirl, started to twirl, started to twirl [it] above his head.'

kámbáy hál tá ngàn fúu tàn limit GEN stick 3SG all **DED** ván ká mhàlém ďá skù INF NEG rain touch exist

'The area delimited by his stick, the rain did not touch it.'

The clause with the auxiliary divà may have the same subject as the preceding clause:

(35)pàts ntá náz náz náz náz á náz throw throw 3SG took throw throw one wàhín tàŋ yàm á nà DED PRED PREP water DEM

'He took one [page] after another and threw them upon the water.'

điyà ngàz pàts pàts pàts pats pàts nà mán foot PREP ANAPH put put put put put start put tsám pàts pàts kàn tsám déréwól ngàn cross pick uppick up 3SG paper (F.) put là6-yí ká kó mà ďá skù wet-STAT POS **OUANT** REL exist **NEG** 'He started to walk on them, walked, walked, until he crossed the river; then he picked up his paper. Not even one page was wet.'

The clause following the clause with $diy\dot{a}$ does not have to be a consequence of the preceding clause. But the listener knows, that if $diy\dot{a}$ is used, something else must follow:

(36) mò ndá-y zò á ìdá séy nd-á
REL go-GO-STAT EE PRED home then go-GO
dà
cook

'When she returned home, she cooked.'

i dĩyá zòm3PL put eat'They started to eat.'

ngùl ngòn zá wàl nàn husband 3SG COMP wife 1SG

'Her husband said, "My wife,'

The subject of the auxiliary divà does not have to be agentive:

(37)sév wàl ngàn táŋ á nd rà 3SG wife 3SG DED go D.HAB SO wírnjìk đĩyà bàk-áhà wàcin syì pour-GO DEM COM ash start cìđé' cìđé' cìđé' cìďé ' kàtàf á pile pile pile pile PRED road 'When his wife was going, ashes poured out in small piles on the

road.'

ngùl tìy á sév mà ngùl tìv-ú wàl husband husband see 3SG REL see-3SG wife SO dámù tsú zà went EE bush

'So the husband saw that the wife went to the bush.'

The importance of the marker divà is that it is not predictable from any other element of grammar or discourse.

dzán skèn (38)skàn nàm svì há diyà gáy find thing COM 2SG thing 1DU put spoil kà POS 'The thing we found, you are ruining it.'

> nám ká tì tàn INF **DED** 1DU see 'We'll see about this.'

The auxiliary with diyà may follow a clause with the inceptive marker bàt 'take'.

(39)kámbáy 6àt nákà ká séy zá REM INF take EE stick SO dàp immediately 'So the stick took off immediately.'

hWáp hWáp hWáp dĩyà gòld wàl wàhín bap bap bap put hit woman DEM 'Wap, wap, it started to hit the woman' (hW=plosive with lower lip curled far back behind the teeth. The articulation is accompanied by the voiced velar fricative.)

wàl kà ďál hàn hàn vàngáyá wá DEM cry INF do how 3SG woman cry sàn skà bà know NEG again

'This woman cried, "What should I do?" She did not know!"

The clause following diyà may describe an event that is the opposite of what one would have expected from the preceding clause but that is nevertheless linked to the preceding clause:

(40) bàhámàn nd-á gàr Bahaman go-GO stand 'Bahaman went and stood.'

> diyà séitin go wàcin syì start muezzin's call DEM COM 'He started to make the call,'

kó wàl nd rà skù but neck go D.HAB NEG 'but the voice did not go out as before.'

The auxiliary divà may occur following another verb, but it still retains its function of directing the listener's attention to the next clause:

(41) ndà điyà dà á ìdá go put cook PRED home 'Then she returned home to cook.'

sév tì á tì á kà mbáŋ ANAPH 3SG see like that SO see ďál rà skù ά D.HAB 3SG do **NEG**

'Then she saw that one does not do it like that.'

The clause following divà may have a different subject than the clause with divà. The link between the two clauses is the unity of time:

(42)рá tà ngùl ngàn husband 3SG distribute in parts DED 'She gave a part [of the food] to her husband,'

> wàží ábá tá ngàn àa dĩyà zèm children-PL ASSC GEN 3SG 3PL put eat '[and] to her children, and they started to eat.'

nd-à-y zá kwáykwá-yíì má hvena-PL go-GO-STAT EE 3PL REL 'The hyenas came.'

tà dáp đĩyà lù á wàží tùk-yíì say continue PRED children 2S-PL put dáy dáy dáy tán fĩs a lot a lot a lot PRED 1SG little

'He kept on saying, "For your children its a lot, for me it is little."

fakát séy hìdì wà zá people DEM COMP INTERJ true (F.) 'Then those people [the hyenas] said, "Ha, it is true."

9. Conclusions

The use of the comment-clause marker syì is motivated by the speaker's relating the proposition to the expectation that one may have given the discourse line. It reflects the speaker's attitude toward the proposition. Like many other complementizers (cf. Frajzyngier 1995, 1996), even when the marker occurs between two clauses within a sentence, it has a modal function.

The change-of-scene construction consisting of the subject followed by the associative marker áb or ib for plural subjects indicates that the one of the participants in the event has moved to another place. Thus, the existence of the construction indicates that the unity of place in narration is the norm, and the change of place must be overtly coded.

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The auxiliary $diy\dot{a}$ used before a verb alerts the listener that the clause that follows is directly linked to the clause that has $diy\dot{a}$.

Texts

Text 1. The year of hunger

- (1) tár láy tá mìtás month time GEN hunger 'The year of the hunger.'
- (2) hìd-yíì wà í tètè màkád man-PL DEM 3PL 3PL three 'There were three men'
- (3) *i* ndà ká bèr-é cìkid bùhù ntá 3PL go INF sell-GO sesame bag (F.) one 'They were going to sell one bag of sesame seeds.'
- (4) ngàd ngàd i ngàd ciké' zà ká count count 3PL count all EE POS 'They counted all [the sesame seeds].' (The form ká was first given when the speaker repeated the recorded sentence.)
- (5) dzàw i dzàw-ú á dùwán attach 3PL attach-3SG PRED back màdìngwàrzé donkey 'They attached it to the back of the donkey.'

^{4.} In a version of the same story recited by another speaker, instead of the demonstrative wà, the phrase final form wècin was used.

- (6) *i* nd-rá *i* nd-rá vàŋ wà ká 3PL walk-D.HAB 3PL walk-D.HAB rain start INF da draw water 'While they were walking, rain started to fall.'
- (7) dá dá á dà wàné draw:GO draw:GO 3SG draw a lot (F.) 'It rained a lot.'
- (8) séy, áb dùwáŋ mbéŋ làkwát mà then (H.) ASSC back ANAPH river REL nd-à-y zá go-GO-STAT EE 'And afterwards a river came.'
- (9) hìd-yiì wá i dĩy-á gán làkwát man-PL DEM 3PL start-GO cross river 'When the men started crossing the river,'
- (10) cìkid tó gwidin ndòv ká [ndòf] sesame GEN single fall POS 'a single sesame seed fell down.'
- (11)kím kím cìkíd mà mà zá COMP listen listen REL sesame REL ndàv-yì zá EE fall-STAT 'The one who was good at listening said, "A sesame seed fell down."
- (12) <u>kàn</u> i <u>kàn</u> zá cross 3PL cross EE 'They crossed [the river].'

^{5.} In another version of this story, the noun phrase *làkwátù wà* 'the river' follows the verb.

- (13) mà ngád ngád pàl á pàl bàtákàr

 REL count count detach 3SG detach bag

 ngàd ngàd

 count count

 'The one who was good at counting detached the bag and counted [the seeds].'
- (14) mò tó gwidin dá skù REL GEN single exist NEG 'One grain was missing.'
- (15) pèl mindén dámdámà detach another normal 'He detached the other—[was] normal.'
- (16) tsáy mò tíy tíy nd-à nástó
 then REL look look go-GO enter (F.)
 nò yòm
 PREP water
 'Then the one who was good at looking entered the water.'
- tíl á nà vàm tá áb dùwáŋ (17)PRED PREP water DED ASSC back mbén tìv tìv á tìv-ú look look 3SG look-3SG ANAPH 'He entered into water and he searched for it [the sesame seed].'
- (18) dzáŋ á dzán-á mò tó gwidin nákà find 3SG find-GO REL GEN single REM wèhíŋ
 DEM
 'He found the one sesame seed of those [that were counted].
- (19) nd-á náz á náz kó nò láy tàŋ go-GO throw 3SG throw POS PREP place DED 'He went and threw it into its place [in the bag].'
- (20) mà mbád ví REL surpass who 'Who is superior?'

Not on tape. After the tale is told, there may be a discussion, usually concluded by the story teller. The preceding tale may end in the following conclusion:

- (21) mò mbód dá skù
 REL surpass exist NEG
 'Nobody is superior!'
 or
- (22) *i* prák prák 3PL equal equal 'They are all equal.'

Text 2. The four men

- (1) hìd-yiî wècin i tètè nfád man-PL DEM 3PL 3PL four 'There were four men:'
- (2) míndén à ndí lám bín another 3SG HAB build house 'One builds a house.'
- (3) mindén à ndi téwél gámbáy another 3SG HAB twirl stick 'Another twirls a stick.'
- (4) míndén à pàdák njûl another 3SG split grass (a certain variety) 'Another splits a stalk of grass.'
- (5) míndén à ndí mbìr another 3SG HAB jump 'Another jumps.'
- (6) *ii* zék yàw [žék] 3PL make competition 'They had a competition.'

- á (7) hìdì wèhin à zá ván ká n 3SG DEM 3SG COMP rain PREP INF man kàsám gàr nd-á-k kà ďà á touch-GO-1SG body 3SG INF fall want skù **NEG** 'This man said, "Rain, when it falls, will not touch me."
- (8) kóo νí zá sà déy kì **QUANT** COMP 1SG also PRED like who mbén **ANAPH** 'Each one of them said, "Same with me."
- (9) ván đá rà mòná á nò rain draw:GO D.HAB like PRED PREP lúmò market
 'It was raining from the direction of the market.'
- (10) mà lớm bín rá drìš ngád drìš

 REL build house dig mud mix mud

 'The one who builds a house dug the mud, mixed the mud,'

hàmás nd-à lám bin ká hàk ká thatch POS build straw go-GO house cut nà wán ká máŋ inside PREP LOC.ANAPH lie built a home, cut some straw, thatched the roof, and lay down inside it.'

(11) ván wilkil ká ndá-hà rain fail INF go-GO 'The rain failed to come in.'

- (12)mà mbir mbir ván đà rá diy-á REL jump jump rain draw D.HAB start-GO mbìr nà mán iump PREP ANAPH cìdék cìdék cìdék cìdék cìdék ideophone 'The one who jumps, when the rain was falling, he started to jump in it.'
- (13) ván ká mbèlém dá skù rain INF touch exist NEG 'The rain did not touch him.'
- (14)kámbáy 6át mìd žì mà téwél mindéŋ stick and then other REL twirl take kámbáv téwél ďiv-á ďiv-á téwél start-GO Stick start-GO twirl twirl ďiy-á ngàn téwél á tàlàn PRED head 3SG start-GO twirl 'The other, the one who twirls the stick, took the stick and started to twirl, started to twirl, started to twirl [it] above his head.'
- (15)kámbáy ngàn tàŋ hál tá fúu **DED** stick 3SG all limit **GEN** ván ká mbàlém ďá skù INF exist NEG rain touch 'The area delimited by his stick, the rain did not touch it.'
- (16)pàdák njûl 6át pàdák á pàdák-á тà grass split-GO REL split take split 3SG ngàn nà nástà mán PREP LOC.ANAPH 3SG enter (F.) 'The one who splits grass split a stalk of grass and entered it.'
- ká ngàn (17)ká nà mán ván tsú inside PREP LOC.ANAPH rain INF 3SG go mbàlém ďá skù **NEG** touch exist 'He entered it [the grass], and the rain did not touch him.'

- (18) mà mbád žì ví

 REL surpass then who 'Who is superior?'
- (19) dá skù exist NEG "Nobody.'
- (20) fúu tàŋ i kàlkàl all DED 3PL equal (F.) 'All are equal!' ('equal' in Mina is prák prák)

Text 3. The three men

- (1) hìdì-yíì wèhín í tàtà màkád man-PL DEM 3PL 3PL three 'There were three men.'
- (2) i ndà ká bàd-á wàlà
 3PL go INF woe-GO woman
 'They went to woo a woman.'
- (3) míndí wàcín màllúm other DEM teacher 'One is a teacher.'
- (4) mindi wàcin gáw other DEM hunter 'Another is a hunter.'
- (5) míndí wàcín màšil other DEM thief 'Another is a thief.'
- **(6)** nd-rá í nd-rá í nd-rá 3PL go-D.HAB 3PL go-D.HAB go-D.HAB 3PL ndà dzán làkwát mà nd-à-y zá go-GO-STAT river REL EE find go 'They were going, going, going, till they came to a river, which was filled up.'

- **(7)** nòk kà ďál žì vàngáy kà káŋ 1PL INF do INF then how cross làkwát wàcin river DEM "How are we going to cross this river?" (žì phrase-internal, žèn phrase-final)
- (8) màllúm zá á táŋ wérèh-nò teacher COMP PRED GEN:1SG trick-1SG dáhà exist 'The teacher said, "As for me, I have my means."
- (9) bàt á bàt déftá ngàn take 3SG take Koran (F.) 3SG 'He took his Koran.'
- (10)pàts ntá náz náz náz náz á náz throw throw throw 3SG took throw one tàn á nà vàm wàhin DED PRED PREP water DEM 'He took one [page] after another and threw them upon the water.'
- (11)diyà pàts ngàz nà mán foot PREP ANAPH start put pàts pàts pàts pats pats pàts put put put put put put déréwól kó kàn tsám tsám ngàn ká **QUANT** pick uppick uppaper (F.) 3SG POS cross là6-í ďá mà skù **NEG** REL wet-STAT exist 'He started to walk on them, walked, walked, till he crossed the river; then he picked up his paper. Not even one page was wet.'
- gáw (12)zá á táŋ dév sà ká n hunter COMP PRED 1SG 1SG also PREP INF kàn táŋ DED cross 'The hunter said, "Me too, I will cross it."

- gàdéd ngèn bál (13)6èt á 6èt 6ál 6ál á arrow 3SG 3SG take shoot shoot shoot 3SG take làkwát wà cü`r 6ál nà rá shoot PRED PREP river DEM straight (F.) D.HAB 'He took his arrows and shot them straight into the river.'
- ndá-r э́п ngáz ánà (14)báts màn á PREP L.ANAPH walk-PROG 3SG put PREP foot màn kán ngàn ánà báts àn ngáz PREP L.ANAPH put PREP foot cross 3SG 'As he was walking, he stepped on them, one after another, [and] he crossed the river'
- (15)màšil wà đéù á nzà ká DEM remain 3SG **POS** steal stay á í fká-kw zá á S COMP 3PL leave-GO-1SG PRED 1SG 3SG vù (u fronted) ží then 'The thief remained there and said, "Is it me that they left alone?""
- wècin skàn (16)6án 6án 6án á wà 3SG think DEM thing think think DEM mbád-á-n á nd-r ká sémbè go-PROG INF surpass-GO-1SG strength (F.) 'He thought and thought about it, "This thing is going to surpass me."
- (17)6èt 6èt màšil màšíl sév á á vìm 3SG steal take take steal 3SG then water ngán ká jíbà wà náz náz nà á DEM throw 3SG throw 3SG PREP PREP pocket kán á kán zà 3SG EE cross cross 'Then he up and stole the water, threw it into his pocket, and crossed [the river].'

- (18)*6àt* á 6àt yìm wà fàk á fək -á throw-GO take 3SG take DEM throw 3SG water í-hà ndà tètàn 3PL-ASSC 3PL go 'He took the water, threw it into the river, and they went away.'
- (19) wàl ndá dzán wèhin νí fú á 3SG find DEM all all went woman gíż-ù tá gíž ngàn á say-3SG 3SG **GEN** 3SG say gíž tá ngàn 3SG DED 3SG say 'They went to find the woman. They were talking, and each of them was telling his story.'
- (20)wàl wà sá ká sév zá wà n PREP INF DEM COMP but 1SG then woman máv wá ží νí hí fú tàŋ hí DED choose DEM then who 2PI. all 2PL kálkál equal (F.) 'Then the woman said, "Who am I going to choose? You are all equal."

Text 4. In the time of famine

Speaker Ahmadu Umaru

Text recorded and translated by Adrian Edwards, typed and first analyzed by Eric Johnston. Tonal transcription and present analysis by Zygmunt Frajzyngier.

Language Assistant: Saibu

- (1) tàr láy tá mìtíš month time GEN hunger 'In a time of famine:'
- (2) hìdì wàcin i-bà wàl ngàn man DEM PL-ASSC wife 3SG 'This man with his wife'

- (3) mbù mbù í mbù wàží gwád give birth(x2) 3PL children give birth many 'had many children.'
- ndà kà ďá tìpíd (4) ndí wàl ngàn à HAB go wife 3SG 3SG INF draw termites 'His wife had the habit of going to look for termites.' (dá 'to fetch, to draw'. A clay pot filled with fresh cow dung, cut sorghum stems and dead leaves put next to a termite hill overnight. The next morning it is filled with termites which can be drawn out like water from a well.)
- (5) dzán ká ndà zá fú ndà záván-yíì **INF** EE always go find guinea fowl-PL go í màr rà graze D.HAB 3PL 'Each time she went, she found guinea fowl grazing.'
- **(6)** záván-yíì zá fəd-á ná guinea fowl-PL COMP shave-GO 1PL tàlàn kớ gí POS please 'The guinea fowl said "Shave our heads, please."
- **(7)** fàd-á-n sév à ndí tà tàlàn HAB shave-GO-3SG so (H.) 3SG 3PL head fəd fàď fàď shave shave shave 'So, she would shave their heads. Shave, shave, shave.'
- (8) gwidin ngà lìm-é té ká 6àh ká only break POS see-GO hide POS one 'Each time she would kill just one and hide it.'
- (9) túm ndí ďál kà à mbén always (F.) 3SG HAB do PREP ANAPH 'She always did that.'

- (10) mò nd-à-y zó á ìdá séy
 REL go-GO-STAT EE PRED home then
 nd-á dà
 go-GO cook
 'When she returned home, she cooked [it].'
- (11) i diy-a zòm
 3PL put-GO eat
 'They started to eat.'
- (12) ngùl ngòn zá wàl nàn husband 3SG COMP wife 1SG 'Her husband said, "My wife,"
- skèn mèná (13)ndí hà dzán-á nám wà 1DU thing HAB find-GO like **DEM** 2SG tíkì where 'where do you find us things like this?""
- (14) dà só hítdìb-é-h kràp wait 1SG sew-GO-2SG shoe "Wait, let me sew you some shoes."
- (15) hítdìb hítdìb á hítdìb-é-ŋ kràp wàhíŋ sew sew 3SG sew-GO-3SG shoe DEM 'He sewed and sewed the shoes for her.'
- (16)bàk bàk á bàk-á-ŋ 6à wírnjìk kớ 3SG fill-GO-3SG ASSC ash fill fill POS nà màn PREP LOC.ANAPH 'He filled them with ashes.'

- (17)séy wàl ngàn tán á nd rà DEM 3SG wife 3SG D.HAB go SO wirnjìk diy-à bàk-áhà wàcin syì pour-GO DEM COM ash start-GO cìđé' cìđé' cìdé' cìdé' á kàtàf pile pile PRED road pile pile 'When his wife was going, ashes poured out in small piles on the road.'
- ngùl ngùl (18)séy mà tìy á tìy-ù husband 3SG see-3SG REL SO see wàl tsú zá dámù wife EE bush went 'So the husband saw that the wife went to the bush.'
- (19)kámbáy ngàn ɗiyà 6àt á 6*àt* žéb follow 3SG stick 3SG put get get tàŋ DED 'He got his stick and went to follow her.'
- (20)tú nàŋ ngàzù wá ngàzù wá wàl tú wàl foot DEM GEN wife 1SG foot DEM GEN wife nàŋ ngàzù wá tú wàl nàŋ DEM GEN wife foot 1SG 1SG 'That is my wife's foot, that is my wife's foot, that is my wife's foot.'
- (21) žè6 žèß á žè6-ù ndà dzáŋ wàl follow follow 3SG follow-3SG wife find go ngàn nákáhà **REM** 3SG 'He followed and followed and found his wife,'
- (22)ká đà tìpíd tsáy zà gather termites finish EE 'who had finished getting termites'

- (23) à fàd-á-ŋ tàlàn tá
 3SG shave-GO-3SG head GEN
 záván-yíì r bàhá
 guinea fowl-PL D.HAB again
 'and was shaving the heads of the guinea fowl again.'
- (24) séy á nà gámbáy ngàn bàt so 3SG PREP stick 3SG grab 'Then he grabbed his stick.'
- (25) bàt á bàt-á-ŋ ỳdá n záván-yíì
 get 3SG get-GO-3SG beat PREP guinea fowl-PL
 wàcíŋ
 DEM
 'He grabbed it [his stick] and beat those guinea fowl.'
- (26) kớ lìm ntá INF see one 'He hit one.'
- (27) záván-yíì í-bà fir tàtàŋ guinea fowl-PL PL-ASSC flight 3PL:POSS 'The guinea fowl flew away.'
- (28) wàl ngòn zá áu sò dál-á-h wife 3SG COMP INTERJ 1SG do-GO-2SG mòná wà mí like DEM what 'His wife said," What did I do to you?"
- (29) ibà ndà tàtà wùtá
 ASSC:PL go 3PL.POSS village
 'They went home.'
- (30) ndá zòm zòm nákà wà zá
 go eat eat REM DEM EE
 'They returned and ate that one' (i.e. the guinea fowl that the man killed).

- (31)wàl wá à ndí tàl ngàn dáp DEM 3SG HAB 3SG wife walk only ngàn dáp ndí dámù tàl á PRED bush 3SG HAB 3SG still walk 'The wife still took walks in the bush' (despite the fact that her husband had killed the guinea fowl).
- (32)séy ndà dzáŋ á dzáŋ-á kàďám find 3SG find-GO calabash SO go á dámù PRED bush 'While walking, she found a calabash in the bush.'
- (33) lù á lùw-á-ŋ nò kờdôm wàcíŋ say 3SG say-GO-3SG PREP calabash DEM 'She addressed this calabash.'

wá

DEM

(34) kàdám vl-à-k wùd gí calabash give-GO-1SG food POL "Calabash, could you give me some food?"

kàđám

calabash

(35)

séy

SO

wùd màná wà mhá cook-GO-3SG food DEM so like té té té té pè á much spread(4 times) **PRED** ngàn mà kàbám mouth face 3SG 'So the calabash made a lot of food for her [and] spread [it] in front of her.'

dà

cook

dà

cook

á

3SG

- (36) zòm zòm zòm á zòm zá eat eat eat 3SG eat EE 'She ate and ate and ate' (until she was satisfied).'
- (37) á n kàdám ngàn bàt 3SG PREP calabash 3SG take 'She took her calabash.'

- (38) á n kàdám ngàn bàt 3SG PREP calabash 3SG take 'She took her calabash.'
- (39) ábà nd-á ngàn wùtá
 ASSC go-GO 3SG.POSS village
 'She returned home.'
- (40)ndà dáb á dáb-ú ndà lw-á bring 3SG bring-3SG tell-GO go go ngàn ngùl husband 3SG 'She brought it and then she went to tell her husband.'
- (41) yá í-bà ndà tàtà bíŋ call PL-ASSC go 3PL.POSS room 'They went into the room.'
- (42)kà dzán-á skàn ngùl-víì nám S zá husband-PL 1SG INF find-GO 1DU EE thing "My husband, I found us something."
- (43) mhm kàdám wàciŋ
 mhm calabash DEM
 "Here is the calabash." (woman still talking)
- (44) hà n ká lùw-á-ŋ vàngáy
 2SG PREP INF tell-GO-3SG how
 "How do you talk to it?" (man talking)
- (45) hà n ká zá lùw-á-n mák
 2SG PREP INF COMP tell-O-3SG what
 "What do you say to it?" (error)
- (46) kàdám vl-à-k wùdá gí tsáy dàp calabash give-GO-1SG food POL finish only "Calabash, could you give me some food?', just like that."' (woman talking)

- (47) tsáy dàp finish only "That is all."
- (48) kàđám mà ngùl ngùl zá **COMP** husband DEM husband calabash vl-á-k wùdá gί give-GO-1SG food POL 'So, her husband said, "Calabash, could you give me some food?""
- (49) kàđám dà dà wá dà dà á DEM cook cook cook 3SG calabash cook d-á-ŋ wùdá màná wà kám cook-GO-3SG food like DEM TOP 'The calabash made him a lot of food like that.'
- (50) gwád tsáy zá fill finish EE 'filled completely'
- (51) zòm zòm zòm á zòm zá eat eat eat 3SG eat EE 'He ate a lot.'
- gár (52) píč ndà gár wà á ká dàp stand 3SG Sun DEM go POS stand only 'Under this sun he went out and stood.'
- (53) kớ fàk wàl zá
 INF give neck EE
 'He started to yell' (from joy).
- (54) séy mìd fàk then wind give 'Then a wind blew.'

- (55) báy zá ngwáy tèr láy té mìtíš chief COMP INTERJ month time GEN hunger mèná wàcíŋ like DEM 'The chief said, "Oh, during the time of hunger like this,'
- (56) syì bàhámán à dzò wúl wàcíŋ syì
 COM Bahama 3SG cry neck DEM COM
 "Bahaman is yelling over there."
- (57) à gìm-é nòk mí
 3SG listen-GO 1PL what
 ""What has he heard for us?"" (What kind of news does he have for us?)
- (58) hí ndà déf-é-ŋ mà

 2PL go show-GO-3SG mouth
 "Go call him." [lit. 'show him mouth']
- (59) ndò yá í y-ú go call 3PL call-3SG 'And they called him.'
- (60) Bàhámàn tíl á nd-á
 Bahaman go 3SG go-GO
 'Bahaman left' (immediately after he was called).
- (61) ah Bàhámàn á túk bákà ták syì PRED GEN:2SG today COM all oh Bahaman píč wàhín syì DEM COM sun "Oh, Bahaman, for you, with all this heat?"
- bán rà (62)à túk há skù wúl 2SG think D.HAB NEG for you neck héŧ rà wá syì DEM COM break D.HAB "You are not thinking, you are yelling with joy."

- mí (63) hà lìm-é nòk 1PL.INCL see-GO what 2SG "What have you found for us?"
- (64)nà kà dzán-á àa bárkàmà wàl ah chief wife 1SG INF find-GO skàn pár zá ɗáhà strange EE thing exist "Ah, my chief, there is something my wife found."
- (65) vàngáy skàn tá nzá thing be GEN how "What is the form of this thing?" ('What is this thing?')
- kàđám (66)à dzán-á à 3SG find-GO calabash ah "She found a calabash."
- (67)6èt-à skú àa ndà nòk svi get-GO 1PL **NEG COM** ah go á vàngáy PRED how "Ah, go bring it to us, otherwise what can we do?"
- (68) à zá hí k-án hìdì 3SG COMP 2PL send-3SG man 'He [the man] said, "Send somebody.'
- (69)hìd-yíì kán kán ndá 6àt 3PL send 3PL send man-PL get go 6èt-á-n kàđám wàcin dà í get-GO-3SG calabash DEM bring 3PL dà-há-w bring-GO-3SG

'They sent people and they went and got the calabash for him and brought it.'

- **(70)** wà ká lùw-á-ŋ n kàđám tá say-GO-3SG PREP calabash **GEN** INF but ží vàŋgáy bàháman then how Bahaman "What do you say to the calabash, Bahaman?"
- (71) bàhámán zá hí n ká
 Bahaman COMP 2PL PREP INF
 lùw-á-ŋ syì bárkàmà
 say-GO-3SG COM chief
 'Bahaman said, "You say to it, my chief,'
- (72) kàdám vl-à nà wùdà gí
 calabash give-GO 1PL.EXCL food POL
 tsáy dàp
 finish only
 'calabash give us food." That is all.'
- (73) séy báy zá kèdőm vl-à nà so chief COMP calabash give-GO 1PL.EXCL wùdò gí food POL 'So the chief said, "Calabash, give us food."
- (74) dà á dà d-á-ŋ tà wùdà cook 3SG cook cook-GO-3SG 3PL food wàcíŋ syì
 DEM COM 'Then it made food for them.'
- (75) hìd tớ nfád-yíì zòm zòm fák-á man GEN palace (F.)-PL eat eat leave -GO 'The men of the palace all ate and left the remains.'
- (76) kàđám ngàn 6èt báy nà dé6 á chief PREP calabash SG take 3SG carry dé6 ká á ìdá carry POS PRED home 'The chief; took his; calabash and carried it home.'

- ká (77)ígà nákáhà ndà ká kà n long time (F.) REM INF PURP PREP INF go wàciŋ 6ètá take DEM 'A long time after, he went to take the calabash.'
- lù lùw-á-ŋ (78)lù á wàl wà á wife 3SG say-GO-3SG **PRED** DEM say say dà-n gwáď kàđám wá má DEM DEB PREP calabash cook-3SG a lot 'The woman told the calabash to cook a lot for her.'
- (79) dà dà á dà-ŋ nà wàl cook 3SG cook-3SG PREP woman cook wùdó ngòn dzògód wà n PREP food 3SG gather DEM 3SG dzàgád 6àh ká gather hide **POS** 'It [the calabash] cooked for the woman, and the woman gathered the food and hid it.'
- (80)séy báy dé6 ngàn á ìdá zá ká take EE 3SG POS then chief PRED home 'Then the chief took the calabash home.'
- (81) ngàn màdáràf ndà lù-á wàl nà PREP wife 3SG favorite say-GO 'He went and said to his favorite wife,'
- (82)skàn ká lùw-á-ŋ sá wà syì há zá thing DEM COM 2SG INF say-GO-3SG EE here kàđám gί vl-á nòk wùdà calabash 1PL food give-GO **POL** svì à ndí dá tà dàp HAB make DED COM 3SG only "Here you have this thing. If you say to it,'Calabash make us food, please,' then it just cooks."

- (83) séy lùá dà dà á d-á-ŋ zá
 then ask cook cook 3SG cook-GO-3SG EE
 syì
 COM
 'Then the woman asked. It [the calabash] cooked for her [the woman].'
- (84) bàhámán ábà ndá ngàn Bahaman ASSC go 3SG.POSS 'Bahaman went home.'
- (85) wàl ngòn zá dámà bàhámán hà yóm wife 3SG COMP good Bahaman 2SG also skó vù NEG Q 'His wife said, "Good, Bahaman, you also [can do it?]."
- (86) ták tèr láy tó mìtíš mòná wàcín ní in month time GEN hunger like DEM EXCL (F.) "In the time of the famine like this,"
- (87) skòn nàm dzáŋ skòn syì há dĩyà gáy thing 1DU find thing COM 2SG put spoil ká
 POS
 "the thing we found, you are ruining it."
- (88) nám ká tìy tàn 1DU INF see DED "We'll see about this."
- áb dùwán mbí (89)tál ngàn á ASSC back ANAPH 3SG walk 3SG.POSS dám tà dàp bush DED still D.HAB 'After that, she continued to walk in the same bush.'

- (90)à tál-à à tál-à ndà dzáŋ á walk-PAST 3SG go 3SG walk-PAST find 3SG dzán-á làkwid làkwid làkwid kámbáv straight straight straight stick find-GO 'She walked and walked and she went to find (and found) a very straight stick.'
- (91) à zá gámbáy ỳd-à-k gí 3SG COMP stick beat-GO-1SG POL 'She said, "Stick, beat me, please."
- (92) séy gámbáy nákà ká bàt zá so stick REM INF take EE dàp immediately 'So the stick took off immediately.'
- (93) hWáp hWáp hWáp diyà gàld wàl wàhín bap bap bap put hit woman DEM 'Wap, wap, wap, [it] started to hit the woman.' (hW plosive with lower lip curled far back behind the teeth. Articulation is accompanied by the voiced velar fricative.)
- (94) wàl wá hàn hàn kà đál vàngáy woman DEM cry cry INF do how 'This woman cried, "What should I do?"
- (95) á sòn skò bà 3SG know NEG again 'She did not know anymore!'
- (96) séy čáp màl à kámbáy then INTERJ 3SG stop stick wà ká dàp DEM POS only 'Then chap! she stopped the stick.'
- (97) ndàd ká n skàn ngàn bàt lay down PREP thing 3SG take 'She put it down [and] took her thing.'

- (98) ábà ndá ngàn wùtá
 ASSC go-GO 3SG village
 'Then she returned to her village'
- (99) nd-á yà ngùl ngèn á bíŋ go-GO call husband 3SG PRED room 'and called her husband into the room.'
- (100) déb á déb-é-ŋ gámbáy nákà
 bring 3SG bring-GO-3SG stick REM
 wà bíŋ
 DEM room
 'She brought him the stick in the room.'
- (101) à zá ngùl-yíì gámbáy tá
 3SG COMP husband-PL stick GEN
 màcíŋ lùw-á-ŋ màk
 DEM say-GO-3SG would you
 'She said, "My husband, this stick, say to it,"
- (102)kámbáy ὴd-á-k gí syì à kà n COM 3SG hit-GO-1SG POL stick PREP INF ďál-á tàŋ do-GO:2SG DED ""stick, hit me,' and it will do it to you."
- (103) há n tsàf skù syì wàl-yíì
 2SG PREP lie NEG COM woman-PL
 "You're not lying, my woman."
- (104) há lùw-á-ŋ ngási kámbáy dàl n-dí say-GO-3SG like that 2SG stick do go tá vù DED Q "You say to it just like that, 'Stick, do it'?"
- (105)á ndá biŋ tíl zá depart 3SG EE go room dzáŋ mì bíŋ dzán ká à á PREP mouth room close 3SG close **POS** 'He went to the room and closed the door.'

- kámbáv (106) báhámán là á lúw-á-n nà 3SG say say-GO-3SG PREP stick Bahaman nákà wà REM DEM 'Bahaman spoke to the stick'
- məl-a-ŋ (107) kámbáy mál ndə wà á DEM catch 3SG catch-GO-3SG stick beat màciŋ bíŋ ngàn room DEM 3SG 'The stick started to beat him in the room.'
- (108) hàn hàn hàn á hàn màná wàciŋ 3SG cry like that **DEM** cry cry cry svi COM 'He cried a lot like that.'
- (109) tús ń gàtsà right like that 'rightly like that' (tús 'right, well')
- (110)wàl wà ràz màbín ndà tsáp màl á DEM open wife 3SG catch door tsap go ká POS 'the woman opened the door, went and tsáp caught [it].'
- (111) séy bàhámàn páláh à wurtə zá leave(F.) 3SG COMP then Bahaman out ndà séytíinà bá dàp again 'call' go 'Then Bahaman went out. She said to him, "Go make that call again." (séytíinà 'name in Fula of Muezzin's call in the morning')
- (112) bàhámàn nd-á gàr go-GO Bahaman stand 'Bahaman went and stood' (at the same place from which he had yelled before).

- (113) diyà séytiin go wàciŋ syì start muezzin's call ? DEM COM 'He started to make the call,'
- (114) kó wàl nd rà skù even (F.) neck go D.HAB NEG 'but the voice did not go out as before.'
- (115) $b\acute{a}y$ ngwáy bàhámàn bákà bá dzàn-á zá today find-GO people Bahaman chief EE still nòk mí 1PL what 'The chief said, "People, what else did Bahaman find us today?" (ngwáy 'plural addressee')
- (116) hí ndà lùw-á-ŋ má ndà-hà
 2PL go say-GO-3SG DEB go-GO
 "Go tell him to come here."
- (117) ndá yà í y-ù go call 3PL call-3SG 'One went to call him.'
- (118) tíl á nd-á á r báy tàn go 3SG go-GO PRED PREP chief DED 'He went to the chief's.'
- (119) á vàngáy bàhá
 PRED how still
 "How still?" (i.e., What's new?)
- nà (120)áá wàl kà dzán-á skàn pár find-GO 1SG INF thing wife another ah bàdáp zá EE again "Ah, my wife found another thing again."

- (121) $k\hat{\sigma}$ nòk skàn dzán-á pár zá INF thing another find-GO 1PL EE bádàp again "She found us something else again?"
- dzán-á bàrkámà (122)áa kà nòk zá 1PL EE chief (F.) INF find-GO "Yes, she found us something, my chief."
- (123) à hí ndà lùw-á-n zá má COMP 2PL go say-GO-3SG DEB dà-há-w bring-GO-3SG 'He said, "Go tell her to bring it here."
- 6èt-áhà-w (124) zàgíy tíl ndà 6èt í courtiers (F.) go take take-GO-3SG go 3PL gáď bà wàl wà táŋ push with woman DEM DED 'The courtiers went and brought the calabash with the woman.'
- điyà (125)nd-á kámbáy ďi í wà go-GO 3PL stick **DEM** put put fádà ká tà dàp n DED just PREP court (F.) 'They came and put the stick in the court of the chief.'
- (126)wà ká lùw-á-n vàngáy ee. n PREP INF say-GO-3SG how well, but "But what does one say to it?"

Another language asistant does not accept the the prepostion nin the avove clause, and wants the sentence to be:

> vàngáy [ee. wà ká lùw-á-n INF say-GO-3SG how well. but "But what does one say?"

- (127)áa hí lùw-á-n màk hí n kà tell-GO-3SG won't you 2PL PREP INF 2PL aa, kámbáy nda hìdì wà tál há zá 2SG DEM try hit stick man say gí POL
 - "Tell him, you will tell him, 'Try to hit someone."
- kámbáy (128)lù í lùw-á ŋgù wà say-GO 3PL 3SG stick **DEM** sav màl-á-n tàtà tà ndə màl á 3SG catch-GO-3SG 3PL 3PL hit catch mècin there 'They said [it] to the stick, and the stick went on to hit them there.'
- (129) $m\grave{a}$ ndà ká šì ká 'ndъ̀ νí svi zá REL INF COM INF hit EE go who run svì mà ká šì νí ká zá ndà 'ndэ̀ COM INF INF REL run who hit EE go 'The one who wants to run away, he hit him.' (repeated twice)
- (130)*6àt* á 6àt káyyà hí màl ká **INTERJ** 2SG 3SG start start catch POS 'He started, "Yikes! Stop (PL) it!"
- (131) séy ndò mól wàl wá mòl ká so go catch womanDEM catch POS 'So the woman went and stopped it.'
- (132) báy bàt zá ngàn déb ká ìdá chief get EE 3SG carry POS home 'The chief took it [the stick] and carried it home.'
- (133) ndà lù-á tàtà sà slúd bà go say-GO 3PL PREP two ASSC màdáràf ngàn favorite 3SG

'He went to speak, between the two of them (privately), with his preferred wife.'

- (134) màná í ká ĥàt kàđám hàhá INF 3PL take calabash how again 'In the same way in which they took the calabash'
- kàgám syì ndà màl á màl-á-n tá (135)COM hit 3SG hit-GO-3SG 3PL talk go tàtà ndá mà bá syì again COM strike 3PL there 'They talked [to the stick]. It started beating them over there again.'
- (136) kàyifi tàtàn í-bà ndà strange (F.) PL-ASSC go 3PL 'Never seen before [a stick hitting people on its own]. They left [the court].'
- (137) séy wàl kám ká tál ďá wá nàz womanDEM TOP INF the stop walk exist skù dáp NEG only 'Then, that woman [the one who found the calabash] did not stop taking her walks.'
- (138)án ndà ngàn ká tàl áa tàl tàl 3SG INF 3SG walk 3SG walk go walk tàl tàl walk walk 'She walked and walked.'
- (139) *ndà* dzáŋ kwáykwá-yíì í kà ngá Κì zá hvena-PL 3PL break meat go find INF EE syì COM 'She went and found some hyenas who had caught some meat.'
- wàlla (140)kávà diyà tà hà dà INTERJ (F.) start help (F.) ASSC cook 3PL tàn DED 'She started to help them cook.'

- (141)tséy ká dà-n tà svì à zá cook-GO-3SG 3PL COM 3SG INF EE SO ndá ngàn go:GO 3SG šék łíp ngàn ķì nákáhà rá án ? 3SG D.HAB ? REM meat divà á kàđám ngaara n PRED PREP calabash break and carry in hand put 'So when she finished cooking for them, she returned home, she tore off a piece of that meat, carried it [home], and put it in a calabash.'
- (142) ndà điyà dà á ìdá go put cook PRED home 'Then she returned home to cook.'
- tìy tìy á kà mbáŋ (143) sév á á **ANAPH** 3SG like that 3SG SO see see ďál rà skù D.HAB **NEG** do 'Then she saw that one does not do it like that.'
- (144) kwáykwáy-yíì wà zá ńgà há hyena-PL DEM COMP 2SG mbàl-ù há vàn á kàcin move PRED here 2SG want-3SG 'Those hyenas told her, "If you want, you can move in here."
- (145)ááá mbí zá sà kí yàn à n myself 1SG 3SG COMP ah. PREP INF move bá ìdá á tàn àmmá sà PRED DED 1SG ASSC house but 'She said, "I want to move but I have a house."
- (146) ngùl nò dáhà wòží n-yíì
 husband 1SG exist children 1SG-PL
 dáhà
 exist
 "I have a husband, I have children."

- (147) kwáykwá-yiì bó i zá á tùk ASSC 3PL COMPPRED GEN.2SG hyena-PL ndà-há hì kám hí fú 2PL go-GO 2PL all (F.) DED TOP(F.) 'As for the hyenas, they said, "Come, all of you."
- (148) tèbén tá ndìr ďáhà sorgho exist GEN "There is a granary of sorghum" (i.e., 'we have granary of sorghum').
- (149) *tèbén* tá kàkàs đáhà GEN beans exist granary "There is a granary of beans."
- (150) tèbén tá wàndàn ďáhà GEN peanuts granary exist "There is a granary of peanuts."
- (151) tèbén cìkíd dáhà tá GEN granary sesame exist "There is a granary of sesame."
- dà fú (152) fú á tìn wà ďáhà kind (F.) PRED PREP 1PL DEM exist all "We have all kinds of things."
- (153)sév á kám ndí ngà tà-t 3PL PRED 3PL TOP (F.) then HAB catch kì-yíì ndá zà ká kà dá tàn EE INF INF DED meat-PL go cook 'Then, as for them [the hyenas], they just catch the meat [and] bring it for cooking'
- (154) èe hìd-yíì í-bà wá yáŋ tàtà DEM 3PL:ASSC man-PL move 3PL:POSS ah màcin PRED there 'Those people moved over there.' (i.e., the woman with her family)

- (155) i nz-ù i nz-ù i nz-ù i 3PL stay-PL 3PL stay-PL 3PL stay-PL 3PL stay-PL 3PL stay-PL 3PL rz-ù stay-PL 'They stayed there a long time.'
- (156) kwáykwá-yíì wá zá bákà gì dà skù hyena-PL DEM COMP today meat exist NEG "The hyenas said, "today, there is no meat."
- pàts-á nòk (157) gèlbé kám há mbà ntá hà better TOP(F.) 2SG take 1PL child 2SG one dá nòkón cook 1PL "You better take one of your children and cook it for us."
- (158) skú syì ká zàm skàn-yíì wà bà
 NEG COM INF eat thing-PL DEM ASSC
 mí
 what
 "Or else what will we eat those things with?""
- (159) áa dámà wàl wà bà á
 ah good woman DEM again 3SG
 lúwá-ŋ táŋ
 say-GO-3SG 3PL
 "It's good," the woman told them again.'
- (160) ábà ndà ngàn n kilvid-yiì
 ASSC go 3SG PREP trash heap-PL
 'She went to trash heaps.'
- (161) ndó tsàm tsàm á tsámà kiringil-yiì go gather gather gather 3SG gather bone-PL 'She went and gathered bones.'
- wàží-yíì gán ngùl-yíì rà (162)rà dig children-PL man-PL dig even jí6 címéd ká r dig hole POS 3PL around 'Children and also men dug a hole.'

(163) $\dot{a}b$ dùwán mbí á mvən n ASSC back 3SG PRED stone ANAPH tápá tá *6át* GEN tobacco take 'Afterwards, they took the tobacco stone'

> kà pék ká ndá mì jí6 nákà bà cover mouth hole REM ASSC INF come INF bén **ANAPH**

'to go and cover the entrance to the hole with it.'

- (164) *séy* hìd-yíì wà mà ndá-v zà man-PL DEM REL go-STAT EE then 'Then those people [the hyenas] came.'
- wùdá fkáy (165) áa á sà wùdá dà sá food where 3SG voici food voila bring "Ah, where is the food? Here is the food, here is the food, she brought it."
- (166)mbán té gwidiŋ nàz èе á ná ká jí6 3SG PREP child GEN one throw in hole 'Then [she took] one child [and] threw it into the hole.'
- (167)á kà mbin tóm always (F.) PRED like that '[She] did like that each time.' (I.e., each time when she was asked to cook one of her children, she did the same, she hid it in the hole.)
- (168) ká ďál zá syì mbà á n COM 3SG PREP child INF do EE another náz ká jí6 throw PREP hole 'Each time she did that, she took one child and threw it into the hole.'
- (169) *ndá* kíríngíl tsám tsám ndà dá gather gather bone go cook:GO 'She went to gather bones and cooked [them] there.'

(170)ká ďál zá sà hàa tí píc 3SG until INF do EE GEN day 'She did this until the day . . .'

wàži túwád zà children finish EE 'when there were no more children.'

- (171)ίi zá bákà sví COMP today COM thev dá tàlàn há ká tùkón n PREP INF cook head 2SG 'They said, "Today you will cook yourself."
- (172) á zá á dámà sờ dó zà 3SG COMP 3SG good 1SG cook EE 'She said "Good, I will cook."
- (173)tsàm á til á ndà zá ndà tsàm collect collect 3SG 3SG go EE go go nd-á ták kiringil-yiì cìkíd tsám-à bone-PL go-GO crush sesame collect-GO ďál ďál ďál cíkè kà á 3SG do all POS do do 'She went and collected bones, returned, and crushed sesame; she did all that.'
- (174)dà dà á dà zá diy á cook cook EE cook 3SG put 3SG divà-n tàtà ká put-GO-3SG 3PL POS 'She cooked, cooked, and she put [it] for them [hyenas].'
- (175) séy mìné ngùl ngòn žídèp then remain husband 3SG still 'Her husband was still left.'
- (176) hìd-yíì wà tán kò dò tàlàn ngòn zá man-PL DEM return INF cook head 3SG EE 'Those people returned, and she cooked herself,'

- ngàn bàr (177) àskà tsú wùž íi 3SG side children went 'but actually she went to be with her children.'
- t-kón (178)bákà səì á tà ngùl GEN-2SG GEN husband today ah, ká dá tàlàn tàkón hà n PREP INF 2SG cook head (wife talking) "Today, it is for you husband, you will cook vourself."
- (179) $i v \hat{o}$ ďámà o.k. yes, "Well, o.k." (husband answers)
- (180) kwàikwà-yiì tsù ká tàláa ká wà DEM 3PL went INF hyena-PL walk **INF** tàláa nkù-ngàn-yíì syì bàs kúhú kú goat -SG-PL COM lit fire walk when ká kàdáw syì áw wá ngwáy INF burn COM INTERJ PL.ADRSE ksám ngàn wàl nà ndí d vàngáy go wife 1SG cook body 3SG how 'When the hyenas went to tend their goats, the man lit the fire, and when the fire was burning well, the man screamed, "How did my wife cook herself?""
- skàn-yíì (181)l'heur tá wà mbé kà GEN thing-PL time (Fr.) DEM close INF ndà-hà come -GO 'When the time of their return was approaching,'
- (182)ánà píč mhé ká nd-á wácii[n] PREP day close INF go-GO **DEM** 'When the day of their [the hyenas'] return was approaching,'
- wàl wà báf á bàf-áhà bà náf (183)dàp DEM leave 3SG leave-GO wife ASSC heart only 'the wife left abruptly with a lot of courage.'

- á (184) *ndá* dà dà dà dà wirú wá 3SG cook go cook cook cook gravy DEM fú zà food (F.) EE '[She] came to cook the gravy for the food.'
- (185) bát á bát vènjéh hàz hàz hàz hàz túk take 3SG take pepper crush crush crush crush fill fòrám horn 'She took pepper and crushed, crushed, crushed [it], and filled the horn.'
- (186) hé dâl í-bà ndà tàtà á jíb ? do PL-ASSC go 3PL PRED hole 'They went into the hole,'

á bòr wòží ngòn-yíì nákáhà PRED side children 3SG-PL REM 'next to her children'

(187) pá tá ngùl ngàn distribute in parts GEN husband 3SG 'She gave a part [of the food] to her husband,'

àa wàží ábà tá ngàn [hesitation] children-PL ASSC GEN 3SG i diyà zàm
3PL put eat '[and] to her children, and they started to eat.'

- (188) kwáykwá-yíì í mó nd-à-y zá hyena-PL 3PL REL go-GO-STAT EE 'The hyenas came.'
- rá í zàm í (189)í zàm rá D.HAB D.HAB 3PL 3PL 3PL eat eat zàm rá svi D.HAB COM eat 'They were eating, they were eating, they were eating.'

- (190)sév mà ngùl ngùl ká wà REL husband husband INF start then ngàn tá bá kédén zà dàp stupidity 3SG DED EE again only 'Then the man started again with his stupidity.'
- tùk-yíì wàží (191) ngwáy á dáv 2SG-PL PL addressee PRED children much fiš dáy tán much PRED 1SG small "Say, for your children it is a lot, for me it is little."
- (192) à wàží tàkí dáv dáv dáv 2SG much much PREP 1SG PREP children fàš little "For your children it is a lot, for me it is little."
- (193)kwáykwá-yíì kà sév váz. wà í łím DEM 3PL perhaps hyena-PL INF then hear zà EE 'Then, the hyenas heard.'
- kàgám ɗáhà (194)ngwáy skàn-yíì rà 'say' thing-PL D.HAB talk exist (one of hyenas talking) "There is something talking there."
- (195) divà lù tà dáp á wàží PRED children continue put say dáy dáy dáy tùk-víì á tán GEN.2SG-PL a lot a lot PRED 1SG little 'He kept on saying, "For your children it is a lot, for me it is little."
- (196)sév hìdì wà zá á fàkát people DEM COMPINTERJ true (F.) 'Then those people [the hyenas] said, "Ha, it is true."

- (197) kwáykwá-yíì wà lù žén zà 3PL hyena-PL RECIPR **COMP** DEM say ďápdàp hìdì wà kà ďä exist only people DEM here 'The hyenas said to themselves, "There are some people in here."
- (198) mòl i mòl-á-ŋ gár tàtàŋ catch 3PL catch-GO-3SG search 3PL 'They started looking for them.'
- (199) hók ńvàŋ hók ńvàŋ hók ńvàŋ
 hók ńvàŋ
 remove stone (X 5)
 'They removed one stone, removed another, another, and another.'
- (200)wàcin séy hók rà wàl 6àt í wà lift DEM then 3PL D.HAB wife DEM take fòrám nákà vènjéh diyà 6àt bà dì á á take horn REM ASSC pepper put 3SG 3SG put ká ná mà PREP mouth in 'When they were lifting [the stones], the wife took the horn that
- contained the pepper and put it in her mouth.
- áb dùwán mbí (201)séy ká ká n ASSC after that 3PL PREP INF PREP INF then ndá-hà kò hók ńvàn-yíì INF go-GO stone-PL lift 'After they came to lift the stones,'
 - if á if-é tó n fòróm wà dàp blow 3SG blow-GO GEN PREP horn DEM only 'she blew that which was in the horn.'
- (202) vènjéh tûl kwáykwá-yíì tín tín tín mòts pepper spread hyena-PL heap heap heap dead 'The pepper spread, and the hyenas were lying around dead,'

séy mòtábù ábò šì ngòn except last born ASSC flee 3SG 'except for the last born: he fled.'

- (203) ndò dzáŋ á dzáŋ dàkáy t-yíì dámù go find 3SG find other DEM-PL bush 'He went to search for others in the bush.'
- (204) séy nástà ngàn tsákà pàríi the enter (F.) 3SG inside (F.) others 'He went in with the others.'
- báf ngàn páláh gàr (205)wàl nákà wife REM jump 3SG stand up out kàts ábà kàts á wàzí táŋ gather 3SG gather ASSC children **DED** ngùl táŋ ábà ndà dzáŋ go ASSC husband DED find kwáykwáy-yíì nákà hyena-PL REM 'The woman jumped out, stood up, gathered her children and her husband, and went to find the hyenas.'
- (206) kwáykwáy-yíì nákà fú mó mbàd-í
 hyena-PL REM all (F.) REL transform-STAT
 kó wír žìdép áb tèbéŋ-yíi nákáhà
 PREP gravy only ASSC granary-PL REM
 'The hyenas became [meat for] her gravy, and also the granaries [belong to her].'

Text 5. A frog and a buffalo

(1) gómbòk í-bà bàkàlàf ì dál frog PL-ASSC buffalo 3PL make gáabà conversation 'A frog and a buffalo had a conversation.'

- **(2)** bàkàlàf nà gómbòk kà zá hà kúl COMP PREP frog buffalo 2SG able **INF** ší skù NEG run 'The buffalo said to the frog, "You cannot run."
- (3) tspádàp túm hà á nì vàm remain crouched PRED PREP water always 2SG dáp k áz tàm ší vámàk only 1GEN.DU INF also go run "Every day you remain crouched in the water. Let's also run."
- (4) gómbòk zá hà r ví frog COMP 2SG insult who 'The frog said, "Who are you insulting?"

sà n k ší dáy kóhón 1SG PREP INF run surpass 2SG "I will run better than you." [buffalo talking]

- (5) à gá hà tsàf 3SG say 2SG lie 'He [the frog] said, "You are lying."
- **(6)** kám Ьá s-tsàf tò à à okay 3SG TOP(F.) say 1SG-lie **PRED** káfkáfá tèm pàt áz 1GEN.DU morning tomorrow go táŋ ká sī **DED** INF run "Okay, he said, "If I lie--tomorrow morning let's run."
- (7) gómbòk zá tò frog EE well (H.) 'The frog said, "Okay."

- (8) gómbòk ábù tskòh mbén tàr ASSC evening **ANAPH** frog ask ngámbù tàr á tàr á friend ask 3SG ask PRED ngàn-yíì 3SG-PL 'That evening, the frog asked for help from his friends.'
- (9) ďi ďi tàtà cìké á dì ká á 3PL **POS** 3SG all **PRED** put put put màkám làkwát shore river 'He put them all on the shore of the river.'
- (10)kà bàkàlàf à ká dèf hínà тù INF buffalo 3SG say show 2PL mouth gómbòk zá kám łéłé òhók TOP frog COMP answer yes 'He said, "If the buffalo calls you frog, answer yes."
- (11) i gá tó
 3PL say okay
 'They said, "Okay."
- (12) gàrà káfkáf žíŋ bàkàlàf mà during morning return buffalo REL ndà-y zá go:GO-STAT EE 'The next morning, the buffalo returned.'
- (13)ķά tàm ká šì táŋ á áz 1GEN.DU INF **DED** 3SG run say go 'He said, "Let's run."
- (14) \acute{a} $\not a \acute{a}$ $t\acute{o}$ 3SG say well (H.) 'He said, "Okay."
- šé ší (15)bàkàlàf šèee šé šé á 3SG buffalo run run run run run 'The buffalo ran and ran.'

- (16) gómbòk óhòk frog yes "Frog?" "Yes."
- (17) à bà á kàbám ká mbàd-à-k zá
 3SG say 3SG ahead INF surpass-GO-1SG EE
 'He [the buffalo] said, "He[the frog] is ahead. He surpasses
 me."
- (18) á šì dàp á šì dàp 3SG run only 3SG run only 'He runs, he runs.'
- (19) gómbòk òhók frog yes "Frog?" "Yes."
- (20) á šì dàp á šì dàp 3SG run only 3SG run only 'He runs, He runs.'
- (21) gómbòk òhók frog yes "Frog?" "Yes."
- (22) ķà kái šì dáy à à INTERJ 3SG run 3SG say surpass sáŋ kà PREP 1SG 'He said, "Hey, he runs faster than me."
- (23) à ràmú à ràmú à rámù
 3SG run fast 3SG run fast
 'He runs fast, fast, fast.'
- (24) gómbòk óhòk frog yes "Yes."

- (25)bàkàlàf ďá ngàn dàbàráy skà bà buffalo strength exist 3SG NEG **ASSC** žìdép still 'The buffalo doesn't have strength anymore'
- (26) gés kà bà páy mà màts-yí zà lean PREP ASSC tree REL die-STAT EE 'He leans against a tree; he is dead.'
- (27) cìbéw á páláh nà fat gómbòk-víì fàt PRED outside go frog-PL all skin skin 3PL tàtán fàt βì GEN:3PL skin meat 'All the frogs went outside and skinned their meat.'
- kwáykwáy ngàn (28)kà ndá tò r INF okay hyena 3SG D.HAB come ďál zá hí mí hì what 2PL **PREP COMP** 2PL make ķì dzán-á nók zá kà và 1PL EE isn't it INF find-GO meat 'Okay, a hyena came and said, "What are you doing? You found us meat; how nice of you!""
- (29) háá nók kà dzán-á nók ķì zá INF find-GO 1PL 1PL EE yes meat "Yes, we found the meat for ourselves."
- (30)áz tòk ká 6àm há tá GEN:1PL.INCL INF eat **DED** SO go žìdép skà νú at last NEG O 'So, aren't we going to eat at last?""
- (31) i ţá káy
 3PL say INTERJ
 'They said, "Hey!"

- kà lèbék lèbék bà mí wà kà 6ám (32)wà ASSC what something raw but **INF** INF eat but 6ám vàŋgáy how eat "But how can one eat it raw?"
- (33) tò áz tòk kó grà okay (H.) go GEN:1PL.INCL INF find kúhú fire "Okay, let's find fire."
- ká gàd-á (34)wá mà ndà ká nòk 1PL INF take-GO REL INF but go kú νí fire who "but who will go to find us fire?"
- (35) kwáykwáy zá hí ndà hyena COMP 2PL go 'The hyena said, "You go!"
- (36)kái ķά lá ķì nìnàn í nà **INTERJ** 3PL 1PL 1PL say own meat ká ndà INF go "Look, they said, "We who own the meat, it is we who go?"
- (37) kwáykwáy à ndò dáp nò gr-á
 hyena 3SG go only PREP find-GO
 nòkòŋ
 1PL
 "Just the hyena goes to find it for us."
- (38)kwáykwáy grà kühü tàŋ ká ndà ká DED INF INF find fire hvena go 'The hyena went to find fire.'

- (39)тà zá báytà gómbòk-yíì zá syì REL large frog-PL **COM** EE **COMP** hí kám wàn kà fú tàn hí TOP DED 2PL 2PL sleep:IMPER POS all mùkàdkádán sùlúd sùlúd upside down two two 'The largest of the frogs said, "You all lie down on your backs in pairs."
- (40)kí mìŋ tátà sà hó sà n PREP INF 1SG 1SG stay 1SG also alone "I also will stay alone."
- (41) Ьá bìķáf ká dzà dàkáìt-yíì sà ká n 1SG PREP INF God INF kill other-PL say mín tsáv zá à S tátà completely EE 3SG remain 1SG alone 'I will say God killed all the others; I alone remain'
- ká (42)kwáykwáy tò tàŋ gàd-á Z hyena EE **INF** take-GO okay go kúhú fire 'Okay, the hyena went to get fire.'
- (43)ndá fü syì tàtà tàŋ mà à DED 3PL REL 3SG go:GO COM 3PL all sùlúd sùlúd mùkàdkádáŋ wàn-yi upside down sleep-STAT two two 'She came -- all of them were sleeping on their backs in pairs.'
- (44)kwáykwáy đá6 í wàn sùlúd sùlúd ask 3PL hyena sleep two two wá dál-á-n tàtà mà mí make-GO-3SG REL 3PL what but 'The hyena asked, "They sleep in pairs, but what happened to them?""

- (45)ķά tàtà à bìkáf ká dzà cíké' kà à 3SG 3SG God INF kill 3PL all POS say ká tì fin nàmú nám tàn remain 1DU 1DU **DED** INF see 'He said, "God has killed them all; there remains only us, we will see."
- (46) kwáykwáy zá mèd hyena COMP swear 'The hyena said, "Swear!"
- (47) káy tátà fin nàm ká à à 3SG alone 3SG say INTERJ remain 1DU tàŋ mbémbé wá ká ndá à n but 3SG PREP INF go:GO DED immediately 'He said, "Look, there remains only us, but very soon he [God] will come."
- (48)kwáykwáy mbin ķì kám tìkínìŋ zà **COMP ANAPH** GEN:2PL hyena TOP meat má nzà hín kà REL stay you here 'The hyena said, "If it is like that, your meat should remain with you."
- (49)gómbòk-yíì ká 6àt šì wàhin zá frog-PL take EE **DEM** INF run fədáh dùwáŋ ábà tàtàn wake up ASSC after 3PL 'She took flight; those frogs then woke up.'
- (50)tàtàŋ tàŋ ķì dè6 dè6 ká fú GEN:3PL DED bring 3PL bring INF meat all yàm PREP water 'They brought all of their meat into the water.'

- žíŋ bà dùwán syì í (51) kwáykwáy cikè return ASSC back COM 3PL hyena all yàm tàtà nà tsù í 3PL PREP water went 3PL 'The hyena returned after they all had gone into the water.'
- (52) à sé i dz\(\partial k-\delta-k\hat{u}\)
 3SG then 3PL cheat-GO-1SG
 'She said, "They cheated me."
- (53) ndìká mànjé wàhin sà kà dzán n now DEM 1SG PREP INF better (F.) find gómbòk zá EE frog sá ká ndrák mbàd wìrnjík n 1SG PREP INF smash become ash "From now on, when I find a frog, I will smash it to ashes."

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