

# A GRAMMATICAL SKETCH OF GOEMAI: WORD CLASSES

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## 1. *Introduction*

Goemai is a Chadic language spoken by an estimated 200.000 speakers in the Great Muri Plains, located between the Jos Plateau and the river Benue of Central Nigeria. It is classified as a member of the Southern Angas-Goemai sub-group of West Chadic A (Hoffmann 1975, Newman 1977a). There is very little linguistic documentation on languages of this Southern group (but cf. Jungraithmayr 1964a). However, grammars have been written on some closely related languages of the Northern group, notably on Angas (Burquest 1973, Foulkes 1915, Jungraithmayr 1964b), Mupun (Frajzyngier 1993) and Mwaghavul (Jungraithmayr 1963a). The information available suggests that languages of both sub-groups are closely related. In addition, it has been noted that the Jos Plateau and its adjacent regions constitute a language area, in which languages of both Chadic and Niger-Congo origin share lexical and structural properties (Gerhardt 1983, Gerhardt and Wolff 1977, Hoffmann 1970, Jungraithmayr 1963b).

On Goemai itself, there is some phonological material available (Kraft 1981, H. Wolff 1959). In addition, several unpublished manuscripts exist: a comparative phonological study (Hoffmann 1975), a grammatical sketch (Sirlinger 1942) and two dictionaries (Sirlinger 1937, 1946). These three latter manuscripts are of historic interest, as they constitute an excellent document of the language as it was spoken around 1930. The present paper attempts to fill a gap in the descriptive literature, presenting a concise grammatical description of Goemai as it is spoken today.<sup>1</sup>

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It concentrates on the word classes, focussing on the noun phrase and its elements, and on the elements of the verbal clause. Briefly, Goemai has SVO word order (and related features such as prepositions, noun-genitive ordering) and is a serializing language. It does not have any verbal extensions. Number is marked on the verb; it does not have nominal plurals. And TAM categories are expressed periphrastically.

This sketch does not include a discussion of the phonology, as such material is available in the studies mentioned above. Note that for the purposes of the present paper, I adopt a modified version of the practical orthography developed in Sirlinger (1937). This orthography does not mark tone; as a consequence I will only mark tone whenever it is grammatically relevant. The following notation is used:

*Consonants:*

	labial	alveolar	palatal	velar	glottal
<i>stops</i>					
voiceless aspirated	p	t		k	
voiceless non-aspirated	p'	t'		k'	
voiced	b	d		g	
implosive	d'	d <sup>h</sup>			
<i>fricatives</i>					
voiceless aspirated	f	s	sh		h
voiceless non-aspirated	f'	s'	sh'		
voiced	v	z	j		
<i>nasals</i>					
	m	n		ng	
<i>liquids</i>					
lateral		l			
trill		r			
<i>glides</i>					
	w		y		
<i>Vowels:</i>					
	i	û (= / <del>ɨ</del> /)	u		
	e	œ (= / <del>ɛ</del> /)	o		
		a			

without whose invaluable help this grammatical sketch could not have been written. The sketch is based to a large extent on the Kwo dialect. But whenever possible, data was crosschecked with speakers of other dialects (Duut, East Ankwe/Derteng, Dorok). These dialects are very similar and differ mainly on the phonological and the lexical level.

2. *Nominals and the noun phrase*2.1 *Noun phrase*

Nominals can be identified on the grounds of their ability to occur as the head of a noun phrase. A noun phrase consists of a head that can be accompanied by (quantifying and qualifying) modifiers and by determiners. The order of these constituents is fixed:

Table (1): The structure of the noun phrase

(Modifier)	Head	(Modifier)	(Determiner)
Quantifier		Possessive	Demonstrative
Plural		Numeral	Locative anaphor
		Nomz. verb	Definite
		Nomz. clause	

All constituents above can co-occur in the order depicted, both within (examples 1a to 1c) and across (1d) columns, e.g.:

- (1a) War            **d'u**            **gwen**    *d'a* (. . .).  
 remove(pl) **many**    **PL**        *calabash*  
                   quantifier plural head

'He removed the **many calabashes** (. . .).' [LIIT, 28/12/99]<sup>2</sup>

<sup>2</sup> The elements in square brackets refer to the texts and fieldnotes, from which the examples were taken. A backslash in an example represents an intonation break. And the abbreviations used in the interlinear glosses are as follows:

ADVZ	adverbializer	LogB	addressee-logophoric
ANT	anterior	m	masculine
BEN	benefactive	NEG	negation
DEF	definite article	NOMZ	nominalizer
DEM.DIST	distal demonstrative	OBL	obligative
DEM.PROX	proximal demonstrative	ORD	ordinal number
CL	classifier	PAST.REM	remote past
COM	comitative	PAST.CL	close past
COMP	complementizer	PERM	permissive
COND	conditional	PL	plural
CONJ	conjunction	POSS	possessive
EMPH	emphasis	PROGR	progressive
f	feminine	PROH	prohibitive
FOC	focus	PUR	purpose
FUT.CL	close future	RED	reduplication
HAB	habitual	RESULT	resultative
INTERR	interrogative	SG	singular

- (1b) A / *pe* **goe-f'yer** / (...) **goe-d'ik** **G.**  
 FOC *place* **NOMZ(sg)-become\_big(sg)** **NOMZ-build** **G.**  
 head nominalized verb nominalized clause  
 'It is a **big** *place* (...) **that G. built.**' [MIL\_AS]
- (1c) *goe eep fridge* **n-d'e-nnoe** **hok**  
 2Sgm open *fridge* **ADVZ-Cl:exist-DEM.PROX** **DEF**  
 head demonstrative definite  
 'open **the/this existing** *fridge*' [WITCH2]
- (1d) *goe nak ndoe haas* **goe-n-d'ek** **hok.**  
 2Sgm fetch **some** *flour* **NOMZ-ADVZ-winnow** **DEF**  
 quantifier head nominalized clause definite  
 'you fetch **some (of) the** *flour* **that was winnowed.**' [CROP]

The existence of the phrasal unit 'noun phrase' can be shown with respect to clitics, which attach to the final element of a noun phrase (e.g., clitic *hoe* 'exactly' in the example below). In addition, the whole noun phrase can occur in the syntactic direct object slot, i.e. preceding syntactic boundary morphemes such as the morpheme *yi* (cf. 3.1.1), e.g.:

- (2a) *d'e* *t'ong* *mûûr* /  
 exist PROGR steal  
**oerem** **ji** **nnoe-hoe** *yi?*  
**beans** **Sgm.LogA.Poss** **LOC.ANAPH-exactly** **PROGR**  
 '(He<sub>1</sub> said who) is stealing **these his<sub>1</sub>** very **beans?**' [FUAN]

Note that this criterion excludes quantifying adverbs as constituting part of the noun phrase (as *dip* 'all' in the example below). They can co-occur with a noun phrase, in which case they are in apposition to each other, referring to the same entity. Syntactically, they thus occur in different slots. This criterion, by contrast, includes complex heads, such as the nouns in a genitive construction (as *long lwa* 'chief of animals' in the example below).

IRR	irrealis	SEQ	sequential
LOC	locative	SUB	subordinating particle
LOC.ANAPH	locative anaphor	TH	theme
LogA	speaker-logophoric		

- (2b) Liit a toe **long** **lwa** *yi* **dip** n-s'et.  
 lion FOC EMPH **chief** **animal** SUB **all** LOC-bush  
 noun phrase adverb  
 'So it is the lion (who is) the chief of the animals, (of) all in the bush.' [LIIT]

## 2.2 *Modifiers in the noun phrase*

A noun phrase can include both quantifying and qualifying modifiers. There are distinct subgroups among them, whereby members of one subgroup cannot co-occur.

With the exception of numerals, all quantifiers precede the head noun. One subgroup consists of the quantifiers *ndoe* 'some', *nde* 'one/other', *d'em* 'remainder', *la* (sg)/*jap* (pl) 'little/few', and *d'u* 'many/much'. They occur as modifiers in the first slot of the noun phrase (3a). In addition, they can occur as the lexical head (3b).

- (3a) See **nde** **la** **liit** gok muut.  
 then **one/other** **child(sg)** **lion** become\_ill die(sg)  
 'Then **one child of the lion** became ill (and) died.' [LIIT]
- (3b) To / **nde** d'e d'i zak.  
 okay **one/other** exist LOC.ANAPH again  
 'Okay, (**another**) **one** is there again.' [DIALECT]

Quantifiers thus behave like nouns, and, in fact, the quantifier *la* (sg)/*jap* (pl) 'little/few' has a corresponding noun (cf. *la* 'child (sg)' in example 3a above). They probably originated in genitive constructions (cf. below), but have undergone semantic bleaching in the meantime. Now, they belong to a distinct slot of quantifiers.

Like quantifiers, numerals occur both as modifiers and as heads of noun phrases. The following forms exist:

Table (2): Numerals

Cardinal numbers	Ordinal numbers
1 ( <i>goe</i> ) <i>me</i>	<i>goeme</i>
2 <i>vel</i>	<i>goevel</i>
3 <i>k'un</i>	<i>goek'un</i>
4 <i>fer</i>	...
5 <i>paat</i>	
6 <i>poemo</i> (give 1)	
7 <i>poevel</i> (give 2)	
8 <i>poek'un</i> (give 3)	

Table (2) (*cont.*)

Cardinal numbers	Ordinal numbers
9 <i>poefar</i> (give 4)	
10 <i>s'ar</i> (< <i>s'a</i> 'hand')	
11 <i>s'ar k'a goeme</i> (10 plus 1)	
...	
20 <i>ya gurum</i> ('catch person')	
21 <i>ya gurum shik'a goeme</i> (20 plus 1)	
...	
30 <i>ya gurum shik'a s'ar</i> (20 plus 10)	
40 <i>ya gurum vel</i> (20 twice)	
50 <i>ya gurum vel shik'a s'ar</i> (20 twice plus 10)	
...	

Goemai makes use of a base 20 system,<sup>3</sup> while the numerals below twenty are based on five (from 6 to 9) or ten (from 11 to 19). However, speakers usually resort to Hausa loans for the numerals above twenty.

Finally, Goemai has an associative plural morpheme *gwen* that occurs preceding the head noun (and following the quantifiers), and which refers to one person and all people associated with him/her, e.g.:

- (4) **gwen** Naan yok n-zam  
**PL** God return(pl) LOC-field

'God **and his people** returned from the farm' [GOELONG]

It is extended to cover objects of the same kind, e.g., several calabashes as in example (1a) above. Note, however, that it cannot be used to refer to entities of different kinds. In fact, Goemai does not have any general and obligatory plural morpheme.<sup>4</sup>

In most cases, a noun phrase is left unmarked for number. There are several loci for marking number, both in the noun phrase and in the clause: quantifiers, associative plural *gwen*, numerals, modifying morphology (cf. 2.5), classifying elements (cf. 2.3), lexical form of some nouns (cf. 2.4) and lexical form of some verbs (cf. 3.1.2). But none of them triggers the use of the plural morpheme *gwen*. Note

<sup>3</sup> A vigesimal system is not very common, either in Chadic or on the Plateau; it is more common in Jukun and the old Kororofa empire of which Goemai was a part (Gerhardt 1987, Ibrizimow 1988).

<sup>4</sup> This is strikingly different from many Chadic languages, which have an elaborate system of nominal plural marking (e.g., Frajzyngier 1977, Newman 1990). It is more common on the Plateau, where languages have developed one general plural morpheme that occurs (obligatorily) within the noun phrase (Gerhardt and Wolff 1977).

also that this is in line with a general phenomenon in the language: number tends to be marked only once. Compare the following two examples:

- (5a) Takarda **goe**-n-d'e-nnoe-hoe.  
 paper **NOMZ(sg)**-ADVZ-Cl:exist-DEM.PROX-exactly  
 'This very existing paper.' [COLOR\_AS/LL\_15]
- (5b) **la** takarda n-d'e-nnoe-hoe.  
**little(sg)** paper ADVZ-Cl:exist-DEM.PROX-exactly  
 'this very existing small paper.' [COLOR\_AS/LL\_16]

The demonstrative form can optionally contain the prefixes *goe-* (sg) and *moe-* (pl) (cf. 2.3). Their presence coincides with the absence of number marking elsewhere in the noun phrase or the clause: it is thus present in example (5a), but absent in (5b), where number is already marked in the quantifier *la* 'little (sg)'. Number marking in the noun phrase is thus not an agreement phenomenon, but actually adds semantic information.

A set of qualifying modifiers occurs following the head noun. These are first the set of possessive modifiers. Today, these are free forms, but there are some indications that Goemai originally made use of possessive suffixes bound to the head noun. Remnants of this older pattern are found in the lexemes 'body' and 'self/own'. All three forms are given in the table below.

Table (3): Possessive modifiers

	Possessive	'Body'	'Self/own'
1Sg	<i>noe</i>	<i>san</i>	<i>mmaan</i>
2Sgm	<i>goe</i>	<i>sak</i>	<i>mmak</i>
2Sgf	<i>yoe</i>	<i>shik</i>	<i>mmik ~ mmit</i>
3Sg	<i>muk</i>	<i>sek (muk)</i>	<i>mmuk</i>
1Pl	<i>men</i>	<i>sen</i>	<i>mnen</i>
2Pl	<i>gwen</i>	<i>suk</i>	<i>mmuk (&lt; *mmuk)</i>
3Pl	<i>mûep</i>	<i>*shak</i>	<i>(mmûep)</i>
Sgm.LogA	<i>ji</i>	<i>sûûn</i>	<i>mmûûn</i>
Sgf.LogA	<i>doe</i>	<i>sat</i>	<i>mmat</i>
Pl.LogA	<i>d'wen</i>	<i>sut</i>	<i>(mmûep)</i>
Sgm.LogB	<i>gwa</i>	<i>(sek gwa)</i>	<i>(mmak)</i>
Sgf.LogB	<i>pa</i>	<i>(sek pa)</i>	<i>(mmik ~ mmit)</i>
Pl.LogB	<i>nwa</i>	<i>(sek nwa)</i>	<i>(mmûep)</i>

The lexemes for 'body' and 'own/self' apparently go back to the proto forms \*s- and \*m- respectively, accompanied by old possessive suffixes. These are formally similar to (possessive) pronouns found in other Chadic languages (Blažek 1995, Dolgopolsky 1988, Kraft 1974). Today, however, they are only found in these two lexemes, both of which are mainly used in grammatical contexts: 'body' as the reflexive pronoun, and 'self/own' as the independent possessive pronoun. In the latter case, the prefix *m-* probably goes back to an adverbializing prefix *N-* (cf. 4.1).

The present-day possessive modifiers immediately follow the head noun. And the order noun-possessor mirrors that of genitive constructions, where two nouns are juxtaposed without any formal markings, e.g.:<sup>5</sup>

(6a) mûaan      **lu**      **muk**  
 go(sg)      **house**      **3Sg.Poss**  
 'he went to **his house**' [ABST\_SM]

(6b) mûaan      **lu**      **la**      hok.  
 go(sg)      **house**      **child(sg)**      DEF  
 'he went to the/a **house of the child.**' [LA]

Note that genitive constructions constitute a complex head of a single noun phrase. There is some independence of the two nouns in that they can occur with separate quantifiers and associative plural morphemes. However, all other modifiers and all determiners can occur only once, modifying the possessor.

Goemai does not have a form class of adjectives. However, it has a nominalizing mechanism by which it turns property verbs into modifiers. These derived forms are used both as modifiers and as heads (cf. 2.5).

In addition, a separate mechanism exists that nominalizes clauses and thereby allows them to occur within the noun phrase. Either, only a nominalizing prefix *goe* 'NOMZ' is added, in which case the original clause structure is preserved and all arguments are expressed (7a). Or the adverbializing prefix *N-* 'ADVZ' is added, in which case the direct object is not expressed and a passive-like reading develops (7b) (cf. 3.1.3).

<sup>5</sup> Only few Chadic languages seem to form the genitive through juxtaposition of nouns (Schuh 1990).



- (7a) Shim            **goe-d'an**            **muk**            hok.  
yam                **NOMZ-boil**            **3Sg.Poss**            DEF

'The yam **that she boiled.**' (lit. 'of her boiling')<sup>6</sup> [LIGYA, LL, 12/10/00]

- (7b) Fûan            lap            shim            **goe-n-d'an.**  
rabbit            receive      yam            **NOMZ-ADVZ-boil**

'The rabbit received the yam **that was boiled.**' (lit. 'of being in a boiled condition') [LIGYA]

Such nominalized clauses follow all modifiers and precede all determiners, e.g. the determiner *hok* 'definite' in the example below (cf. also example 1d above). As such, they function in a way similar to complement clauses, which provide another means of 'relativizing' a clause. However, the latter follow all noun phrase elements (as the clause introduced by the complementizer *goepe* in the example below). In fact, they occur in the syntactic adjunct position, following the boundary morphemes (cf. 3.1.1).

- (7c) p'en            bi (. . .) **goe-t'o**            **d'i**            hok /  
remove(sg)      thing      **NOMZ-lie(sg)**      **LOC.ANAPH**      DEF
- goepe*    *ni*    *nyet*    *nd'ûûn*    *boega.*  
*COMP*   *3Sg*   *leave*   *INSIDE*   *well*

'he removed the thing (. . .) **that lay there,** *which he had left in the well.*' [MOESHAR]

It is not possible to have two nominalized clauses co-occurring in a noun phrase. But it is possible to have a nominalized clause followed by a complement clause as in the above example.

### 2.3 *Determiners in the noun phrase*

A bare noun phrase can be interpreted as being either definite or indefinite, but definiteness can be marked explicitly. Goemai has three sets of determiners dedicated to this purpose: the demonstratives, the locative anaphor and the definite article.

<sup>6</sup> Note that if the head noun does not correspond to the subject of the nominalized clause, this subject follows the verb in possessive form, e.g., *muk* '3Sg.Poss'. In this case, it refers to the subject ('her boiling') and not to the head noun (\*'her yam').



Finally, the definite article *hok* explicitly marks a referent as being identifiable from previous discourse. When referents are mentioned for the first time in discourse, they are marked by either a bare noun phrase or by a quantifier (*ndoe* 'some', *nde* 'one/other') (in the non-spatial domain), or a demonstrative form (in the spatial domain). Subsequent reference then makes use of the definite article.

- (10) Sai **ndoe kaam** t'a nd'ûûn (...) lu k'us mûep.  
 then **some festival** fall(sg) INSIDE house near 3Pl.Poss

'Then **some festival** came close to their town.

(...) mûep goe mûen goe pe **kaam hok**.  
 (...) 3Pl OBL go(pl) SPACE place **festival DEF**

(...) they should go to the place of **the festival**.

(...) mûep yin d'u wul a **kaam hok**.  
 (...) 3Pl SAY Pl.LogA arrive FOC **festival DEF**

'(...) they<sub>1</sub> said that they<sub>1</sub> had arrived for **the festival**' [LIGYA]

The three sets of determiners thus have clearly different functions, which explains their co-occurrence possibilities. This phenomenon is cross-linguistically rare as languages tend to unite different functions such as exophoric use, anaphor and previous mention within a single morpheme or within a single form class (Diessel 1999, Lyons 1977). Similar patterns, however, are attested in the closely related language Mupun (Frajzyngier 1993).

#### 2.4 *Nominal subclasses*

Nominals function as heads of noun phrases. This comprises the subclasses of numerals (cf. 2.2), quantifiers (cf. 2.2), pronouns and common nouns. Nouns and pronouns differ from numerals and quantifiers in that they cannot occur as modifiers. There is no formal category that would be marked directly on the noun: nouns do not differentiate number, gender, or noun class. However, there are remnants of old non-productive number and class marking morphology.

First of all, the following five nouns are marked for number in that they have suppletive singular/plural forms:

<i>singular</i>	<i>plural</i>	<i>gloss</i>
<i>k'a</i>	<i>k'ek</i>	'head'
<i>la</i>	<i>jap</i>	'child, little'
<i>mat</i>	<i>sh'arap</i>	'woman, female'
<i>mis</i>	<i>daas</i>	'man, male'
<i>reep</i>	<i>zarap</i>	'girl'

Note that two of the plural forms, *sh'arap* 'women' and *zarap* 'girls', contain a -VrV- sequence. This is a common formative for deriving verbal plurals (cf. 3.1.2), both in Goemai and in Plateau languages in general (Gerhardt and Wolff 1977). In addition, Goemai has a large number of nouns that formally exhibit this sequence, and that semantically refer to collectives, e.g.:

<i>gurum</i>	'person/people'	<i>arang</i>	'ashes'
<i>shyarap</i>	'fish'	<i>oerem</i>	'beans'

It is very likely that these are remnants of an older productive pattern of plural formation.

In addition, a process is taking place whereby the overt number marking associated with derived nouns (cf. 2.5) is gradually extended to non-derived nouns. In the example below, a form *gurum* 'person' is marked with the 'nominalizing' plural morpheme *moe-*, which does not have any derivational function here: the unmarked form is already a noun, and could occur in the same slot as the marked form.

- (11) **moe-gurum**      muk /    mûep    mûarap    dip.  
 NOMZ(pl)-person    3Sg.Poss    3Pl      die(pl)    all  
 'his **people**, they have all died.' [WITCH2]

It is conceivable that such a process may eventually develop into the overt morphological marking of number on the noun.

Nouns are generally neutral with respect to gender. The only exceptions are the following kinship terms:

<i>mat</i>	'woman, wife, female'	<i>mis</i>	'man, husband, male'
<i>reep</i>	'girl, daughter'	<i>yam</i>	'son'
<i>nûûn</i>	'mother'	<i>nda</i>	'father'

With all other nouns referring to humans, gender can be differentiated through adding the modifiers 'male' or 'female', which are derived from the nouns for 'man' and 'woman' respectively, e.g.:

- (12) Mûep yong jap            **moe-daas.**  
 3Pl call children(pl)       **NOMZ(pl)-men(pl)**

'They call the **male** children.' [LU\_LL]

Unlike in many Chadic languages, gender is not marked in the 3rd person pronoun (cf. below). Pronominal reference thus does not differentiate gender either. However, gender is marked in the 2nd person pronoun.

Finally, nouns referring to small animals, birds, and kinship relations often contain an initial prenasalized consonant, e.g.:

<i>nf'et</i> 'mosquito'	<i>ngum</i> 'insects'
<i>nkya</i> 'vulture'	<i>ndeng</i> 'bird species'
<i>nda</i> 'father'	<i>nsh'ik</i> 'grandson'

This seems to be an areal feature in Plateau languages, which can be traced back to an old Niger-Congo noun class prefix (Frajzyngier and Koops 1989).

Pronouns are treated like nouns in that they can head a noun phrase and can occur with all modifiers, e.g.:

- (13) (...) de goe mûaan goe p'en    **ni nnoe.**  
 (...) PUR go(sg) SEQ remove(sg) **3Sg LOC.ANAPH**

'(He wanted) to go and remove **this/it.**' [LIIT]

They occur in all syntactic slots where a noun can occur: as independent pronouns (in a non-verbal clause, following a preposition), as subjects and as direct objects. The following pronominal categories are distinguished:

Table (5): The pronouns

	Independent/object	Subject
1Sg	<i>hen</i>	<i>hen ~ n</i>
2Sgm	<i>goe</i>	=
2Sgf	<i>yoe ~ yi</i>	=
3Sg	<i>ni</i>	=
1Pl	<i>men</i>	<i>moe</i>
2Pl	<i>gwen</i>	<i>gu</i>
3Pl	<i>mûep</i>	=
Sgm.LogA	<i>ji</i>	=

Table (5) (*cont.*)

	Independent/object	Subject
Sgf.LogA	<i>doe</i>	<i>doe</i>
Pl.LogA	<i>d'wen</i>	<i>d'u</i>
Sgm.LogB	<i>gwa</i>	=
Sgf.LogB	<i>pa</i>	=
Pl.LogB	<i>nwa</i>	=

As can be seen from the table above, the forms are nearly always identical across syntactic contexts. And although there are tonal differences, these are not restricted to the pronouns but are a property of the syntactic slot.

Some specific features of the pronoun system are of general interest. First, Goemai distinguishes gender in the 2nd person singular only. This differs from other Chadic languages, where gender tends to be differentiated in both the 2nd and the 3rd person singular (Blažek 1995, Dolgopolsky 1988, Kraft 1974). And cross-linguistically, languages that have a gender distinction in the 2nd person, generally also have it in the 3rd person (Claudi 1985).

Secondly, Goemai has two sets of logophoric pronouns. One set specifies co-reference with the speaker (set A), the other with the addressee (set B).<sup>7</sup>

- (14) Yin / to / (...) **ji**            goe    ndoe    ûen  
 SAY    okay            **Sgm.LogA**    COM    some    medicine  
 goepe    t'ong    **ji**            poe    *pa*    ba.  
 COMP    IRR        **Sgm.LogA**    give    *Sgf.LogB*    NEG

'(He<sub>1</sub> said to her<sub>2</sub>) that, okay, (...), he<sub>1</sub> does not have any medicine that he<sub>1</sub> could give her<sub>2</sub>.' [MATWO]

The logophoric pronouns are used in clauses introduced by speech act verbs and/or the complementizer *yin* 'SAY'. Their use reflects not only elements of indirect speech, but also of direct speech (such as interjections and the use of absolute tenses that were true at the

<sup>7</sup> The terminology 'set A' (co-reference with speaker) and 'set B' (co-reference with addressee) is borrowed from Frajzyngier (1993). Similar logophoric systems are found in some other Chadic languages, including the closely related languages Mupun and Mwaghavul. See Frajzyngier (1985a, 1985b, 1993) for details.

time of the direct speech, but not at the time of the reported speech). In addition, the gender distinction in the logophoric pronouns of set A mirrors that of the 2nd person pronouns, but not the 3rd person pronouns.

The main function of the logophorics is reference tracking, and as such they can occur outside the speech act context to indicate co-reference with the subject. This use is restricted to possessive forms, though. Compare the following example, where the possessive uses the logophoric form, whereas the direct object uses the non-logophoric form.

- (15) goe-k'oon                      n-k'a                      **ji** /  
 NOMZ-face\_down(sg)    LOC-head(sg)            **Sgm.LogA.Poss**
- t'ong    goe            wakaam    goepe    liit    t'ong t'an    ni.  
 sit(sg)    SPACE    road            COMP    lion    IRR    pursue 3Sg
- 'after covering **his**<sub>1</sub> head, (he)<sub>1</sub> sat on the road where the lion<sub>2</sub> would pursue *him*<sub>1</sub>.' [LIIT]

Thirdly, the pronouns can be divided into two sets depending on their position relative to the verbs in a serial construction:

Set 1	Set 2
1Sg	2Sg
3Sg	1Pl
3Pl	2Pl
LogB	LogA
Nouns	

In all serial constructions, pronouns of set 1 precede the first verb (16a), while those of set 2 follow the first and all subsequent verbs, except for the last (16b). The latter can additionally precede the first verb to focus on the pronoun. In this case, it appears either in its independent or in its subject form (16c).

- (16a) **Mûep** buk            d'yam            t'ong            pil            sek            mûep            yi.  
**3Pl**    return(pl)    stand(pl)    PROGR    watch    body    3Pl.Poss    PROGR
- 'They returned (and) stood watching each other.' [STAGE\_AS\_46]
- (16b) Buk            **gu** t'wot            **gu** shin bi            goe-d'emem            n-ni.  
 return(pl)    **2Pl** sit(pl)    **2Pl** do    thing    NOMZ(sg)-good    COM-3Sg
- 'You return (and) you sit (and) you do something good with it.'  
 [YOUTH]

- (16c) Goemai / **gu** *buk*      **gu** *t'wot* / gu rang nye yi.  
 Goemai 2PI *return(pl)* 2PI *sit(pl)* 2Pl think word SUB  
 'Goemai, you return (and) you sit, so that you think (about) it.'  
 [YOUTH]

It is possible that pronouns of set 1 are, in fact, nominal forms. In terms of their syntactic position, they behave like nouns. And there is some evidence that the logophoric B pronouns derive from nouns (cf. Frajzyngier 1993: 118 for an analysis of the cognate forms in Mupun).

Nouns, pronouns, numerals and quantifiers are the only elements that occur as non-derived nominals. In addition, the demonstratives and the nominalized verbs can occur both as modifiers and as head nouns. However, both contain nominalizing morphology, and thus have to be analyzed as derived forms (cf. 2.5).

### 2.5 *Derived nominals*

Goemai has a mechanism that nominalizes property verbs. The approximately 50 property verbs are a distinct sub-class of state-change verbs that encode the inchoative concept of entering a state. They form a semantically coherent group that encodes adjectival concepts such as dimension (*f'yer* 'become big'), physical property (*shyoon* 'become heavy'), color (*b'ang* 'become red') and age (*gya* 'become old') (following the semantic types laid out in Dixon 1982), e.g.:

- (17a) Hangoed'e d'e t'ong      **b'ang**      yi.  
 water      exist      PROGR      **become\_red**      PROGR  
 'The water is **getting red**.' [DPP\_LL\_83] (said while water was in the process of turning red)
- (17b) Mûep **nan**      t'ei      ba.  
 3Pl **become\_big(pl)**      already      NEG  
 Mûep la      **nan** (. . .) /      dang hok      **b'ang**.  
 3Pl COND **become\_big(pl)**      tail      DEF      **become\_red**  
 'They (= fish species) have not yet **grown big**. When/After they have **grown big** (. . .), the tails will have **become red**.' [DIALECT]

Formally, property verbs are the only state-change verbs that can be nominalized through the addition of the prefixes *goe-* (sg) and *moe-* (pl), e.g.:







The distribution between the marked and the unmarked forms within the noun phrase correlates partly with another function of the nominalizing morphology: the marking of number. In the case of determiners, the presence of number marking elsewhere correlates with the absence of the nominalizing prefix (cf. examples 5a/b above). Cf. also example (11) above, where the 'nominalizing' prefix is used to overtly mark number in a noun. It is possible that these prefixes will eventually turn into agreement markers that obligatorily occur in every modifier within the noun phrase and mark (a) its modifying function and (b) its number.

In addition to the nominalizing prefixes *goe-* (sg) and *moe-* (pl), there are some other ways of deriving nominals from verbs. First, some verbs occur with cognate objects. These act like nouns and can take on all modifiers. However, they can only occur in direct object position, following their respective verbs (cf. example 24b below). And secondly, a prefix *nye-* 'word/kind' derives abstract nouns from mental verbs, e.g.:

<b>Verb</b>	<b>Nominalized verb</b>
<i>rang</i> 'think'	<i>nye-rang</i> 'thought'
<i>tal</i> 'ask'	<i>nye-tal</i> 'question'
<i>k'a</i> 'doubt'	<i>nye-k'a</i> 'doubt'

### 3 *Verbs and verbal clauses*

Verbs are identified by their ability to occur as predicates of verbal clauses. As such they follow pronominals of the subject pronoun set (cf. table 5 above), and they occur with specific TAM morphemes whose occurrence is restricted to verbal clauses (cf. 3.2).

The structure of a simple verbal clause maintains SVO word order. The position of a subject pronoun relative to a TAM morpheme depends on (a) the set the pronoun belongs to (cf. 2.4), and (b) whether or not the TAM morpheme grammaticalized from a verb or a preposition (cf. 3.2). Note that there are no bound pronouns nor are there any TAM inflections; these categories are all encoded in free forms. Generally, verbs do not carry any inflectional or derivational morphology. However, a subgroup of verbs mark number on the verb stem (cf. 3.1).

### 3.1 *Transitivity*

In Goemai, core arguments of a verb can be omitted under certain conditions. And since these are not cross-referenced on the verb, determining the basic valence of a verb is far from trivial. However, there are a number of criteria that help to determine it. The evidence comes from the syntactic position of noun phrases (cf. 3.1.1), from number marking on the verb (cf. 3.1.2), and from nominalization (cf. 3.1.3).

#### 3.1.1 *Syntactic position*

A syntactic criterion helps to determine whether the element following a verb is a direct object or an adjunct. Certain boundary morphemes, such as the morpheme *yi*, only allow direct objects to precede them (22a), while adjuncts follow (22b and 22c).

- (22a) Kan    goe-bi    t'ong    b'em    **yil**    *yi*.  
 incline like    IRR    touch    **ground**    *SUB*  
 'It is inclined as if it would touch the ground.' [DIS\_NK/SM\_15.4]
- (22b) de        hen    sam        *yi*        **n-yil**.  
 COMP    1Sg    descend    *SUB*        **LOC-ground**  
 'so that I descend onto the ground.' [ANIMAL1]
- (22c) de        *yi*        ru        *yi*        **lu**        **men**.  
 COMP    2Sgf    enter(sg)    *SUB*        **house**    **IPl.Poss**  
 'so that you enter our house/home.' [LU\_SM]

This criterion is especially relevant in the case of unmarked adjuncts. Since there is no formal marking to indicate their syntactic status (neither on the verb nor on the adjunct), they could be mistaken for direct objects, and the verb could be mistaken for a transitive verb. In the last example above, the phrase *lu men* 'our house' could equally well be a direct object following a transitive verb *ru* 'enter'. However, its syntactic position shows its adjunct status (comparable to 'home' in English), thus allowing for the possibility that *ru* 'enter' is an intransitive verb.

#### 3.1.2 *Number marking*

A subset of verbs have different singular and plural forms. The following formatives are attested:

## Formative

## Example

suppletion	<i>f'yer</i> > <i>nan</i> 'become big'
-a-, - <sup>w</sup> a-, - <sup>y</sup> a-	<i>f'yer</i> > <i>f'yar</i> 'become big/important'
-ara-, -ar	<i>taɸ</i> > <i>tarap</i> 'snap'
-aba-	<i>k'oön</i> > <i>k'aban</i> 'face down'
-a-ap ( <i>t</i> > <i>r</i> )	<i>muut</i> > <i>mûarap</i> 'die'
-e-	<i>mûaan</i> > <i>mûen</i> 'go'
-oere-p, -oere-	<i>gép</i> > <i>goerep</i> 'cut'
-oe-eng	<i>d'al</i> > <i>d'oeleng</i> 'swallow'
-wo	<i>ru</i> > <i>r(u)wo</i> 'enter'
-t	<i>twam</i> > <i>twat</i> 'cause standing'

Many other Chadic languages mark number overtly on the verb stem; and some of the morphology employed in Goemai, especially the infix *a*, is very likely to be of Chadic origin (Frajzyngier 1977, Newman 1990). Other formatives, e.g. the *-r-* infix, or the *-ng* suffix, are common in both Chadic and Niger-Congo languages spoken on the Jos Plateau. These can be traced back to Niger-Congo verbal extensions (Gerhardt and Wolff 1977). The form a plural stem would take is not predictable on the basis of its phonological form. And, in fact, the largest group are the suppletive forms.

Around 10% of the collected verb lexicon is marked for number. And although number marking is to be found in almost every semantic domain, it occurs predominantly with verbs of posture, motion, caused motion, and destruction. While it is totally absent with verbs of cognition, perception, speaking, and consumption.

Number marking correlates with the basic valence of the verb. An intransitive verb agrees with the subject (23a), and a transitive verb with the direct object (23b). This pattern holds even when the direct object is not overtly expressed (23c).

(23a) Kafin *ni* **muut** dai (. . .).  
before 3Sg **die(sg)** indeed

*Jap muk* (. . .) d'e t'ong **mûarap** yi.  
children(pl) 3Pl.Poss exist PROGR **die(pl)** PROGR

'Before he died (. . .). His children are dying.' [TIME\_LL]

(23b) Ima (. . .) **tu** *goeme*. (. . .) Ni **two** *mûep* dip.  
Ima **kill(sg)** one 3Sg **kill(pl)** 3Pl all

'Ima (. . .) killed one. (. . .) He killed them, all (of them).' [WITCH2]

- (23c) Mûep    **two**        t'ong    **tar**        **kwan**.  
 3Pl        **kill(pl)**    IRR        **tear(pl)**    **throw\_away(pl)**

'They killed (them), (and) would tear (them) apart (and) throw (them) away.' [LIIT]

This is a very typical pattern in Chadic languages, for which Newman (1990) coined the term 'pluractionals'. Different from other Chadic languages, though, number marking is not used for encoding a plural action (e.g., iterative, frequentative).

### 3.1.3 *Nominalization*

While number agreement reliably distinguishes between transitive and intransitive verbs, this criterion can only be applied to those verbs that mark number. It is not available for the vast majority of verbs, though. This is especially problematic since the direct object can be omitted.<sup>9</sup> The general condition for any omission is that the argument is recoverable from context and that the verb action is emphasized (24a). Note that semantic recoverability is not enough to warrant the omission of an argument. E.g., in the case of unspecified direct objects or generic actions, the object has to occur in the form of a cognate object (24b).

- (24a) Ya        **ndûûsnaan** / ya        at        de        goe    tu        yi.  
 catch(sg) **insect**        catch(sg) bite(sg) COMP OBL kill(sg) SUB

'He caught the **insect**, caught (**it**) (and) bit (**it**) so that he would kill (**it**).' [ANIMAL5]

- (24b) Mûep    d'e        t'ong        s'oe    **s'oe**        yi.  
 3Pl        exist    PROGR    eat        **eating**    PROGR

'They are *eating* **food**.' [FUAN2]

<sup>9</sup> Some subject arguments can be omitted, too. Generally, the 3<sup>rd</sup> singular subject pronoun *ni* is omitted if it is recoverable from context. If it is realized, it invites the pragmatic implicature of non-co-reference with an accessible antecedent (an implicature that could be cancelled, though).

(i) Liit mûaan    de        **ni**        goe    tal        ni        yi.  
 lion go(sg)    COMP **3Sg** OBL greet    3Sg    SUB

'The lion went so that **he** (preferred interpretation: not the lion) should greet him.'  
 (LL, 15/2/00)

The 3<sup>rd</sup> plural subject pronoun *mûep* can optionally be omitted if the subject slot is already filled by a noun.

While a direct object can thus be omitted in a verbal clause, it cannot be omitted if this clause is nominalized (25a). There, it has to occur either as the head noun, whereby the subject is then encoded as a possessive modifier (25b), or as the direct object within the nominalized clause (25c).

(25a) \* mat            goe-tu  
           woman(sg)    NOMZ-kill(sg)  
           \* 'the woman who killed/was killed' [LL, 16/2/00]

(25b) mat            goe-tu            **muk**  
           woman(sg)    NOMZ-kill(sg)    **3Sg.Poss**  
           'the woman whom he killed' [LL, 16/2/00]

(25c) mat            goe-tu            **ni**  
           woman(sg)    NOMZ-kill(sg)    **3Sg**  
           'the woman who killed him' [LL, 16/2/00]

It is only possible to omit the direct object of a nominalized transitive clause under the condition that the verb is adverbialized first (cf. 4.1), e.g.:

(26) Twen    hok        a            **goe-n-fum.**  
       cloth    DEF        FOC        **NOMZ-ADVZ-fold**  
       'The cloth is a folded (one).' [DIS\_AS/LL\_13.3]

Intransitive verbs could not occur in the above example. Nominalization thus helps to determine the basic valence of a verb: the direct object of transitive verbs obligatorily occurs in the nominalized form—unless adverbialization has taken place first.

Applying these criteria (syntactic position, number marking, nominalization), all verbs can be divided into one of three classes: intransitive verbs, transitive verbs, and labile verbs.<sup>10</sup> The latter occur both in transitive and in intransitive constructions, whereby the less active participant fills the subject slot of the intransitive (27a) and the direct object slot of the transitive construction (27b). The number agree-

<sup>10</sup> Many of the labile verbs in Goemai correspond to verbs that undergo the causative alternation in English. These are often assumed to be basically intransitive verbs, describing an internally controlled action, which under certain circumstances can be externally controlled (cf. e.g. Levin 1993). In the case of Goemai, however, I do not have any language-internal evidence that would suggest that labile verbs are either basically transitive or basically intransitive.

ment is always with the less active participant, and clausal nominalization shows both the transitive and the intransitive pattern.

(27a) D'a      goe-leng                      n-s'a      gurum (...)    **p'yaram.**  
calabash    NOMZ-hang/move(pl)    LOC-hand person      **break(pl)**  
'The calabashes that hung/were in the hand of the person (...) **broke.**'  
[STAGE\_AS\_65]

(27b) Goelong t'ong      **p'yaram**      wang (...)      dip.  
Goelong    IRR      **break(pl)**      pot              all  
'Goelong would **break** the pots (...), all (of them).' [GOELONG]

Subdivisions among these three transitivity classes are possible on the basis of their participation in constructional alternations. Their discussion goes beyond the scope of this sketch grammar, but cf. Hellwig (in prep. a) for further details.

### 3.1.4 Adding and removing arguments

Goemai has no derivational morphology available that would increase or decrease the number of arguments in a clause. Many Chadic languages, by contrast, use verbal extensions for this purpose (Frajzyngier 1985c, Newman 1977b).<sup>11</sup> This phenomenon is probably responsible for the large number of suppletive intransitive and transitive verb stems, which bear no morphological relationship to each other, e.g.:

#### *Intransitive*

t'ong (sg), t'wot (pl) 'sit'  
paap (sg), pap (pl) 'hide'  
yool (sg), yūūl (pl) 'rise'  
muut (sg), mūarap (pl) 'die'  
fjal 'boil'

#### *Transitive*

d'u (sg), d'war (pl) 'cause sitting'  
s'ok (sg), s'wak (pl) 'hide'  
eep (sg), aap (pl) 'raise'  
tu (sg), two (pl) 'kill'  
d'an 'boil'

There are, however, syntactic possibilities for increasing the number of arguments in a clause: an applicative construction adds an applied object, and a ditransitive construction adds a second object. Both

<sup>11</sup> Goemai shows only remnants of a morpheme *n-*, which might have been used to form transitive caused motion verbs from intransitive motion verbs:

<u>intransitive</u>	<u>transitive</u>
ru (sg), rwo (pl) 'enter'	ruun (sg), rwan (pl) 'insert'
p'et (sg), p'uat (pl) 'exit'	p'en (sg), p'uan (pl) 'remove'



constructions add a core argument, which has the syntactic status of a direct object. As such, it occurs preceding boundary morpheme such as *yi* (cf. 3.1.1). Example (28a) below illustrates the applicative construction, and example (28b) the ditransitive construction.

- (28a) *de*      *hen*    *fʔyer*                      **ni**    *yi*.  
 COMP 1Sg    *become\_big(sg)*    **3Sg**    SUB

'so that I have grown big **in relation to him.**' (i.e., I am bigger than he is) [LL, 14/11/00, YOUTH]

- (28b) S'oot (...) d'e    t'ong    *poē*    **men**    **wala**    *yi*.  
 witchcraft exist    PROGR    *give*    **1PI**    **trouble**    PROGR

'Witchcraft (...) is giving **us trouble.**' [WITCH1]

There is no derivational morphology that would overtly mark the applicative or the ditransitive on the verb. It is the construction alone that licenses the addition of an applied direct object or of a second object.<sup>12</sup> Note that the basic valence of the verb does not change when it occurs in one of these constructions. This point can be illustrated with respect to number agreement and nominalization. Verbs that enter the applicative construction are intransitive—and number marking on the verb agrees with the subject as in example (28c) below (compare this to the number marking of transitive verbs such as in example 23b above). And verbs that enter the ditransitive construction are transitive—in cases of nominalization, only the beneficiary is obligatory, but not necessarily the theme (28d).

- (28c) **Hen**    *fʔyer*                      *mûep*    *toe*.  
**1Sg**    *become\_big(sg)*    3Pl    EMPH

'I have grown big in relation to them.' [YOUTH]

- (28d) t'ong    d'u      *kat*    *gurum*    *goē-poē*      **d'wen/\*shita**.  
 IRR    Pl.LogA    find    person    NOMZ-*give*    Pl.LogA/\*pepper

'(They<sub>1</sub> said) they<sub>1</sub> would find a person who gives **to them<sub>1</sub>** (beneficiary)/\*pepper (theme).' [LL, 14/11/00, LIGYA]

In the cases above, the syntactic criterion thus conflicts with the number marking and the nominalization pattern: the added argu-

<sup>12</sup> I follow the construction grammar approach laid out, among others, in Goldberg (1995). It assumes that, under specific conditions, constructions can map their argument structure and semantic properties onto elements that enter them.

ment has the syntactic status of a direct object, but the verbs remain basically intransitive and transitive respectively. This conflict only arises through a derivational process, in which a construction (applicative, ditransitive) adds an additional syntactic core argument, but which does not change the valence of the verb.

There are other possibilities to express additional participants: serialization and prepositions. However, these do not add syntactic arguments. Goemai is a serializing language, and this mechanism can be employed to introduce a recipient, which is expressed as the object of the verb *poe* 'give' (29a). By contrast, the benefactive argument is marked by the preposition *N-* (29b).

- (29a) Ni s'eet shim **poe** hen.  
3Sg trade(sg) yam **give** 1Sg

'He bought yam for me.' (and gave it to me) [LL, 17/2/00]

- (29b) Ni s'eet shim **n-hen**.  
3Sg trade(sg) yam **BEN-1Sg**

'He bought yam for me.' (for my benefit, e.g., because I asked him to) [LL, 17/2/00]

This type of serialization differs from other types found in the language in that the verbs form a tighter unit. This can be shown with respect to negation, where the negation morpheme negates the whole event. In addition, the verb *poe* 'give' and the recipient-morpheme *poe* can co-occur, which points to them having different functions. Moreover, *poe* can mark the 'recipient', i.e., the addressee, of speech act verbs. There is thus evidence for semantic bleaching and some grammaticalization of this construction.

Prepositions not only mark the benefactive, but also several other roles. These go back to the two locative prepositions, *goe* 'SPACE' and *N-* 'LOC' (cf. Hellwig, in prep. b). They have comitative and instrumental uses, whereby *N-* introduces a pronoun, and *goe-* a noun or an animate companion, e.g.:

- (30) reep nnoe (...) ba **goe** s'a muk /  
girl(sg) LOC.ANAPH return(sg) **COM** hand 3Sg.Poss  
het yit noe **n-ni**.  
hit face 1Sg.Poss **COM-3Sg**

'this girl (...) moved **with** her hand, (and) hit my face **with** it.'  
[WITCH1]

The benefactive preposition (cf. example 29b above) does not show the same alternation between *N-* and *goe*, but invariably assumes the form *N-*, suggesting a different grammaticalization path. The same alternation is found again in the marking of the theme role, though. A sub-set of transitive verbs (e.g., *s'eet* 'trade', *shye* 'teach/learn' or *nin* 'point/show') can either encode the theme role as a direct object or the benefactive role as an applied direct object. In the first case, the verb action is interpreted as being directed towards the theme (with the interpretation 'buy', 'learn', or 'point'), and in the second case, as towards the beneficiary ('sell', 'teach', or 'show'). In the later case, the theme role is encoded with the prepositions *goe* (plus noun) or *N-* (plus pronoun), e.g.:

- (31) Ni s'eet men **goe** *shim* *hok*.  
 3Sg trade(sg) 1PITH *yam* DEF

'He sold us the yam.' (lit. 'he traded in relation to us with the yam')  
 [LL, 15/12/99]

Finally, an associative reading is conveyed with the help of the conjunction *ndoe* 'and', which occurs in the same slot as the prepositions. It differs semantically from the comitative preposition, though, in that the participant is more involved in the action, taking an active part in it, e.g.:

- (32) K'ur yool **ndoe** *mûep*.  
 tortoise rise(sg) CONJ 3Pl

'The tortoise rose together with them.' [KUR]

The same morpheme is used with the verb *k'wal* 'talk' to introduce the addressee of the speech act. In fact, the addressee can occur in the syntactic direct object position, conveying the sense of 'tell/instruct s.o.' (33a). In the sense of 'talk to s.o.' it occurs in the adjunct position (33b).

- (33a) A bi mmoe weel nwa toe poenoe?  
 FOC thing what disturb Pl.LogB EMPH thus  
 Nwa k'wal k'wal **ndoe** **ni** *yi*.  
 Pl.LogB talk talking CONJ 3Sg SUB

'What is it that worries them like this? They should tell him.' [LIIT]

- (33b) Mûep d'e t'ong k'wal k'wal yi ndoe sh'ak.  
 3Pl exist PROGR talk talking PROGR CONJ each\_other  
 'They are talking to each other.' [STAGE\_AS\_22]

This conjunction thus seems to be on its way to grammaticalize into a verbal extension, assigning syntactic direct object status to the element following it.

Goemai does not have corresponding mechanisms dedicated to decreasing the number of arguments. Recall, however, that nominalization and adverbialization convey a passive-like reading to transitive verbs (cf. 3.1.3, 4.1). In addition, there is an impersonal passive construction, which transitive verbs can enter:

- (34a) Mûep leng yim sek t'eng.  
 3Pl hang/move(pl) leaf BODY tree  
 'They hung the leaves on the tree/The leaves were hung on the tree.'  
 [TRPS\_VL\_41]

This construction is formally identical to a transitive construction containing the 3rd person plural pronoun *mûep*. Semantically, the clause is interpreted as agentless (e.g., in the example above, it is unlikely that the speaker had an agent in mind who put the leaves onto the tree). This has a formal correlate in that an impersonal construction cannot contain logophoric marking. Recall that logophoric possessive pronouns are used to indicate co-reference with an antecedent (cf. 2.4). An impersonal passive construction can only contain the non-logophoric form, suggesting that the pronoun *mûep* is interpreted as an impersonal pronoun.

- (34b) Mûep leng le n-k'ek mûep/\*d'wen  
 3Pl hang/move(pl) load LOC-heads(pl) 3Pl.Poss/\*Pl.LogA.Poss  
 'They<sub>1</sub> hung the loads on their<sub>2</sub>/\*their<sub>1</sub> heads.' [LL, 17/2/00]

### 3.2 Tense, aspect, modality

In the domain of tense, aspect and modality (TAM), Goemai differs considerably from other Chadic languages, both formally and semantically (cf., e.g., Jungraithmayr 1979, Newman 1977c, Schuh 1976, E. Wolff 1979). Formally, the categories are not marked through either ablaut, suffixes or tonal changes on the verb, nor through

specific TAM pronouns, but rather through free particles and periphrastic constructions whose diachronic origin is still transparent. Semantically, Goemai does not exhibit the perfective/imperfective dichotomy that is said to be typical for Chadic languages. However, there are some semantic and formal similarities with the closely related language Mupun (Frajzyngier 1993).

The following table gives an overview of the TAM forms, their semantics and their diachronic origin.

Table (6): The TAM morphemes of Goemai

Form	Semantics	Diachronic origin
unmarked verb	aorist	—
<i>dok, d'yen, d'in, d'a</i>	absolute tenses	?first verb in a serial construction
<i>t'ong</i>	irrealis, future	first verb in a serial construction
locative verb + <i>t'ong . . . yi</i>	progressive	locative verb and subordinate clause marked for irrealis
<i>la . . . t'ong</i>	habitual	conditional clause plus irrealis morpheme
<i>goe, N-</i>	irrealis, future	locative prepositions
<i>. . . kam, . . . lat</i>	resultative, anterior	second verb in a serial construction

Those TAM particles that derive from verbs in a serial construction retain some of their verb properties. In serial constructions, pronouns of set 2 follow the first verb, while those of set 1 precede it (cf. examples 16a to 16c above). And the same behavior is found with respect to such TAM particles: pronouns of set 1 precede them (35a), while those of set 2 follow them (35b). Similarly, the resultative and the anterior particles are treated as the second verb in a serial construction. Pronouns of set 2 thus appear between the main verb and the TAM particle (35c). TAM particles that originated in prepositions, by contrast, do not show this behavior: pronouns of both sets precede the particle (35d).

- (35a) **Hen**     *t'ong*     kut     ndoe     kut.  
**1PI**     *IRR*     speak     some     speech

'I will say something.' (lit. 'speak some speech') [FUANUU]

- (35b) *T'ong*    **moe**    kut    a    mmoe?  
*IRR*    **IPI**    speak    FOC    what  
 'What will we speak (about)?' [GOESEM]
- (35c) Goepe    wa    **yi**    *kam* (. . .).  
 COMP    return(sg) **2Sgf**    *RESULT*  
 'After you came back (. . .).' [TIME\_SM]
- (35d) **moe**    *goe*    rwo    n-s'et.  
**IPI**    *OBL*    enter(pl)    LOC-bush  
 'we should enter into the bush.' [SPEAKING]

Even though the TAM morphemes retain some of their original verbal or prepositional properties, they also show formal differences. For example, the 'prepositional' particles follow a subject pronoun—the occurrence of which is restricted to the slot preceding verbs and TAM particles. And the deverbial particles do not behave like verbs when they occur in a nominalized clause. When serial verb constructions are nominalized, only the first verb precedes the clausal subject, while all others follow (36a). In the case of the TAM particles, however, both the particle and the verb precede the subject (36b).

- (36a) Goe-**su**    *muk*    **wa** /    *sai* (. . .).  
 NOMZ-**run**(sg)    *3Sg.Poss*    **return**(sg)    then  
 'After he had run back home, then (. . .).' [WITCH1]
- (36b) La    hok    man    bi    goe-**t'ong**    **shin**    *muk*    ba.  
 child(sg) DEF known thing NOMZ-**IRR** do    *3Sg.Poss* NEG  
 'The boy did not know what he should do.' [FROG\_LL]

Finally, the absolute tenses and the habitual can occur both in verbal and in verbless clauses, suggesting that they are a property of the clause, and not of the verb phrase. However, for the sake of presentation, all TAM morphemes are discussed in the present section.

### 3.2.1 *The unmarked verb: aorist*

Goemai has a verb form unmarked for TAM (aorist), in which the unmarked verb stem directly follows the subject pronoun. It is used in cases of tense neutralization, i.e., it is the default choice once temporal reference is established, e.g.:

- (37a) Fûan **dok** **shin** bi goe-dam t'yak noe (...).  
 rabbit **PAST.REM do** thing NOMZ-spoil heart 1Sg.Poss

'The rabbit did something that made me angry (...).

Moe **tang** ni yi de-goe doe tu.  
 1Pl **seek** 3Sg SUB PUR come kill(sg)

So we looked for him to kill (him) here.

See **mang** s'a muk **nin** n-yit noe.  
 then **take** hand 3Sg.Poss **show/point** LOC-face 1Sg.Poss

'Then he took/raised his hand (and) pointed (it) at my face.' [LIIT]

During narratives, this form is thus generally used to tell the main story-line. Other TAM morphemes are introduced when the temporal sequence is interrupted (37b), or in quoted speech (37c).

- (37b) Mûep **t'wot** shin nye-d'ûe nnoe, (...).  
 3Pl **sit(pl)** do word-voice LOC.ANAPH

'They sat having this discussion, (...).

Mûep **yûûl** **p'ûat** de-goe mûen.  
 3Pl **rise(pl)** **exit(pl)** PUR go(pl)

They rose (and) went out to go.

Fûan **d'in** **t'ong** d'i goe-t'oor (...).  
 rabbit **PAST.CL** **sit(sg)** LOC.ANAPH SPACE-flank

The rabbit had sat there at the side (...).' [LIIT]

- (37c) Liit **ter** **d'yem** goe-t'oor.  
 lion **branch\_off** **stand(sg)** SPACE-flank

'The lion branched off (and) stood at the side.

See bi hok **tal** kûût.  
 then thing DEF **greet** just

Then the thing just greeted him.

Yin gwa **t'ong** **mûaan** a n nang-hoe a?  
 SAY Sgm.LogB **IRR** **go(sg)** FOC where-exactly INTERR

Saying, where exactly would you go to?' [LIIT]

Finally, the aorist is used to convey a generic reading, which may substitute for the habitual, especially when talking about personal habits, e.g.:

- (37d) Hen **yool** yitsaam m-pûûs poemo m-b'itlung.  
 1Sg **rise(sg)** sleep LOC-sun/time six LOC-morning  
 'I always rise from sleep at six in the morning.' [TQ\_LL\_71]

There is some controversy as to whether forms unmarked for TAM have a semantic content of their own, or whether they derive a default meaning from being in pragmatic opposition to other TAM markers in the system (e.g., Bybee 1994, cf. also Levinson 2000 for a pragmatic framework to handle such default meanings). In Goemai, there are indications that the unmarked form can replace all other TAM morphemes under certain conditions, which would argue in favor of an analysis in terms of pragmatic implicatures.

One alternative option would be that the unmarked aorist encodes the perfective, while the forms marked in one way or other with *t'ong* encode the imperfective. Semantically, this would be possible as *t'ong*-marked forms encode notions such as irrealis, progressive or habitual. However, in Goemai, the unmarked form is used in both typically perfective and typically imperfective contexts.<sup>13</sup>

Another possibility would be an interpretation in terms of tense. A verb in the aorist form usually receives a default non-future interpretation (past or present), while the future tense would be marked with the particle *t'ong*. However, *t'ong* actually marks a modality, not a tense (cf. 3.2.4). Moreover, the default non-future interpretation of the aorist can be cancelled, and the unmarked verb can refer to a future event, e.g.:

- (38a) *Goed'aar* toe moe **mûen** n-Jos.  
*tomorrow* EMPH 1Pl **go(pl)** LOC-Jos  
 'It is *tomorrow* that we **go** to Jos.' [FRIENDS]

It is cross-linguistically common that unmarked forms receive a default past/present tense interpretations, whereby the interpretation tends to correlate with the aspectual class of the verb (Bybee 1994, Comrie 1985, Dahl 1985): in Goemai, stative verbs receive a default 'present tense' and non-stative (including inchoative) verbs a default 'past tense' interpretation.

<sup>13</sup> This was established with the help of the Tense/Aspect questionnaire developed by Dahl (1985). It attempts to control for cross-linguistic variation found in the encoding of different tense/aspect categories. In Goemai, no correlation emerged between the unmarked aorist and either the perfective or the imperfective category.



Finally, the third option would be to interpret the system as having a basic realis (unmarked aorist) vs. irrealis (*t'ong*) distinction. However, the unmarked aorist does not necessarily convey a realis reading, as it is used in future contexts (38a), or in the expression of epistemic modality (38b).

- (38b) Hen rang goepe mûep **poe** n-daas ba.  
 1Sg think COMP 3Pl **give** BEN-men(pl) NEG

'I think that they do not give (it) to the elders.' [HAND\_AS/LL]

All interpretations of the aorist (perfective, non-future, realis) are default interpretations. They arise because of the existence of other TAM particles that semantically encode aspectual and modal categories. The unmarked form then pragmatically picks up the interpretations not encoded in these particles. They are not part of its meaning, though, and can thus be cancelled.

### 3.2.2 *Tense*

Goemai has four absolute tenses, three past tenses and one future tense: *dok* (remote past), *d'yen* (yesterday), *d'in* (earlier today) and *d'a* (tomorrow). These locate an event in time, usually with respect to the time of speech, i.e. the present moment is taken as the point of reference. They are only rarely used as relative tenses, i.e. relative to some other reference point that is established by the context. This behavior is cross-linguistically quite common (Comrie 1985, Dahl 1985).

Formally, these particles occur preceding the verb, e.g.:

- (39a) Mûep **dok** maar maar nt'it ba.  
 3Pl **PAST.REM** farm farming thoroughly NEG  
 'They did not farm properly in the past.' [TARIHI]

- (39b) B'it la **d'a** lin / (...).  
 day COND **FUT.CL** dawn  
 'When the day dawns tomorrow, (...).' [PEOPLE]

In addition, they behave like the first verb in a serial construction, i.e. pronouns of set 2 follow these particles.

The tenses can combine with modal and aspectual particles, whereby the past tenses can occur with the progressive and the habitual, and all four tenses can occur with the irrealis. In the latter case they assume different syntactic positions: the past tense markers occur

before the irrealis morpheme *t'ong* (40a), and the future tense follows it (40b).

- (40a) **Dok**            *t'ong*    *goe*    *ru*            *taxi*    *dakd'ûe*    *lu* (. . .).  
**PAST.REM** *IRR*    2Sgm    enter(sg)    *taxi*    MIDDLE    town/house  
 'In the past you would enter a taxi into town (. . .)' [JOS]
- (40b) *t'ong*    **d'a**            *moe*    *rwo*.  
*IRR*    **FUT.CL**    1Pl        enter(pl)  
 'we would enter/arrive tomorrow.' [ARAM]

This different distribution may either reflect principles of iconicity (Haiman 1985), or it may reflect different grammaticalization patterns. The diachronic origin of the tenses is not transparent, though. Three of them have corresponding temporal adverbs: *dokndok* (day before yesterday), *d'yend'yen* ~ *nd'yen* (yesterday) and *goed'aar* ~ *toed'aar* (tomorrow). These are clearly formally related. Cross-linguistically it is well attested that absolute tenses grammaticalize from temporal adverbs (Dahl 1985, cf. also Frajzyngier 1993 for a related analysis for Mupun). In Goemai, however, the temporal adverbs are clearly derived forms, whereby at least some of the derivational morphology is still a productive means in the language to derive adverbs from nouns and verbs (partial reduplication, prefix *N-*, prefix *goe-*). In addition, the tense morphemes occur in the syntactic slot that is reserved for verbs in a serial construction, not for adverbs. This makes it unlikely that these particles derive from adverbs. For the time being, I would thus rather assume a verbal origin.<sup>14</sup>

The grammatical category tense is periphrastically expressed. And it is not obligatory. In a narration, the tense particles usually occur only once to anchor an event in time, and all subsequent reference to that event is done by the unmarked aorist (cf. example 37a above). In addition, tenses usually do not occur when the corresponding temporal adverbs are used to introduce the temporal setting.

<sup>14</sup> Another option would, of course, be that the temporal adverbs derive from the tenses. Such an analysis is conceivable, although it would not be compatible with the principle of unidirectional change in grammaticalization theory (e.g., Heine, Claudi and Hünnemeyer 1991). However, I do not adopt this analysis because of the syntactic position of these morphemes, and because of the adverbialization morphology found in the corresponding adverbs.

3.2.3 *Aspect*

There are four aspectual categories encoded in Goemai: the progressive, the habitual, the resultative and the anterior.

The progressive is a periphrastic construction, which contains an obligatory locative verb and the morphemes *t'ong* and *yi*. Pronouns of set 1 precede the locative verb (41a), while pronouns of set 2 follow the particle *t'ong* (41b)

- (41a) *Mûep t'wot t'ong shin shit yi b'ak.*  
*3Pl sit(pl) PROGR do work PROGR here*

'They sit doing work here.' [MIL\_LL]

- (41b) *D'e t'ong moe shin shit yi n-ni.*  
*exist PROGR 1Pl do work PROGR COM-3Sg*

'We are doing work with it.' [HAND\_SM]

The locative verb is taken from a minor form class that contains five verbs, all of which are used to locate objects with respect to another reference object. The same set also occurs as classifiers in the demonstrative word (cf. table 4 above). Cross-linguistically, such verbs are often grammaticalized to become deictic classifiers (Aikhenvald 2000) or progressive morphemes (Kuteva 1999) (cf. Hellwig, in prep. a, submitted). In the progressive, the locative verb has the status of a full verb, not of a TAM particle. This can be shown with respect to their behavior under nominalization (cf. examples 36a and 36b above): when the progressive is nominalized, only the locative verb occurs preceding the clausal subject, e.g.:

- (41c) *goe man bi goe-d'e noe t'ong shin yi*  
*2Sgm know thing NOMZ-exist 1Sg.Poss PROGR do PROGR*

'you know the thing that I am doing' [ARAM]

The locative verbs encode the position of the agent while he is performing an action. The other two morphemes, *t'ong* and *yi*, go back to the irrealis morpheme *t'ong* (cf. 3.2.4) and to the morpheme *yi*, which marks any subordinate irrealis clause, e.g.:

- (42) *de ni goe shin ûen yi n-doe.*  
*COMP 3Sg OBL do medicine SUB BEN-Sgf.LogA*

'so that he should do magic for her.' [MATWO]

This makes it likely that the progressive grammaticalized from a main locative verb plus a subordinate irrealis clause.

Semantically, it refers to an action that is viewed as on-going at reference time. In addition, stative verbs can occur in the progressive construction, in which case they receive a habitual interpretation.

Like the progressive, the habitual is a periphrastic construction, which contains the morphemes *la* ~ *d'a* and *t'ong*. Again, pronouns of set 1 precede the morpheme *la* (43a), while those of set 2 follow (43b).

- (43a) *Mùep* **la** yil goe-nnoe **t'ong**  
 3Pl **HAB** write NOMZ(sg)-LOC.ANAPH **HAB**  
 'They used to decorate this one' [HAND\_AS/LL]

- (43b) **La** *moe* yong ni **t'ong**  
**HAB** 1Pl call 3Sg **HAB**  
 'We used to say it' [TARIHI]

The habitual is used in reference to any event that is characteristic for an extended period of time (taking place habitually or repeatedly). Formally, it was grammaticalized from a conditional clause. The first element *la* ~ *d'a* is identical with the conditional morpheme (in form and in syntactic position), and the second with the irrealis morpheme *t'ong*. Both usually occur in a conditional clause, e.g.:

- (43c) Neen **la** tu ni / **t'ong** at goe.  
 hunger **COND** kill(sg) 3Sg **IRR** bite(sg) 2Sgm  
 'When(ever) it becomes hungry, it would bite you.' [ANIMAL1]

In the development from the conditional to the habitual, a reanalysis of the clause boundaries must have taken place, so that *la* and *t'ong* occur now within the same clause.

Finally, Goemai has two phasal verbs, *lat* 'anterior' and *kam* 'resultative', which originated in the intransitive verbs *lat* 'finish' and *kam* 'stay' respectively.

*Lat* 'anterior' is used to describe an event prior and relevant to the situation at reference time. It thus very often occurs in complex sentences during narratives, conveying a temporal order:

- (44) **La** *fi* **lat**, (...) goe wus nd'ûûn sher.  
**COND** *become\_dry*(sg) **ANT** 2Sgm roast **INSIDE** pot  
 'After it has become dry (= finished to become dry), (...) roast it inside a pot.' [CROPS]

The anterior morpheme occurs with any verb (including stative verbs), indicating that the event has ended. *Kam* 'resultative', by contrast, is more restricted in its occurrence. Generally, it occurs with verbs of motion and caused motion, but it is marginally acceptable with any verb that can be construed as involving an element of (metaphorical) motion, i.e. with inchoative verbs ('getting into a state'). With caused motion and with inchoative verbs, it focuses on a state existing as the result of an action, e.g.:

- (45a) *Ruun* gong muk **kam** n-t'uun.  
*insert(sg)* nose 3Sg.Poss **RESULT** LOC-hole  
 'He inserted his nose into a hole.' (i.e., the nose still is in the hole)  
 [FROG\_LL, 11/2/00]
- (45b) Neng hok *f'u* **kam** b'e.  
 cow DEF *become\_scattered* **RESULT** EMPH  
 'The cows have scattered.' (i.e., they are scattered now) [LL, 11/2/00]

In the case of goal-encoding motion verbs, two interpretations are possible. When the goal is overtly encoded, *kam* 'resultative' stresses that the goal has been reached (46a), when it is not encoded, it stresses that the motion itself continues (46b). With manner of motion verbs, only the latter reading is possible (46c).

- (46a) P'aar *t'a* **kam** n-hangoed'e.  
 jump *fall(sg)* **RESULT** LOC-water  
 'He jumped (and) fell in the water.' (i.e., the falling event is over)  
 [FROG\_LL, 11/2/00]
- (46b) T'eng *t'a* **kam!** T'eng *t'a* **kam!**  
 tree *fall(sg)* **RESULT** tree *fall(sg)* **RESULT**  
 'The tree is falling! The tree is falling!' (i.e., the falling event is taking place now) [LL, 11/2/00]
- (46c) Ball *b'iring* **kam** nd'ũũn goegyat.  
 ball *roll* **RESULT** INSIDE net  
 'The ball is rolling in the net.' (i.e., the rolling event is taking place now) [LL, 11/2/00]

In addition to these four categories, younger speakers increasingly use Hausa words to convey aspectual notions. The following are attested in my database: *tab'a* 'have previously done', *k'ara* 'repeat

an action', *niga(ya)* 'have already done', *rik'a* 'keep on doing', and *gama* 'stop doing'. Formally, these are used like the first verb in a serial construction, e.g.:

- (47) **k'ara** ji            tang pe goe-d'e      fuan zak-yit mou.  
**repeat** Sgm.LogA seek place NOMZ-exist rabbit again NEG  
 '(He<sub>1</sub> said) he<sub>1</sub> would never again look for the place where the  
 rabbit is.' [LIIT]

Their text frequency is very low, and older speakers reject these as foreign words and hardly use them. For the time being, these cannot be considered as integrated loans into Goemai, rather they are used when bilinguals mix or switch codes.

### 3.2.4 Modality

Goemai has three morphemes, *t'ong*, *goe*, and *N-*, which are used to express both irrealis (modality) and future (tense). Cross-linguistically, these two categories show much overlap: they are either encoded in the same form, or the irrealis marker is in the same formal system as the past/present tense. In addition, grammaticalization chains are attested from the irrealis modality to the future tense (Bybee, Perkins and Pagliuca 1994, Comrie 1985, Dahl 1985, Palmer 1986). This overlap is not surprising because, as Dahl puts it, "[n]ormally, when we talk about the future, we are either talking about someone's plans, intentions or obligations, or we are making a prediction or extrapolation from the present state of the world." (Dahl 1985: 103).

The particle *t'ong* 'future' derives from the verb *t'ong* 'sit (sg)'. It is obligatorily present in reference to both the intention-based (48a) and the prediction-based future (48b).

- (48a) Goe-vel / hen    **t'ong**    poe a            n-la            noe  
 ORD-two 1Sg    **IRR**    give FOC    BEN-child(sg)    1Sg.Poss  
 'The second one, I will give (it) to my child' [GOESHANW]

- (48b) La (...)    goe    p'et    nkwa    **t'ong**    goe    muut.  
 COND    2Sgm    exit(sg)    away    **IRR**    2Sgm    die  
 'If (...) you go away, you will die.' [GWAKTAK]

Following Comrie (1985), it thus has properties of a future tense category: it is near-obligatory (but cf. example 38a above and the

discussion surrounding it), and it occurs in prediction-based contexts. However, in addition to its uses in the future context, it is also used in the irrealis context. This includes the encoding of epistemic modality (49a), of intention (49b), and of counterfactual (49c).

- (49a) **T'ong** d'e n-Jos nd'as'oenoe.  
**IRR** exist LOC-Jos now

'(I think) he should be in Jos now.' [LL, 16/2/00]

- (49b) **t'ong** d'u k'wal a k'a goepe (. . .).  
**IRR** Pl.LogA talk FOC HEAD COMP

'(They<sub>1</sub> said) they<sub>1</sub> should talk about (the fact) that (. . .)'. [LIIT]

- (49c) D'in la goe zem d'ûe noe,  
 PAST.CL COND 2Sgm like voice 1Sg.Poss  
 d'in **t'ong** goe bi fûan ba.  
 PAST.CL **IRR** 2Sgm follow rabbit NEG

'If you had listened to my voice, you would not have followed the rabbit.' [LIIT]

The particle *t'ong* thus encodes basically a modality, and only secondarily a future tense: the morpheme can occur in non-future contexts, future can be expressed with the help of the unmarked aorist, and *t'ong* is not part of the same formal system of oppositions as the absolute tenses (with which it can co-occur). In labeling it a modality category, I follow Comrie's methodological caution, when he says that in order to establish whether a language has a category of future tense, one has to ascertain first that its use "cannot be treated as a special use of a grammatical category with basically non-tense meaning." (Comrie 1985:46).

A similar argumentation holds for the two other morphemes, *goe* 'obligative' and *N-* 'permissive'. The form *goe* derives from the locative preposition *goe* 'SPACE' (cf. 4.2). It encodes both the obligative (50a) and the definite future, focussing on the fact that an event will definitely take place (50b). In the latter case, it usually combines with *t'ong* 'irrealis'.

- (50a) pa **goe** nyap hura.  
 Sgf.LogB **OBL** prepare gruel

'(He<sub>1</sub> said) she<sub>2</sub> should prepare gruel.' [REEP]

- (50b) Hen t'ong **goe** yil longvilip.  
 1Sg IRR **OBL** write letter

'I definitely plan to write a letter.' [TQ\_LL\_22]

The form *N-* derives from the locative preposition *N-* 'LOC' (cf. 4.2). It encodes the permissive (51a) and the immediate future (51b). In the latter case, it usually combines with *t'ong* 'irrealis'.

- (51a) Hen **m-mang**.  
 1Sg **PERM-take**

'Let me take it.' [TL\_99]

- (51b) Mûep t'ong **n-yûûl**.  
 3Pl IRR **PERM-rise(pl)**

'They are about to rise.' [LL, 29/12/00]

Note that both *goe* and *N-* fill a syntactic slot that is different from that of the future tense *d'a* (cf. 3.2.2): pronouns of set 2 follow the tense, but they precede the two modalities. Note also that none of them can be assigned to an objective time measure. They are not part of Goemai's tense system.

#### 4 *Minor word classes*

##### 4.1 *Adverbs*

Adverbs generally follow the verb phrase they modify. They are defined as a form class by their syntactic position following boundary morphemes such as progressive *yi* (52a) (cf. 3.1.1). This is the syntactic positions for all adjuncts, including prepositional phrases (52b). Adverbs differ in that they occur in this slot without any prepositional marking.

- (52a) Mûep t'wot t'ong shin shit *yi* **b'ak**.  
 3Pl sit(pl) PROGR do work *PROGR* **here**

'They sit doing work here.' [MIL\_LL]

- (52b) Hangoed'e t'o (...) t'ong su *yi* **n-yil**.  
 water lie(sg) PROGR run(sg) *PROGR* **LOC-ground**

'The water lies running on the ground.' [MIL\_LL]



It is a heterogeneous class, containing a small core of non-derived forms. In addition, reduplication and prefixation are productive processes to derive adverbs from verbs.

Non-derived forms comprise locational and deictic adverbs, temporal adverbs, and quantifying adverbs. A large number of these contain an initial element *N-* or *goe-*, both of which are also locative prepositions that attach to nouns (cf. 4.2). In addition, a prefix *N-* derives adverbs from verbs (cf. below). It is thus likely that these adverbs originally derive from nouns and verbs, e.g.:

<i>goe-sam-pe</i>	'outside'	<i>n-date</i>	'straight'
<i>goe-t'eng</i>	'upward'	<i>n-duni</i>	'much'
<i>goe-tûûn</i>	'beyond'	<i>n-d'yen</i>	'yesterday'
<i>goe-d'aar</i>	'tomorrow'	<i>n-gong</i>	'night time'

Another set occurs in partially or completely reduplicated form. And again, partial reduplication is a productive process for forming adverbs from verbs.

<i>toe-t'ei</i>	'all'	<i>d'yen-d'yen</i>	'yesterday'
<i>toe-d'aar</i>	'tomorrow'	<i>mpûe-mpûe</i>	'always'

There is only a very small core of non-derived adverbs: *b'ak* 'here', *d'i* 'locative anaphor', *jar* 'straight' and *dip* 'all'. But even here, some occur in alternating forms (*d'i* ~ *goe-d'i*, *dip* ~ *n-dip*). Although most adverbs thus seem to be derived forms, the original nouns or verbs do not exist anymore in the language. For this reason, I consider them to be synchronically non-derived.

Additionally, Goemai has two productive processes to derive adverbs. First, a prefix *N-* can attach to any verb to form an adverb. These then occur in the same syntactic slot as other adverbs (e.g., following a direct object as in example 53a), and they can even co-occur with the original verb (example 53b).

- (53a) *goe tarap sonkwa m-b'arak.*  
 2Sgm snap(pl) maize ADVZ-become\_fresh/wet  
 'break the maize **freshly/in a fresh condition.**' [CROPS]

- (53b) Gu *t'wot n-t'wot.*  
 2Pl *sit(pl) ADVZ-sit(pl)*  
 'You *sit* **sittingly.**' [QUEST]

Secondly, partial reduplication to the right derives adverbs from a sub-set of verbs. Formally, the first consonant is reduplicated (whereby implosives and voiceless non-aspirated obstruents become voiceless aspirated obstruents), and a schwa is inserted between the reduplicated consonant and the stem. This process is largely restricted to the sub-class of property verbs (54a). However, some transitive verbs can undergo the same process (54b). The latter can then occur as stative predicates (54c).

- (54a) Vúang a riga muk **poe-pya.**  
 wash FOC shirt 3Sg.Poss **RED-become\_white**

'(It is) his shirt (that) he washed white.' [LL, 1/2/00]

- (54b) Man goe mang **loe-la** ba.  
 PROH 2Sgm take **RED-pain** NEG

'Do not take it too **seriously/painfully.**' [LL, 2/2/00]

- (54c) Tamtis noe **toe-t'at.**  
 folktale 1Sg.Poss **RED-shoot/tell\_folktale(sg)**

'My folktale is being told.' [KUR]

Adverbialization foregrounds a state, and backgrounds an agent role (if there is one). This results in a stative-like reading in the case of inchoative verbs (example 54a above), and in a passive-like reading in the case of causative verbs (54c). Nominalization has a similar effect in that it allows the inchoative property verbs to occur statively (cf. 2.5). And, in fact, nominalization and adverbialization combine to form a nominalized 'passive' of transitive verbs (cf. 3.1.3). Goemai has only very few lexical stative verbs. Many concepts that are encoded as statives in other languages, are inchoative verbs in Goemai (e.g., property concepts, but also verbs such as *man* 'know' or *zem* 'like'). Nominalization and adverbialization provide one possibility for such verbs to occur statively.

#### 4.2 Prepositions

Goemai has two sets of prepositions: prepositions proper, and spatial relators.

Table (7): Prepositions and spatial relators

Prepositions:	
<i>goe</i>	location in space, comitative/instrumental, theme
<i>N-</i>	location at object, comitative/instrumental, theme, benefactive
Spatial relators:	
<i>sek</i>	location at the 'body' of an object
<i>k'a ~ n-k'a</i>	location at the 'head' of an object
<i>goede ~ n-goede</i>	location at the 'bottom' of an object
<i>pûe ~ n-pûe ~ goe-pûe</i>	location at the 'mouth' of an object
<i>nd'ûûn</i>	location inside an object
<i>dakd'ûe</i>	location in the middle of an object
<i>nk'ong</i>	location at the 'back' of an object
<i>ntyem</i>	location at the 'front' of an object
<i>n-t'oor ~ goe-t'oor</i>	location at the 'side' of an object

Both are defined syntactically as being able to head a prepositional phrase. This prepositional phrase has the status of an adjunct, and thus occurs following boundary morphemes such as the subordinating morpheme *yi* (cf. 3.1.1), e.g.:

- (55a) Wang hok t'ong *yi* **k'a** pepe.  
 pot DEF sit(sg) SUB HEAD cover  
 'So that the pot sits on the woven cover.' [DIS\_AS/LL\_2.6]

The two sets differ in that the spatial relators have a nominal origin. This nominal origin shows formally in their co-occurrence with the possessive pronouns (55b) and in their ability to occur without a reference object (55c).

- (55b) Ndoe shel-n-shye t'o **k'a** muk.  
 Some game-LOC-foot lie(sg) HEAD 3Sg.Poss  
 'Some ball lies on it.' [COMP\_NK/SM\_12]
- (55c) Moto n-d'e-nang d'yem **k'a**.  
 car ADVZ-Cl:exist-DEM.DIST stand(sg) HEAD  
 'That existing car stands on top (of it).' [COLOR\_SM]

Prepositions proper would be followed by the independent pronoun (cf. example 41b above), and they cannot occur without an accompanying nominal. Prepositions and spatial relators can co-occur to

indicate non-contiguity between the Figure and the Ground, or to indicate a shift from an intrinsic frame of reference to a relative frame of reference, in which case the preposition precedes the spatial relator (Hellwig, in prep. a.).

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